Education and Development in India

Critical Issues in Public Policy and Development



Education and Development in India

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—Bikas C. Sanyal, Former Special Advisor to the UNESCO Director General, Paris

Jandhyala B. G. Tilak

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Critical Issues in Public Policy and Development



Jandhyala B. G. Tilak New Delhi, India

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With humble pranams at the Lotus Feet of Bhagawan Sri Sathya Sai Baba,
this book is dedicated
to the memory of my Parents
'Kunjali' and 'Santisri' Jandhyala Venkateswara Sastry
who struggled to see that I along with everyone get virtuous
public education.

Preface

The nexus between education and development is strong. Education's contribution to economic growth, distribution, poverty reduction, reduction in inequalities and sociopolitical transformation of the societies is now being recognised all over the world. Earlier research has shown that the nexus is stronger—education contributing more significantly in these areas—in middle income countries than in very poor or very rich countries. Hence, in the fast growing Indian economy, one can expect not only education to contribute to development in diverse ways very considerably, but also the level of socio-economic progress to influence the nature and pace of advancement of education. After all, the relationship between education and development is bidirectional. Education is also an objective and a component of development as well.

India aims at transforming itself into a knowledge society and to catch-up with the advanced nations in economic growth, technological progress and in social and political spheres. Education has a vital role in this endeavour. But, for education to contribute maximum to socioeconomic transformation of the nation, into a strong and vibrant knowledge society, the education system itself needs to be strong and vibrant, based on strong foundations, sound logic and social and moral philosophy.

Education in India as it developed over the years, presents a mixed picture. Despite very impressive growth in all levels of education during the last seven decades after independence, India's quest for universal elementary education is still not fulfilled; secondary education has not progressed enough; vocational and technical secondary education has

not yet taken off, despite several initiatives taken during the last several years, and higher education is not found to be providing good skills and knowledge enough for decent jobs in labour market. Education faces umpteen challenges in the rapidly changing socio-economic and political global and national environments, calling for a sound public policy. Formulation of sound and thoughtful education policy will depend upon the availability of robust research evidence on a variety of issues. It is hoped that examining the past, present and the future of education in India, this book serves an important purpose in this direction.

Based on the best available and reliable research evidence, both quantitative and qualitative, the twenty stand-alone chapters in the book critically elucidate quite a few critical contemporary challenges that education system in India faces. The book is a compilation of papers written over the last three decades, during which period, the education sector in India, like in many other countries, has undergone tremendous changes and faced several challenges. A critical review of the response of the state in the form of public policy to these challenges is the focus of the several chapters included in the book. Comparison with other countries is not the objective of the book, but references to other countries is not totally eliminated; in fact a couple of chapters refer to several countries in Asia and other regions of the world. Providing a sound and contextualized understanding of some of the major policy issues in education development, and broad national and international inter-disciplinary perspectives on many issues, the book stresses that education is important for development, but it also argues that the nature, form and pace of the development of education determines the nature and level of socio-economic development of the nation. The analysis made here will be of interest not only to Indian academia, policy makers and planners, but also to researchers and policy makers outside, as many countries face similar issues and challenges.

I would feel the purpose of book served, if it stimulates critical thinking about some of the major policy issues in education and development and leads to further research in the area that would help in formulation of better and sound public policy in education.

The research included in this volume was originally carried on during my short and long stints at the World Bank, University of Virginia, Hiroshima University and the National University/Institute of Educational Planning and Administration during the last nearly four decades. The excellent academic supportive environment in these institutions

is highly appreciated. I may also recall the encouragement and valuable support that I received from George Psacharopoulos, Peter Hackett, Masafumi Nagao, Moonis Raza, Satya Bhushan, Kuldeep Mathur and many others in these organisations. My interest in the area of Economics of Education was originally kindled by my teacher B. Sarveswara Rao at Andhra University. I also received huge encouraging academic support and advice from Malcolm S. Adiseshaiah, J.P. Naik, Mark Blaug, P.R. Brahmananda, D.T. Lakdawala, Y.K. Alagh, V.N. Kothari, A.M. Nalla Gounden, P.R. Panchamukhi, J.N. Sinha, K. Krishnamurthy, K.L. Krishna, S.N. Mishra, D.U. Sastry, Tapas Majumdar, Martin Carnov and many others during various stages of my research.

Most of the chapters included in this book have appeared earlier in Indian and international academic journals/books. I am grateful to the Editors of the respective journals/books for publishing my articles, and the publishers/Editors for granting permission to reprint/reuse them here in this collection. They are reproduced here with minimal editing, and stylistic and related corrections.

In their earlier forms, some of these chapters were presented in seminars/conferences and they have also been used in my lectures at National Institute/University of Educational Planning and other universities in India and abroad. I immensely benefited from the comments and guestions offered by the young as well as experienced scholars in strengthening empirical evidence and sharpening my arguments. I highly appreciate the valuable encouraging comments on this selection made by Fazal Rizvi, P.R. Panchamukhi, Stephen Heyneman, R.V. Vaidyanatha Ayyar, Kenneth King and Bikas Sanyal, which are published on the back cover/ preliminary pages.

I may make a special mention of the able secretarial assistance I received from Mukesh Kumar at the National Institute/University of Educational Planning and Administration, where the idea of bringing out such a collection originated. The research environment at the National University/Institute of Educational Planning and Administration and the conducive atmosphere at the Council for Social Development where I finalized this material for the book, need a special mention.

My sons, Kunj Vihari and Dr. Viswanath contributed a lot in processing the entire material for publication in the book. My wife Punya and children including Lavanya and Sravani, grandchildren Sai Kiran, Sai Charan, and Sai Aradhya, understood my passion for research and allowed me to continue with my affair uninterrupted.

x PREFACE

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New Delhi, India

Jandhyala B. G. Tilak

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ABOUT THE BOOK

Based on the best available and reliable research evidence, both quantitative and qualitative, the several chapters in the book critically elucidate quite a few critical policy issues in education in India, such as educational deprivation, equity, efficiency, household economy, economic growth, human capital, state finances, external aid, development cooperation, private higher education, the role of the state, households and markets and the nature and quality of education statistics.

The material included in this book was written over the last three decades. This is the period during which the education sector in India and in many countries has undergone tremendous changes and faced several challenges. A critical review of the response of the state in the form of public policy to these challenges is the focus of the several chapters included in the book. Comparison with other countries is not the objective, but references to other countries is not totally eliminated; in fact, a couple of chapters refer to several countries in Asia and other regions of the world. The policy analysis made here will be of interest not only to Indian academia, policy makers and planners, but also to researchers and policy makers outside, as many countries face similar issues and challenges.

Formulation of sound education policy will depend upon the availability of good research evidence on a variety of issues. This book serves an important purpose in this direction.

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XXII ABOUT THE AUTHOR

Barcelona in 2005. He served as the Editor of *Journal of Educational Planning and Administration* for 27 years and is on the editorial board of several professional journals. He also served as the President of the Comparative Education Society of India, and is presently on the Board of Comparative Education Society of Asia.

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Introduction

Education is the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded on the values of freedom, social justice and equal opportunity. Programmes of education lie at the base of the effort to forge the bonds of the common citizenship, to harness the energies of the people and to develop the natural and human resources of every part of the country.

Government of India (1966, p. 583)

Education is both an instrument and a component of development. Education not only contributes to development, but also as the human development specialists have described, education is development. The nexus between education and development is deep-rooted and very strong. Education's contribution to economic growth, distribution, poverty reduction, reduction in inequalities and sociopolitical transformation of the societies is now being re-recognised all over the world. India aims at transforming itself into a knowledge society and to catch-up with the advanced nations in economic growth, technological progress and in social and political spheres, and recognises the pivotal role education plays in all this. For education to play the role of a powerful instrument for socio-economic transformation of the nation into a strong and vibrant knowledge society, and at the same time education to serve as an end in itself, the education system itself needs to be strong and vibrant, based on strong foundations, sound logic and social and moral philosophy. The book stresses that education is important for development; it also agues that the nature and form of development of education influences the nature and direction of socio-economic development of the nation.

Given the crucial role that education plays in accelerating economic growth, and overall prosperity of the nation, education has been an important area of public policy and development planning in independent India. As a result, during the post-independence period, India has witnessed a veritable explosion in education, which Patel (1985) described as an "educational miracle" (in the third world). There has been a massive expansion of the education system in terms of enrolments, number of schools, colleges and universities, number of teachers and in terms of public expenditure on education. The education system at all levels was made accessible to a larger number of people than ever. Today the student population of about 300 million in the Indian education system exceeds the size of the total population of some of the largest populated countries in the world such as Indonesia and Brazil, and the total population of three most populated countries in Europe, viz., Russia, Germany and France—taken together. Schools are made available almost in every habitation in India. With nearly 900 universities and 42 thousand colleges, the higher education system in India is the second largest in the world, after China. About 35 million students go to colleges and universities in the country. Access of the weaker sections of the society to education at every level has also improved somewhat remarkably. There has also been significant expansion in the number of institutions of excellence in higher education, producing highly specialised human capital. Some of the institutions like the Indian Institute of Sciences and the Indian Institutes of Technology are high quality institutions, figuring in the global rankings of world universities. Compared to the small base that India had at the time of independence, all this marks spectacular achievements.

While the numbers suggest impressive achievements, paradoxically the system is plagued by large number of issues and even conspicuous failures on several fronts. Even after seven decades after independence, India's quest for universal elementary education is still not fulfilled in its full spirit; secondary education is serving neither as a good terminal level, or as an assurance to entry into quality higher education institutions; vocational and technical secondary education has not yet taken off, despite several initiatives taken during the last several years; and higher education is not found to be providing good skills and knowledge enough for decent jobs in labour market. The system is also characterised by widespread social,

gender, economic and regional inequalities in education, and very low levels of learning at all levels of education. There are problems of inadequate infrastructure and facilities, large number of vacancies of teaching positions resulting in imbalanced pupil-teacher ratios and overcrowded classrooms, and woefully ill-equipped teachers in terms of qualifications, training, knowledge and skills at all levels of education. Outmoded teaching methods, poor quality research in higher education, under-motivated teachers and uninterested students, etc., on the one hand, and inadequate funding, poor supervision and regulation and above all a policy vacuum on the other, are also the features of the present education scene. In short, education faces umpteen challenges, calling for a sound education policy. Formulation of sound education policy will depend upon the availability of vigorous research evidence on a variety of issues. It is hoped that this book serves an important purpose in this direction.

The Constitutional directive, which became a fundamental right, with an amendment to the Constitution in 2002, could not be fully accomplished in terms of all its three main components, viz., universal enrolment, universal completion of eight years of schooling, and universal levels of learning. Though gross enrolment ratios are near about 100%, dropout rates are still high, and levels of learning are depressingly low. Vocational and technical education at secondary level has not taken off; and the results of recently launched national skill development programme are yet to be seen. The march towards massification of higher education has not been accompanied by rise in quality and standards in higher education. The alarmingly low quality of education reflected in poor levels of learning of the children at school level, and low employability of graduates of higher education, has been an important serious concern. Further, the whole system is said to be heavily regulated and least governed. The overall efficiency levels of education system are regarded highly unacceptable. Some of these long-persistent problems led educationists like J.P. Naik (1975) to observe, long ago, that education was in crisis, which can now be described as a 'continuing education crisis,' with the ever-elusive balanced triangle of the 3qs—quantity, quality, and equity. In addition to deterioration in quality of education, the crisis in education gests deepened, with widening inequalities in access to education, the absence of human, national, and social values and concerns among the graduates, etc. Weak and ineffective public policies reflected in the provision of inadequate funds for education, poor quality

infrastructure, provision of insufficient number of teachers, appointment of para teachers, poor and outdated teaching, evaluation/examination and assessment methods, promotion of growth of private schools, inefficient methods of governance, fragmented approach to the development of education, viewing one level of education against another, and short term ad-hoc interventions and adoption of quick-fix solutions that have long term implications etc. All these have been aggravating the crisis. Of all, the most important concern is the gradual de-recognition of the public good nature of education, the strong relationship between education and various facets of development and the immense magnitude of externalities that education produces. This de-recognition is the root cause of all the weak, ineffective and even regressive public polices, faulty approaches and ineffective interventions of the government. This is also the cause for the absence of a long term vision, a coherent educational policy, and a comprehensive and holistic approach to the development of education. The twenty chapters in the book, taken together, convey this message and stress the need for a sound policy in education that helps in building a strong, vibrant, democratic, equitable and efficient public education system, which in turn helps in socio-economic transformation and in creating a humane society.

Based on the best available and reliable evidence, both quantitative and qualitative, the several chapters in the book critically elucidate quite a few critical policy issues in education in India, such as educational deprivation, equity, efficiency, household economy, economic growth, human capital, state finances, external aid, development cooperation, private higher education, the role of the State, households and markets in India, political economy and finally the nature and quality of education statistics. The issues are analysed from multi-disciplinary perspectives of Economics, Sociology, Political Science and Public Administration. The issues addressed in the book are not exhaustive; they are selective and the selected issues are discussed in depth. Though many issues are distinct and non-overlapping, since all chapters are by a single author, written over a period, underlying a common thread, repetition in some arguments could not be avoided altogether.

The material included in this book was written over the last three decades, the longest spell during which period, I was at the National Institute/University of Educational Planning and Administration. This is also the period the education sector in India has undergone tremendous changes and faced several challenges. A critical review of the response of

the State in the form of public policy to these challenges is the focus of the several chapters included in the book. Comparison with other countries is not the objective of the book, but reference to other countries is not totally eliminated; in fact, a couple of chapters refer to several countries in Asia and other regions of the world. The critical, analytical and narrative accounts presented here will be of interest not only to Indian academia, policy makers and planners, but also to researchers and policy makers outside, as many countries face similar issues and challenges.

Education in any society is necessarily intricately embedded in a social and politico-economic milieu. While education influences socio, political and economic factors, in turn it is also influenced by the socio, political and economic conditions. The book starts with a review of research evidence in Economics of Education that unravels the all-pervasive contribution of education to various facets of development. The growing research in Economics of Education helps to better understanding of not only the contribution of education to economic progress, health and nutrition, agricultural productivity, poverty, inequalities etc., but also understanding of several socio-economic phenomena and how education is shaped by them. Obviously education is shaped by several political and economic factors. In Chapter 2, the political economy factors are analysed, which influenced the development of education during the first three decades and a half after the inception of planning in the country. A critical review is attempted of educational developments in India in the overall framework of educational policies, five year plans and programs. The chapter also discusses rather somewhat inexplicable divergences between policies, plans and their translation into action. In the context of growing financial squeezes, one might hope that private sector would play an important role in easing the financial problems in education particularly in a mixed economy like India. But the contribution of private sector to educational development in the country has been found to be dismal and actually it has been counter productive, as described in Chapter 2.

Part II focusses on quality and equity in education and diversified secondary education. The most disturbing feature of the Indian education system is the utter lack of equity in access to education between different economic classes of people. The evidence on Indian States and also the evidence by household expenditure groups confirm significant, strong and inverse correlation between levels of educational attainment and levels of poverty. Participation in education is a consistently increasing function of household economic levels and the conformity of such a systematic pattern in case of all groups of population—rural, urban, male and female, rather with no exception at all, is strikingly clear. As the evidence analysed in Chapter 3 shows, among the several factors, household economic factors, including opportunity costs, and direct costs of education, account for a large proportion of non-participation of children in education.

It will be interesting to attempt at analysing questions such as: why do children not go to schools? Once they enroll in schools, why do they drop out soon, before completing a given cycle of education? When they continue in schools, why are their levels of learning not satisfactory and why are the overall education outcomes of schools not up to the mark, as the Annual Survey of Education Reports of the Pratham Foundation and more recently the National Achievement Surveys of the National Council of Educational Research and Training suggest in case of elementary education? The analysis of recent data in elementary education in Chapter 4 suggests that from the supply side, school infrastructure and more importantly the quality and number of teachers matter more than mere accessibility of schools, for improving participation in schools and also specifically the levels of learning of the children. Obviously trained and qualified teachers matter much more. Rural transformation requires transformation of schools in rural areas into powerful centres of learning in such a way that children, parents, and the whole community look at schools as the pivot of transformation. In fact, the whole public school system need to be rejuvenated on a large scale (Tilak 2017).

'Inclusive growth' is regarded as the new mantra of development. In the eleventh and the twelfth five year plans, inclusive growth has been stated as the main objective. Inclusive growth requires inclusive education both at school level and in higher education. A new programme of universal secondary education, known as the *Rashtriya Madhyamik Shiksha Abhiyan*, has been launched, along with a programme of skill development of about 500 million youth with an objective to provide equitable access to secondary education with a good component of skill development suitable for employment. But the experience has not been favourable with vocational education and training, and other skill oriented programmes at secondary level in India and also in a few Asian countries, which have placed varying emphases on general and vocational/techncial education, depending upon several historical, social, economic and political consideration, as the review attempted in Chapter 5 shows, though

with rapid transformation of societies in social, political, economic, technological and education spheres there has been a sea change in the perspectives on the need for and nature of vocational/technical education and training. On the whole, the overall approach to the development of education outlined in the Eleventh five-year plan and later plans and programmes which included some new and not-so-new strategies, along with a few controversial proposals like support to private education, may not help in realizing the goal of inclusive growth. The assumptions that underlie the new approaches and the issues conveniently ignored also suggest the same; they also indicate the absence of any special focus on inclusive growth in education and rather continuation of the big policy vacuum, as described in Chapters 6 and 7.

"Educational finance is probably the most controversial issue in the economics of education" (Cohn 1979, p. 257). The half a dozen chapters in Part III are devoted to examining issues relating to financing of education in India. Concentration on financial aspects does not mean that problems of Indian education lie squarely and solely in finances and all of the challenges can be satisfactorily overcome, if financial solvency is attained. Nevertheless, finances are critical. The Education Commission (1966) chaired by D. S. Kothari made a valuable set of recommendations on financing of education in India, many of which are still relevant for educational planning but have not received much official attention. An important recommendation made by the Commission was to allocate at least six percent of national income to education, which was accepted by the Government of India, as it turned out to be an important part of the National Policy on Education (1968). But this is yet to be fulfilled. Some tend to question its appropriateness in the present context. A review of the premises of the recommendations, and the visionary approach adopted by the Commission and their current relevance is attempted in Chapter 8, which will hopefully be useful in the current policy discussion on education and the formulation of a new National Policy on Education which is underway.

The National Policy on Education 1986 also promised a meaningful partnership between the two layers of the government, the union (centre) and the states in education. There has been continuous controversy regarding center-state relations in financing education in India since the problem of finances for education has reached "the proportions of a crisis for the Central as well as the state government." Some scholars argue that education is of such great national importance that it cannot be the total responsibility of the states. In contrast, proponents of decentralized political philosophy argue that, in a vast and diverse federal polity like India, the interests of education should be the total responsibility of state governments. Several developments have taken place in the recent past. New sharing responsibilities between the union government and the states in elementary education (under Sarva Shiksha Abhiyan) and secondary education (under Rashtriya Shiksha Abhiyan) have been defined and put in practice. A similar move has also been initiated in higher education through the launching of Rashtriya Ucchhatar Shiksha Abhiyan) and formation of Higher Education Finance Authority. In the context of the renewed interest in union-state relations in financing education, and search for more efficient models, a historical perspective on the problem, and a critical review of experience during the post-independence period, made in Chapter 9, in the transfers of educational resources from the center to the states through the Finance Commission and the Planning Commission should be very useful.

Though education is made a fundamental right through an amendment to the Constitution of India in 2002, and a Right to Education Act was formulated in 2009, elementary education still suffers from severe inadequacy of resources, as the sorry state of affairs narrated in Chapter 10 reveals. It is important to emphasise that for comprehensive economic, social and human development there is no alternative to State fulfilling its duty towards adequately financing education to meet the goals relating to quantity, quality and equity.

Realising the need to mobilise additional resources for education, but confronted with shrinking fiscal capacity, India like, many other countries have, among a host of measures, restructured the National Loans Scholarship Scheme that has been in operation since 1963. The new educational loan programme, vastly different from the earlier scheme is found to be associated with a few strengths and several major weaknesses. Marginal improvements are being made to make the programme more popular, attractive and less regressive, but with limited success. As argued in Chapter 11, the potential of the loan scheme, in the earlier form or in the present form, or in any form, in generating substantial resources for higher education without affecting equity and quality in higher education is limited; it goes against the principle of 'social contract'; it can affect the social fabric; and that the state has a critical role in financing and overall development of higher education.

To address problems relating to financing of higher education, apart from student loans, quite a few important proposals are being made in this context by national governments and international organisations. International experience would be of considerable importance in formulating new policies. A casual review of the national and international experience with respect to a few important proposals, presented and contrasted in Chapter 13, shows that the suggestions that are being made for developing countries do not have empirical validity, if the practice of the developed countries were to be taken to provide any guidance.

Education is financed in many societies, essentially by three actors, the state, the households and the rest of the society including markets. Investment decision making in these three mutually dependent domains is influenced by three different sets of considerations. The critical analysis of trends in these three respective domains presented in the 2003 Dr. Adiseshiah memorial lecture (Chapter 12), concludes on the increasing reluctance of the government to spend on education, the phenomenon of compulsion to pay for education by the families, which is familiarly, but not correctly, termed as 'willingness to pay for education' and the negative, in fact, devastating role the unregulated and unscrupulous markets play in education, and underlines the view that there is no alternative to liberal state funding of education.

Domestic resource constraints often compel governments to go for external assistance for education. India is both a recipient of external aid for education, and a giver of assistance for human capital development in developing countries. The two chapters in Part IV critically review the performance of India on these respective two fronts. For a long period after independence, India had not resorted to external assistance for education, except for a few select institutions in higher technical education. With the resource constraints on the one hand, and the adoption of the structural adjustment policies introduced in India in the beginning of the 1990s, along with the launching of a social safety net programme that aimed at protecting the sectors of primary education (and primary health care), India suddenly became a country that was to go for external aid for primary education. Chapter 14 presents a critical review of the politico-economic dynamics of the business of aid for education in India, and in the process reviews the rationale for aid for education and its impact. The review of Indian experience with a nation-wide district primary education project (DPEP) unravels quite a few important nuances of the external aid business from which valuable lessons can be drawn for India and other developing countries. While the nature, performance and outcomes of the aid business depend upon several national and international politico-economic factors, in general, external finance does not necessarily solve the educational problems in developing countries, including specifically even the problem of finances.

While India has become a recipient of external aid for primary education only during the fag end of the 20th century—rather suddenly, that too for a short time, it has been providing development assistance to developing countries for education and related aspects since independence. The amount of aid was relatively small, but grew over the years to a recognisable size. The special feature of India's programme is its conception and implementation in the framework of foundational principles of South-South Development Cooperation (SSDC), distinct from normal principles underlying aid business, largely associated with the western countries. There are many lessons that others can learn from the "Indian model of aid". The analytical and critical account of India's aid programme presented in Chapter 15 is hoped to provide valuable fresh insights to the whole issue and should be of considerable academic and policy value when India is aiming at becoming a major player at regional and global level. The other DAC (Development Assistance Committee) member countries will also find in the India model a few important issues that will be of interest to them in their efforts in restructuring their aid programmes and their approaches and their roles in overall development.

The economic reform policies, commonly known as adjustment policies associated with the World Bank and the International Monetary Fund, introduced in India, have been hailed by some as the most promising ones to make economies like that of India into a tiger economy and at the same time criticised by others as a signal of derailment from the Nehruvian path of planned development and welfare in India. Articulation of the arguments by the two divergent sides has been quite powerful. With the help of some readily available data collected from UNESCO, World Bank and important research studies, a few comparisons have been made in Chapter 16 between the 'adjusting' and the 'non-adjusting' countries in the development of education. The comparative analysis has not yielded unanimous conclusions: the adjustment policies succeeded in a few countries but led to deterioration in educational conditions in many others. The success depends upon the

socio-economic, political and administrative conditions of the developing countries, including fiscal capacities, implementation capabilities, and capacity to negotiate with international organisations, on the one hand, and also equally importantly on the nature, flexibility and other 'conditions' attached to the adjustment loans.

The new economic reform policies associated with these policies include reforms in education. In the neo-liberal era, India attempts at reforming education and has taken a few significant initiatives, all not necessarily in positive direction. As already mentioned, elementary education is recognised as a fundamental right and following a constitutional amendment in 2002, the Free and Compulsory Education Act has been made in 2009. A new programme of universal secondary education has been launched, along with a massive programme of skill development. To address some of the problems of higher education, the government has taken up judicial measures and introduced a series of legislations in the national Parliament for approval. Some more have been in pipeline for quite some time. A cursory reading of these bills may suggest that their intent is progressive, and only their design is flawed, and implementation problematic. But a closer reading may reveal that even the intent is suspicious. These and many other recent initiatives in the broad framework of policy reforms mark a transition in the history of education in independent India—from a system embedded in the welfare statism to a system based on neo-liberal market philosophy. The effects of some of these initiatives, some positive and some not, are being felt, as the review attempted in Chapter 17 shows.

The reform policies include, particularly those relating to a reduced role of the state in many sectors, and even privatisation including of sectors like education. Accordingly, one of the most important strategies of promoting education adopted in the recent years has been promotion of private sector participation, particularly in, but not confined to, higher education. It is argued by some that private higher education would improve equity, access and quality in higher education. Accordingly an alarming growth of private higher education has been a striking feature of the very high rate of growth of higher education experienced in India, particularly since the beginning of the 1990s. One does not find such a high dominance of private sector in higher education in any other country—developed or developing. The size of the private sector is about twice-thrice that of the public sector in terms of the number of institutions and student enrolments. This has several consequences, some of

which are already being felt. Apart from refuting several claimed advantages of private higher education, the Chapter 18 draws attention to the dangers involved in a high degree of dependence on the private sector for the development of higher education in a country like India. It is clear from Chapter 18, that (a) public higher education has the greatest potential to address the issue of equity in higher education; (b) charity and philanthropy based private sector having social responsibility as the main canon, may also have high potential in addressing this issue; (c) state supported and effectively regulated private sector can address the issue to some extent; and (d) the private higher education sector based on market principles, including specifically profit, can actually work against the principles and goals of access, equity, and excellence in higher education and may pose a grave threat to education as a public good.

But more and more universities are being set up in private sector in large number and a few by the state. This is in response to exploding demand for higher education. But the new models of university development and their underlying assumptions are not necessarily sound and viable. Reflecting on the nature and pattern of development of universities in India and abroad and drawing lessons from the past and also contemporary scene, a few major fallacies in planning university development in India are highlighted in the Moonis Raza memorial lecture in Chapter 19. It is shown that the whole approach to planning university systems seems to be guided more by immediate, short term, narrow and pecuniary considerations and compulsions and by questionable presumptions and fallacious arguments rather than by long term and broad national and global considerations and theoretically sound and empirically valid research. It also emphasises the need to resurrect the idea of the 'ideal' public university.

The lone chapter in the concluding part of the book focuses on educational statistics that form the basis for policy, planning, administration and development of education. Education statistics assume greater significance today than ever in view of the structural and systematic reforms being introduced and changes that are rapidly taking place in the social and economic sectors in India. The chapter reviews the current status of educational statistics, identifies and discusses problems relating to educational statistics including their reliability, comparability of data collected by various institutions and between different time periods, gaps in data and the bottlenecks in their timely processing and dissemination, and outline a few important strategies for streamlining and improving the whole system.

After independence, India had adopted a strategy of socialistic welfare state and development planning; and after about four decades there was a clear shift in the development paradigm tilting towards market-oriented, if not market-based development. The journey from resistance to gradual acceptance of the new modes by the society at large marks a paradigm shift in the apprehension of the upcoming generation. The two major phases are grounded on two sharply contrasting philosophies. India is not the only country in this regard. Many countries have been under similar transition. The book endeavours to critically examine and analyse the complexity of challenges being posed by the sociopolitical and economic transition that is taking place in India and in many other countries, requiring reinvention, adoption and adaptation of traditional and orthodox approaches along with innovative modern approaches. It offers quite a few pragmatic policy suggestions for the development of a strong, vibrant education system that will be rich in quality, wide in access, and strong in social and ethical foundations. It covers only a few select issues; there are many more critical issues that education in India faces, but they could not be considered for obvious reasons. To present an exhaustive account of education in India is not the objective of this book. Nevertheless, it is expected that the analyses made in this modest attempt will be of considerable interest to a large section of Indian academia, policy makers and planners interested in contemporary policy discourses on education development in India. Since many countries are also facing similar challenges and dilemmas in the development of their education systems, researchers and policy makers outside will also find the book useful in drawing valuable lessons on how to march ahead in their endeavour towards developing strong and equitable education systems of high quality and excellence, nurturing education as a very unique public good that will contribute not only to nation building, but also a global society of peace, harmony and development.

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Politico-Economy of Education



CHAPTER 1

Economics of Human Capital in India

1.1 Introduction

Economics of human capital as an area of research is at least 45-years-old. Though the idea of human capital finds its origins to Adam Smith and Johann von Thunen of the eighteenth and nineteenth centuries, respectively (Blaug 1975) and was more clearly pronounced in the early part of the twentieth century by John Walsh and Irving Fisher, who even used the concept of specialised human capital to refer to skilled and higher educated individuals, Economics of Human Capital, and more clearly Economics of Education was born as a formal area of study only four and a half decades ago with the Presidential Address by Theodore W. Schultz (1961) to the American Economic Association in 1960 on 'Investment in Human Capital'. The human capital theory was a great contribution to Economics and it created 'the human investment revolution in economic thought' as aptly described by Mary Jean Bowman (1966). The very concept of 'capital' had to undergo a serious change, with the emergence of 'human capital'. Further, it is being realised that the concept of human capital has a profound interface with the newly emerging principles and theories of human development. Today, economists go even

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beyond human capital and formulate the concept of 'social capital', which in a sense is built on the concept of human capital to some extent.

In about five years after the formal birth of Economics of Human Capital in Chicago, the Indian Economic Association had organised in its annual conference in 1965 in Banaras a special session on 'Investment in Human Resources,' and could discuss the theme under as many as six major heads that include the concept of human capital, measurement of costs and benefits of education, efficiency of expenditures, rates of return and criteria for investment, and so on. A report of the conference was prepared by V.N. Kothari (1966a). Today when I attempt to review the area of Economics of Education in India, I recall the significant contributions of Kothari among several others and pay respect especially to Professor Kothari, who passed away last December.

According to the human capital theory, expenditures on schooling, health, training, migration etc., constitute investment in human beings, which enhance the capabilities of the people as producers and consumers in the labour market, in the households and in the society at large. Of all, education and health are considered as the two most important components of human capital, and the concepts of educational capital and 'health capital' (Grossman 1972) evolved. There are several similarities between educational capital and health capital, both being essentially embedded in human beings, but there are also several important differences. While expenditure on education improves skills and productivity of individuals, expenditure on health and medical services results in promoting reduction in death rates or birth rates and "primarily affect the numbers and secondarily the skills, capabilities and efficiency" (Kothari 1966a, p. ix). Hence, it is argued that it is not reasonable to treat expenditure on health as investment in human capital, on par with investment in education, though one can argue that certain kinds of expenditure on health might improve the productivity of the people in the labour market. Human capital is also largely defined as the stock of skills and productive knowledge embodied in people (Rosen 1987, p. 682). I do not wish to discuss this further, but I do recognise that Economics of Education and Economics of Health emerged over the years as two strong and vibrant areas of study in the main field of Economics. A short paper of this kind can hardly do justice to the spectacular growth of either Economics of Education or Economics of Health. I concentrate here on Economics of Education, not only because this is an area that dominates the theory of human capital, but also more importantly it is an area in which my comparative disadvantage is less.

In this short paper, I intend to give a flavour of the growth of Economics of Education at large and in India in particular, briefly describe the contribution of Economics of Education to our better understanding of several socioeconomic phenomena, and also the weaknesses that continue to haunt the area. On the whole, I attempt to show that Mark Blaug, who played a key role in popularising Economics of Education with his famous textbooks (e.g., Blaug 1970), *Readings* (1971) and several edited volumes in Economics of Education, was wrong, when he observed that "the economics of education now lies dead in the mind of both professional economists and professional educators" (Blaug 1987a, p. 331).

1.2 ECONOMICS OF EDUCATION

Beginning with the pioneering works of Theodore Schultz (1961, 1963, 1971), Gary Becker (1964), Jacob Mincer (1958, 1974), Edward Denison (1962) and others, Economics of Education has travelled a long distance during the last four and a half decades. There has been a steady and rather a fast growth of the area. From the 'first generation' research of the heydays of the 1960s, reaching the peak in 1970, and the second generation studies of the 1970s and the 1980s, the area grew in strength decade after decade, not only in terms of empirical applications, but also going deep into the various facets of basic tenets of Economics of Education in the 1990s and in subsequent years. Economics of Education has drawn for its own development heavily from Economics, and in turn influenced heavily the development of Economics and also the fast promising area of Development Studies. Economics of Education also broadened the scope of economic planning. The contributions in Economics of Education during the last four and a half decades opened up new vistas in, and have influenced considerably and even expanded the boundaries of the theories of growth, labour market economics, public finance and development economics. Economics of Education also entered the theories of social choice as well and even Welfare Economics. Further, it became an important area in public policy studies, as public policy everywhere is considerably influenced today by research in Economics of Education. Overall, the research conducted in the area of Economics of Education has been very rich, most diverse and vibrant. It covered three broad areas: (a) education-development relationships, (b) educational production function, and (c) financing of education. Studies on education-development relationships examined the contribution of education to development and the effect of development on education, the two-way relationship. They were based on the rate of return analysis, simple correlations, production functions estimating residual and the coefficient of education, and simultaneous equations. Studies also included estimation of demand functions, and analysis of determinants of participation of children in schooling. Studies on education production function further analysed various aspects relating to internal efficiency in education. And studies on financing of education covered principles of allocation of resources, mobilisation of resources, public versus private finances, household investment in education, costs of education, etc. In a short time, Economics of Education has become a specialised branch of Economics and also a separate area of Educational Studies.

Starting modestly as a residual factor in economic growth in the 1950s and in the early 1960s (Zvi Griliches, Denison and others), human capital, more specifically education, became one of the most important factors in the theories of growth. As Blaug (1985, p. 17) remarked, the 1960s represented the golden years of the Economics of Education with research on a variety of economic dimensions of education, and serious debates on conceptual, philosophical and methodological issues. The three major approaches to economics of educational planning, viz., rate of return analysis, manpower planning, and social demand analysis have occupied centre-stage of the research agenda in Economics of Education and also in all the policy and planning discussions on educational planning in developing countries as well as in Eastern and Western European countries, and have vastly contributed to better understanding of several economic dimensions of development. The area of economics of education received serious shocks in the early 1970s in the form of 'screening', 'filtering' 'labelling' (Arrow 1973; Spence 1973), 'ladder' (Bhagwati and Srinivasan 1977) and 'queue' (Thurow 1975) theories, theories of labour market segmentation (Gordon 1972), and the phenomenon of diploma disease (Dore 1976)—all questioning the very productivity role of education in development. These were further fuelled by the rapid growth of graduate unemployment, and the setting up of inflationary trends in the developing countries and stagflation in advanced countries, on the empirical scene. Luckily, the human capital theory not only withstood the initial shocks, which were later described more aptly as 'hypotheses' (e.g., screening) and notions (of segmented labour markets), but also established itself as invincible, and there was a revival of faith in Economics of Education in the 1980s. By the end of the 1980s, economics of education is back with all its firmness. But research of the second generation of the 1980s no more emphasised manpower planning or vocational education. It did include, however elaborate studies, including tracer studies on graduate unemployment in many countries (Sanyal 1987). The research also advocated cautioned use of rate of return analysis, and qualified interpretation of the results. Socialisation function of education has also become an important area of concern.

Recognising the flower-and-seed relationships between education and development, from the very beginning of the 1960s, scholars have also examined the effect of economic growth on education. This continues to be an important area (e.g., Foster and Rosenzweig 2002). Methodologically the research on the relationship between education and development graduated from simple correlations to simultaneous equations and other highly sophisticated econometric methods. In fact, methodological sophistications have been very significant in the area. As a result, compared to the calculations of Denison and Schultz, a substantial part of variations in growth of the nations (and even within nations) could be explained today in terms of investments in human capital, specifically education. The coefficient of education in production functions remained no more as a 'coefficient of ignorance' that Thomas Balogh labelled the residual (Balogh and Streeten 1963).

The recent literature in the endogenous growth theories by Paul Romer (1986), Robert Lucas (1988), Barro and Sala-i-Martin (1995) and Robert Barro (1999) further demonstrated the role of education in economic progress. The research on endogenous growth, though still in an evolutionary stage, provides many critical insights regarding the role of education, investment in R&D and technical progress in economic development. While Solow (1960) considered technical progress as exogenous to the system, according to Romer, technological progress is not an exogenous factor influencing development. Investment in research and development in general and in agriculture in particular attracted the attention of many scholars (e.g., Zvi Griliches). But according to Griliches (2000), R&D is not the source of all productivity growth.

Economics of Education in a sense, helped in better understanding of the links between education and labour market. As many studies in Economics of Education have shown, individual earnings are a monotonically increasing function of education. As Blaug (1972) observed, "the universality of this positive association between education and earnings is one of the most striking findings of modern social science. It is indeed one of the few safe generalisations that one can make

about labour markets in all countries, whether capitalist or communist." The relationship between the two, namely education and earnings, is analysed in the form of rate of return to education. Starting from Strumulin's (1925) work in Soviet Russia, thanks to George Psacharopoulos, rates of return to education have become very popular with the students of Economics of Education in all countries of the world. Rate of return to education is estimated either with the help of Mincerian (or extended Mincerian) earnings function ('shortcut' method) or based on discounted lifetime earnings and costs of education ('full' or 'elaborate' method). Education-earnings relationship, one of the most important hardcore aspects of human capital theory figures prominently in this regard. Psacharopoulos has made periodical updates of compilation of estimates of rates of return in a large number of countries (see Psacharopoulos and Patrinos 2004). Though the basic methodology of estimating internal rates of return to education remained unchanged, several 'adjustments' have been introduced as marginal modifications in the methodology to arrive at finer (or 'adjusted') estimates of rates of return. Alternative methods of estimating rates of return to education are also developed. 'Shortcut' methods have not remained as shortcut methods. Earnings functions also progressed from the Mincerian earnings function used to estimate private rate of return to education to extended and fuller and fuller specifications of the earnings functions. The improved wage equations have contributed to better understanding of interplay of several socioeconomic variables and their effect on earnings. Examination of the education-earnings relationship also brought the issue of distribution of income to the forefront. As a result of all this, labour economists developed strong interest in Economics of Education. Economic dimensions of education could provide useful explanation of the classical, neo-classical and segmented labour market theories.

The various theoretical and empirical models of manpower planning and manpower forecasting (e.g., Jan Tinbergen, Hector Correa, Herbet S. Parnes and H.C. Bos) were found to be extremely useful in many developing and even OECD countries and have contributed to redefining planning methods for employment. The OECD Mediterranean Regional Project under which manpower planning exercises were attempted in a large number of European countries became very popular. Several methodological improvements have taken place in estimating and forecasting manpower requirements. Similar exercises were attempted in

other developing countries. In a sense, the 1970s was a period of manpower planning. But reviews of experiences of many developing countries later (e.g., Youdi and Hinchcliffe 1985) have shown that manpower planning does not work any more, though analysis of manpower situation would be extremely insightful into the labour market dynamics.

Initial studies on private demand for education attempted at explaining the demand in terms of returns to education. Methodologically estimation of the demand function for education involved identification of several social, economic, demographic and other factors. It was a popular method in educational planning for several years. It was increasingly realised that educational planning in many developing countries is based on some notion of social demand, but not on rigorous estimation of demand functions. Nevertheless, it may be noted that research that examined private and social demand for education have made significant dents into Development Economics, necessitating broadening the framework of studies on poverty, inequality, household consumption and levels of living.

Drawing heavily from tools in Economics, Economics of Education went on expanding in its depth and rigour. For example, microeconomic production models are often used to develop and estimate models of school efficiency. Applications of production functions to schools have been on a rise in the studies on school efficiency and research on effective schools (Hanushek 2003).

Apart from the three major approaches to economics of educational planning and micro-economic production models in schooling, researchers also focused on the issues on financing of education. Starting from the research of Selma Mushkin and Frederich Edding in 1960s, research in financing of education has also emerged as a significant area on its own. Drawing from the theories of public finances, scholars have examined several empirical issues relating to principles and practices of public (versus private) financing of education, the rationale for public subsidies, the case of private finances, and unit costs of education. Serious research in the area also contributed to the development of political economy perspectives of education and brought the issue of the role of the State in educational development to the forefront, an issue that was neglected by neo-classical Economics.

To conclude, several surveys including a 'jaundiced' and other introspective surveys by Blaug (1976, 1985, 1987a, 1992), surveys of first generation and second generation research by Carnoy (1977, 1995), and many other volumes like Cohn and Johnes (1992), Johnes and Johnes (2004),

Brewer et al. (2010), and those brought out by Edward Elgar, under the editorship of Blaug in the series of International Library of Critical Writings in Economics, and encyclopaedia-based volumes by Psacharopoulos (1987) and Carnoy (1995) not only give an idea of the stupendous growth in research in Economics of Education, but also highlighted its contribution to development studies and public policy.

1.3 Economics of Indian Education

In India too, interest and research in the area of Economics of Education dates back to the early 1960s, if not earlier, with the pioneering works of V.K.R.V. Rao, and later by A.M. Nalla Gounden, V.N. Kothari, P.R. Panchamukhi and others. Among the earlier scholars, Mokshagundam Viswesvarayya (1931) highlighted the relationship between and education and economic welfare. As already stated, as early as in 1966 the Indian Economic Association paid serious attention to Economics of Education and human resources. The Education Commission (1966) headed by D.S. Kothari, has recognised in a major way education as an investment and its contribution to development. In the same context of the Education Commission's work, an elaborate manpower planning exercise was attempted (Burgess et al. 1968). The literature produced in the 1960s in Economics of Education-by V.K.R.V. Rao (1964, 1970), Baljit Singh (1967), Kothari (1966a), Pandit (1969) and others still stand as the best textbooks/references to the students in Economics of Indian Education. The economic analysis of Indian education by Blaug et al. (1969) helped in understanding the problems of educated unemployment. Many stalwarts in mainline Economics including A.K. Sen, P.R. Brahmananda, V.M. Dandekar, K.N. Raj, Gautam Mathur, P.N. Mathur, Jagdish Bhagwati, Amit Bhaduri, I.G. Patel, Malcolm Adiseshiah, K.R. Shah, D.T. Lakdawala, Amitabh Kundu, and Tapas Majumdar, to mention a few, have occasionally but seriously examined some specific problem or other relating to Economics of Education, and their contributions have remained quite significant. Sen (1970) and Raj (1970) identified and outlined the crisis in Indian education, much before the crisis was perceived by many. The survey paper by Tilak (1977) and the trend report by Kothari and Panchamukhi on Economics of Indian Education (1980) followed by periodic reviews by Panchamukhi (1997, 2000a, 2004) give an idea of the growth of the subject in India. Indian research in the area covered areas such as rate

of return analysis, production functions, educated unemployment, private and social demand for education, and public and private financing of education. School efficiency, financing of education and role of the State and markets are also receiving serious attention of the researchers in India. Analytical studies on the role of education have not confined to labour markets; some have also examined the role of education in households, in consumption, in the marriage market, in improvement in health and nutrition, etc. The research on Economics of Indian Education is indeed rich and huge in volume and is growing fast. It includes research conducted by Indian researchers published in Indian and foreign journals and books, and an equally, in fact, more important volume of research conducted by outside scholars on Indian education.

While in the 1960s, economists in India started with estimation of stocks of human capital (Panchamukhi 1965; Kothari 1966b; and much later Mathur 1990, Tilak 1997a), they concentrated on estimating rates of return to education (e.g., Harberger 1965; Nalla Gounden 1967; Pandit 1972) and manpower planning (Burgess et al. 1968), in the early 1970s, the problem of graduate unemployment attracted the attention of many with the widespread pessimism on the potential role of education in promoting economic growth, and in reducing income inequalities. The problem of graduate unemployment was explained with the help of rates of return by Blaug et al. (1969). Manpower planning continued to be considered relevant (Ramanujam 1973; Ovens et al. 1973; Veena 1974; Prakash 1977; Verma 1984), as the Institute of Applied Manpower Research launched a series of studies in various sectors.

The phenomenon of 'over-educated American' (Freeman 1976) was found in India too. Many highlighted the phenomena of 'excessive education', unemployment educational inflation and corresponding graduate unemployment in India (e.g., Ilchman 1969; Shrimali 1969; Ilchman and Dhar 1971; Kothari 1978), educational devaluation (Panchamukhi 1975), effect of signalling theory on human capital theory (Rao and Datta 1989b) education-labour market mismatches (Panchamukhi 1980; Varghese 1989; Carnoy 1987; Mathur and Mamgain 2004), the unequalising nature of education (Kothari 1970; Bhagwati 1973; Bhaduri 1978; Datta 1985; Rao and Datta 1985) and the screening role of education (Rao and Datta 1989b). The 'excessive education' phenomenon also led the researchers to examine vocational and technical education as avenues to reduce demand for higher education on the one hand, and to improve employability of secondary school graduates. This also followed the government's intended policies to consolidate and regulate the growth of higher education.

Research on educational production function, internal efficiency in education, wastage in education (Dandekar 1956; AERC 1971), etc., occupied the attention of the educational planners from the beginning. Indian education suffers from a severe degree of wastage. Hence issues relating to internal efficiency, viz., dropout, failures and transition between levels/grades in education have been studied not only during the 1960s and 1970s but also they continue to be items of priority for research.

Besides the relationship between education and economic development, the relationship between education and agricultural productivity, education and fertility and demographic change, migration also received the attention of the researchers (e.g., Chaudhri 1968; Ram and Schultz 1979; Evenson and Kisleve 1975; Ram 1980; Caldwell et al. 1985; Rosenzweig and Evenson 1977; Nair 1981; Jeffery and Basu 1996; Drèze and Murthi 2001; Khadria 1999; etc.). Education is found to enhance labour productivity both in manufacturing and agricultural sectors. Demand functions are also estimated that explained the determinants of schooling, determinants of non-enrolment and dropout of children from schools and unequal access to education. Kothari (1992) has shown that earnings and rates of return are a function of several variables like labour market conditions, social and individual characteristics, etc. Inequalities between different socioeconomic groups of population in education, the distributional impact of public expenditure on education on different groups of population and the consequent inequalities in labour market have also attracted many as important research issues.

Despite the knowledge of some of the inherent and practical limitations attached to rates of return analysis (e.g., Majumdar 1983), the method is still popular among the researchers. Studies on rates of return were continued to be conducted; but their scope has been altered; the focus shifted to inequalities; rates of return to education by gender (Tilak 1987a, 1990; Debi 1988, 2004; Duraisamy 2002), by caste group (Scheduled castes/tribes, Harijans, etc.) (e.g., Tilak 1987a; Marar and Fraser 1986), by rural-urban region (Tilak 1992, etc., by socioeconomic groups (Mehta 1990) or by type of education (e.g., management education, by Paul 1972; scientific and technical education by Duraisamy and Duraisamy 1993; vocational and technical education by Shortlidge 1974; Chakravarti 1972; Fuller 1976; Thakur 1979; agricultural education by Mehta 1992) or by sector (in private sector by Rao and Datta 1989a) were estimated. Tilak (1987a) has shown that investment in education of weaker sections like women, rural

children and backward castes, is justified even from the point of view of economic returns alone, quite apart from the social, historical and cultural reasons. Many studies on basic relationships between education and economic development—earnings, productivity, economic growth, poverty, and income distribution have firmly concluded that investment in education in India pays rich dividends (Heyneman 1980; Kothari 1995; Tilak 1979, 1994, 2002b; Vasudeva-Dutta 2004; Chadha 2003; Self and Grabowski 2004; see also Behrman and Schneider 1992a, b).

In the resource-scarce economy of India, issues relating to costs and financing of education and utilisation of resources have been a matter of serious concern especially since the beginning of the 1970s, a decade characterised, following wars with the neighbouring countries, by inflation, unemployment, student unrest, etc. In the 1970s and 1980s, allocation of public resources (e.g., Tilak 1980, 1983, 1987b, 1988a, 2003c; Panchamukhi 1989), their utilisation (Lakdawala and Shah 1978) distributional effects of public expenditure (e.g., Dasgupta and Tilak 1983; Shah and Srikantiah 1984; Datta 1985; Reddy 1988; Mehta 1995), financing of universities (see, for a review of the studies, Tilak 1988b) and such issues occupied the attention of the researchers. A much stronger interest in the issues relating to financing of education marks the decade of the 1990s that broadly corresponds with the era of adjustment and new economic reform policies in India. Several studies have shown that the adjustment policies have negatively influenced the trends in public expenditure on education (e.g., Tilak 1996; Panchamukhi 2000b) and also social sectors in general (Prabhu 1998). A wide variety of issues relating to finances—household expenditure on education, costs of education, alternative methods of financing education, cost recovery mechanisms etc., were taken up seriously (e.g., Panchamukhi 1989; Prakash and Chowdhury 1994; Mathew 1991; Tilak 1991, 1997b, 2000, 2002a, 2003a, b, 2004a; Tilak and Varghese 1991). Several studies (e.g., Tilak 2002a) have shown that there has been a rapid increase in the levels of family expenditure on education; and this does not represent increase in willingness to pay for education, but that households feel compelled to do so, given the declining public expenditures. The complementing versus substituting relationships between government and household expenditures on education were also studied by some. Some (Tilak 1999; Tilak and Sudarshan 2001) have also examined the increasing role of the private sector in education and the likely effects on education development. Further, some scholars have examined the several cost recovery mechanisms that were introduced in the Indian

system. However, research on these aspects has not been abundant. The effects of the enthusiastic entry of external aid into the education sector and initial reluctance of the government to accept the same, and how the trends were reversed were also briefly examined by some (Tilak 2006). Given the vast size of the country, several researchers also focused on regional disparities in human capital development (Mathur 1987, 1990).

The same macro policies also raised interest of the researchers in the role of the State versus markets in education in the twenty-first century. In the early 1980s, there was an emphasis on private education, markets, competition, etc., but by the end of the 1980s, as Blaug (1987b) and Carnoy (1995) noted, the emphasis laid on private education became counterproductive. But by late 1990s or by the beginning of the twenty-first century, markets began to become important. A few studies were conducted examining the relative efficiency of public versus private schools in India (Govinda and Varghese 1993; Kingdon 1994, 1996; Duraisamy and Subramanian 2003) but they produced mixed results, indicating the need for more elaborate studies on the same. Economists and other social scientists also paid serious attention to research on complex relationships between education and the society, stratification and inequalities, and how the neo-liberal policies influence these relationships.

Interestingly these trends in Economics of Education in India broadly correspond with the global trends—initial interest in rates of return and manpower planning, then a shift towards production function studies, internal efficiency and demand functions, and then a further shift to costs and financing of education. In the area of financing of education also, the trends in India correspond with the global trends—high rates of growth in public expenditure on education in the 1960s, negative rates of growth in the 1970s, steady but slow positive growth in the 1980s, and declining growth in the 1990s that accompanied the adjustment policies. Research interests shifted accordingly from examination of allocation of public resources, to mobilising non-governmental resources, then to alternative methods of cost recovery, and to privatisation of education.

Further, while in the 1960s and 1970s research in Economics of Education covered all levels of education, including higher education, research in the 1980s and in the later period concentrated relatively more on the primary (and elementary education). This has also been a global trend. With the recognition of the poverty alleviating role of primary education by the World Bank and others in the mid-1980s, and

with the launching of the Educational For All programmes in 1990 and the adjustment policies in most developing countries in the 1990s, attention of the policymakers shifted drastically towards primary education and away from higher education; so is the attention of the policymakers and researchers in Economics of Education in India (e.g., Drèze and Sen 1995; Vaidyanathan and Nair 2001; Visaria et al. 1993; Bhatty 1998; Tilak 2002b). It is only recently some shift in research towards secondary and higher education can be noted (e.g., Tilak 2007). However, recent studies on higher education get confined to examining issues relating to mobilising resources and improvement in financial efficiency (Tilak 1988b, 1997b, 2004b). There are also several studies that examined the non-monetary benefits of education, including externalities and other effects (Vlassoff 1980; Ramesh 1989; Dasgupta 1990; Tilak 2003d).

At the policy and planning level, none of the standard approaches to economics of educational planning, viz., rates of return, manpower requirements and social demand formed the basis for educational planning, like in many other countries (Tilak 1982), though there were frequent references in the 1970s to manpower planning and to the manpower planning exercise carried out by the Education Commission. Given the increasing constraints on resources, research on alternative methods of financing is likely to attract the attention of the policy planners.

On the whole, as Carnoy (1995) observed, "Economists of education have graduated from narrow estimates of the productive value of formal schooling to explaining, by means of both statistical and historical methodologies, the complex relations between education, the State and the labor market." This, in my view, holds true for Indian economists of education as well.

1.4 Some Stylized Facts

The slowly but steadily growing research in Economics of Education in India has provided robust evidence to make a few stylized facts, as follows:

 Investment in human capital enhances the productivity of labour considerably. Expenditure on education is a valuable investment. Education matters, economically—for economic growth, reduction in poverty and inequalities, improvement in income distribution, besides contributing to other social, political and cultural

- dimensions of development and human development. Even from a narrow point of view of economic returns also, there is sufficient justification for public funding of education, in comparison with other economic sectors.
- Public investment in education of the weaker sections is also justified strictly on economic efficiency grounds, besides for social and political reasons.
- Education poverty and income poverty are closely interrelated. A sustained method of breaking this cyclical relationship is an attack on education poverty.
- Demand for education is considerably influenced by poverty and other social and economic factors, including costs of schooling on the one hand, and school-related factors on the other. The relative importance of tradition and other factors as determinants of participation of children in schooling declined over the years.
- Demand for education in general, and more particularly secondary and higher education seems to be highly income and price elastic.
- Estimates on rates of return serve some important purposes but do not serve as sufficient criteria in investment decision making across levels/types of education, or in education vis-à-vis other sectors. The information generated in the context of rate of return analysis is, however, very useful, providing valuable insights into several related aspects.
- Manpower planning does not work in rapidly changing economies, which are also increasingly dependent on market forces and international factors. But analysis of manpower situation is very useful to understand the dynamics of labour markets.
- It is not only literacy and primary education, but also secondary and higher education contribute significantly to economic development, reduction in poverty, improvement in income distribution and improvement in human development indicators. All levels of education are important, they are inter-dependent on each other and hence it is not be proper to have a fragmented approach to education. One level of education cannot progress at the cost of other levels of education. People with every level of education are more productive than those with a preceding level of education.
- Internal efficiency in education requires investment in good quality formal schools, and reliance on non-formal and other less expensive methods would be costly in the long run.

- Research on the relative effectiveness of private and public schools and the role of markets in education is still modest and is inconclusive.
- Strong and vibrant education systems with national values cannot be built by a heavy reliance on private finances.
- Sustained levels of public investment in education are necessary for improvement in education levels of population, and for education in turn, to effectively contribute to development. But public expenditure on education in India experienced rising trends in the 1960s, followed by a steep decline in the 1970s, and then a slow and steady increase in the 1980s, followed by again severe cuts in the 1990s. Such serious fluctuations may not ensure building a strong and sustainable education edifice.

1.5 Weaknesses of Economics of Education

Economics of Education is also characterised with some fundamental weaknesses from the beginning.

Ever since the very beginning of the 'human investment revolution in economic thought' in 1960, scholars have been busy with the measurement of benefits of education (e.g., Weisbrod 1964). Researchers largely concentrated their attention on direct economic benefits of education, and were content with mentioning about the nature and direction of indirect and non-economic benefits, what can be called externalities. Externalities in education are indeed huge and complex. Some of them do not rise automatically in every society. As Joseph Stiglitz (1999a, p. 65; see also Stiglitz 1999b) stated, it is not just from the numbers of educated people or from the years of schooling of each that externalities are generated, it depends upon the patterns of specialisation and the nature and level of interaction with economic organisations. The inability to measure non-economic benefits remained as a major shortcoming, though many recognised the need to develop methodologies to measure the indirect social benefits. Despite some attempts (e.g., McMahon 1999) made to measure some of the indirect benefits, this remains the most important weakness of the economic analysis of education. As a result of the inability to measure the externalities, as Griliches (2000) concludes, variables on change in human capital do not show up as strongly in the cross-country productivity regression equations or in growth accounting equations as one expects.

The inability to capture externalities also undermine the value of rate of return estimates to a considerable extent in educational planning, as the social rates of return to education are not truly 'social'. The true social rates of return should include the externalities as well. Otherwise, the estimates on social rate of return that we have can be regarded as essentially private or at best as a little more than private rates of return. Tapas Majumdar (1983) refers to the use the concept of 'social' rate of return as a serious 'category' mistake. Category mistakes refer to defining a concept for operational reasons differently—different from a standard use, allow yourself to forget or overlook the difference and finally argue that it does not matter. "These are simply errors due to using familiar technical terms for describing categories of things that fulfill only loosely, but not rigorously, all the conditions that the technical definitions require" (Majumdar 1997, p. 39).

An important weakness of Economics of Education is the inability of the economists to measure quality of education. Quality in most of the studies is measured with the help of proxies, many a time poor proxies. Many a time, it also refers to quality of inputs, but not to the quality of output, the school graduates. Quality of education is directly related to the quality of labour, and the earnings and returns to education. Since the measure of education captures only the quantitative dimension and not the quality of education, the returns estimated to investment in education are only partial estimates and they may remain as under estimates.

While Schultz's human capital theory highlighted the productivity role of education, the screening theories stressed the screening and labelling functions of education, and not the productivity role. But education performs both functions. Unfortunately, they cannot be separated. As Blaug (1987a) highlighted, the inability to separate the productivity from the screening functions of schooling continues to pose a serious problem in Economics of Education. As a result, the relative importance of these two functions cannot be understood; one cannot even say what is the total contribution of education, or the true social rate of education-to-education.

Further, the inability to separate the consumption and investment components in expenditure on education is still regarded as an important problem, in estimating the contribution of education to development. This has been a serious problem, raised in the very early 1960s, immediately after the concepts of investment in education and human capital were formulated. But it still remains unsolved. No methodologies

could be developed to separate them. Education is regarded as a public good, as a social merit want and also at the same time as private consumption. This problem assumes further importance, as it is increasingly realised in the human development framework, that education is not merely a means for reaching higher levels of development but also and more importantly an end in itself; education is development. As Kothari (1966a, p. xiv) stated, "viewing education merely as an investment can be tremendously destructive" of the diverse nature of education.

There are several studies on growth accounting particularly in advanced countries (Griliches 2000; John Kendrick 1961; Denison 1962), and some in India (Dholokia 1974; Sivasubramonian 2004; Loh 1995). First, as Griliches (2000) reminds, 'accounting' is not explanation; growth accounting equations do no explain much. Moreover, the unexplained residual is still high, and many argue that the contributions of education, R&D and technical progress are not fully accounted, nor are their contributions proved to be distinct from each other. Despite several attempts, as Griliches (2000, p. 75) observed, "no smoking gun has been found, and no single explanation appears to be able to account for all the factors, leaving the field in an unsettled state until this day." Balogh's criticism that it is a 'coefficient of ignorance' may still be valid, though to a lesser extent than earlier (Balogh and Streeten 1963). Hence, the search for explanations for the unexplained economic growth continues.

To sum up, despite some of the important methodological improvements, there remain several fundamental weaknesses in Economics of Education. In a sense Majumdar (1997) is right, when he argues in his Babatosh Datta Memorial Lecture that "in spite of the many conceptual and methodological refinements that were introduced over three decades, several of the basic deficiencies have persisted … Not only did economists fail to take care of these initial problems adequately, some of the problems… actually got compounded over the years" (p. 39; see also Majumdar 1998).

In India, the Economics of Education is associated with some additional problems. Economics of Indian Education has been stagnant in theoretical, conceptual, philosophical and methodological aspects. Empirical applications are on increase, but methodological improvements are not seen. As Panchamukhi (2000a, p. 51) lamented, "the conceptual and rigorous, theoretical studies in economics of education are missing."

Second, research on Economics of Indian Education is largely influenced by research in the west, on the one hand, and the changing policy

concerns of the government and in the recent years by those of the international aid organisations on the other. Though this is not altogether defective, there is much scope for alternative approaches to develop its own agenda by the research community. For example, one of the important areas that did not attract attention of many (except Tilak 1989) is centre–state relations in funding education, an important issue in a federal system like India. In fact, one can make a long list of gaps in research in Economics of Education in India.

Some of the problems in research in Economics of Education in India owe their origin to imperfectly developed, and inadequate empirical database. Official statistics on some aspects of education (e.g., school enrolments) are highly suspect; and those on many other aspects are dated and lack details; and the data provided by household surveys like the National Sample Survey are incomplete, as they do not provide data on schools. The later also do not allow any time-series analysis. Further, the absence of data is also responsible for absence of longitudinal studies on educational issues. There are indeed several gaps in research in Economics of Indian Education that owe to the weak database.

Finally, while there has been a remarkable growth in the research in the area, paradoxically, one notices that Economics of Education still remains at the periphery in the Departments of Economics in many universities and research institutions in India. (This is true to some extent in universities abroad as well.) Many Departments of Education or Educational Studies look down Economics of Education, as an application of the unethical principles and canonical model of the mammal science (if not 'bastard science' in the words of John Ruskin) to the holy discipline of education, injecting 'insidious poison in the body politick.' Such a criticism ignores the fact that the nature and boundaries of Economics have undergone a tremendous change over the years, and that economic analysis of education unravels various important dimensions of development and that Economics of Education has come to stay. Very few universities in India offer Economics of Education as a main or as an optional subject in the Master's studies or at M.Phil (or Pre-Ph.D.) course levels in Economics or in Education, though it is also recognised at the same time, again paradoxically, that it has "got an unshakable place now in social sciences as an important component deserving the attention of the researchers and policy makers" (Panchamukhi 2000a, p. 50). This may be partly because, education, by its very nature is interdisciplinary; and economic analysis of education may not be able to provide a comprehensive understanding of educational issues that are intricately related to sociological, cultural, and political aspects, besides individual, psychological and human factors. However, in the recent years, attempts are initiated to introduce at postgraduate level optional papers, such as Economics of Social Sectors or Economics of Human Development that include Economics of Education and Economics of Health, or a paper entitled Economics of Education and Health. But they seem to be feeble attempts and the number of such universities where it is offered is very small. There is still a long way to go.

In the same context, it may be noted that while there are valuable high-quality papers on various aspects in Economics of Indian Education, few textbooks exist on Economics of Indian Education, except for the ones produced in the 1960s that form a part of the first generation research.

1.6 CONCLUDING OBSERVATIONS

In conclusion, let me borrow from Blaug (1987a, p. 333) and state that "I come not to praise economics of education but also not to bury it." What I have tried to do in this paper is to present a flavour of the field of Economics of Education in India, particularly to those who are not very much familiar with it, how it has grown, or more importantly how it tends to stagnate, and some of the continuing weaknesses with which the area was born in 1960. I cannot claim the paper to be either exhaustive and comprehensive in coverage of issues in Economics of Education or in-depth and thorough in my review of several aspects. In the quick review that does not include, due to constrains on space, a large number of studies on various issues, I have also made somewhat sweeping generalisations, without highlighting many details and minor exceptions, as if whatever I said is universally true, which is certainly not the case.

Compared to the queen of social sciences, Economics of Education is very young; it is only 45-years-old. And compared to the voluminous research in Economics, research on Economics of Education is somewhat meagre both in quantity and quality. But it progressed a lot during the last four and a half decades; it had a glorious period, suffered severe setbacks for some time; it experienced a steady but slow revival for some time; tend to grow fast for some time, again to stagnate and to grow. Some feared that it would die in the 1970s. But as Blaug observed, the economics of education did not die out in the 1970s as

a field of academic activity. On the contrary, the decade saw a vigorous development of the subject into new directions, such that we can now distinguish a well-defined second and third, as contrasted with the first generation of research in Economics of Education. On the whole, it proved many astrologers and predictors wrong, as it did not 'degenerate' as feared by Blaug (1976); rather it progressed at an impressive pace. Economics of Indian Education also progressed remarkably during the last four and a half decades. But while empirical applications multiplied, theoretical contributions have not experienced a significant growth. Of course, one cannot expect growth in theoretical developments as much as in empirical applications in social sciences.

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CHAPTER 2

The Political Economy of Education in India

Walking through the jungle, a lion spied a mouse sitting sadly by a bush, and he asked the mouse what was wrong. "I am so small," the mouse replied, "and all the other animals look down upon me." "Then," said the lion, "I can help you. Just stop being a mouse and be a lion instead." The mouse was very grateful. "I shall certainly do what you suggest," he said, "but how do I stop being a mouse?" "That," said the lion, as he walked imperiously a way, "is for you to decide. I only formulate the policy."

2.1 Introduction

Exactly 18 years after the first national policy on education (Government of India 1968), which was in turn promulgated 18 years after the inception of planning in the country and the adoption of the Constitution of the independent state, India adopted a new national policy on education in 1986 (Government of India 1986). One really wonders whether education is such a short-term activity that it needs a new policy every 18 years.

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If one were to identify the single most important long-term sector of human development, it figures out to be education. A cycle of educational process itself is of about 18 years, and if one were to include early childhood education and life-long education, the span of the cycle is much longer, if not limitless; and the effects of an educational cycle can be felt over generations. Adopting a new policy on education every 18 years essentially ignores a priori the very long term character of education. However, in reality, there is no serious conflict in India, as (a) the latest statement of policy largely reiterates earlier statements, (b) little action followed the earlier statement of policy, and (c) as a result of (b) the diagnosis of the problems remains largely the same over the years, and if at all there is any change, it is towards the negative side, increasing the need for quicker action, and hence, it is only the time dimension that becomes important.

In India, there is need for a perspective (long-term) plan for education. Until now no such plan is attempted, because if a plan is made, after all the money is also to be provided for it. A country which has accepted the principle of planned development continues, even after four decades of planning, to have no perspective plan for education as it is still treated as a "marginal issue" (Naik 1979). The absence of a long-term plan in education is perhaps one of the main sources of the ills of the system. This is also reflected in the new 1986 Policy. Rather the most important omission in this policy is the lack of a long-term socio-economic perspective of the country. Statements of policy on massive vocationalisation, large-scale 'mechanisation' of the whole educational system, setting up of rural universities, etc., exhibit no clear correspondence with educated unemployment, the skill requirements of the economy, the potential of self employment sector, the rigidities in the wage structure, the differences in wages between the rural and the urban, the public and the private, and the organised and the unorganised sectors, the dangers of crossing tolerable limits of dependence on other countries for computers, etc. The inter-dependence nature of education and other development sectors on each other on the one hand, and the diverse contribution of education to various sectors over a long period, on the other, necessitate formulation of a policy on education in a framework of inter-sectoral planning. Policy formulation requires clear prioritisation involving hard decisions regarding crucial choices.

The present paper proposes to critically review the educational developments in India in the overall framework of educational policies, plans

and programmes, and discusses rather somewhat inexplicable divergences between policies, plans and their translation into action. As an illustration, a few major financial policies in education are discussed. A comprehensive discussion on policies and plans in education in India is beyond the scope of the present paper. The paper is highly selective and discusses only a few issues. Concentration on financial aspects does not mean that problems of Indian education lie squarely in finances and can be satisfactorily resolved, if financial solvency is attained. But "educational finances is probably the most controversial issue in the economics of education" (Cohn 1979, p. 257).

The body of the paper is organised as follows: After presenting a critical review of the achievements and failures of the education system in India in the following section (Sect. 2.2), Sect. 2.3 analyses a few financial dimensions relating to Indian education. In the context of growing financial squeezes, one may hope that private sector may play an important role in easing the financial problems in education particularly in a mixed economy like India. Section 2.4 analyzes the nature and contribution of private sector to educational development in the country. Section 2.5 discusses the need for a pragmatic policy in financing education. It discusses a proposal relating to discriminatory fee structure that may enhance the contribution of private sector to public schooling on the one hand, and on the other may make the system less regressive. The paper concludes with a brief summary and a few concluding observations.

2.2 An Overview of Educational Development in India: The Colonial Heritage and the Postcolonial Developments

2.2.1 'An Educational Explosion'

The role of education in development has been recognised ever since the days of Plato. Education, Plato believed, is in dispensable to the economic health of a good society, for education makes citizens 'reasonable men'. Since education has high economic value. Plato argued that a considerable part of the community's wealth must be invested in education. Major contribution to the discussion on the relationship between education and economic growth

was made first by Adam Smith, followed by a long honourable tradition of classical and neoclassical economists until Alfred Marshall in the twentieth century who emphasised that "the most valuable of all capital is that invested in human beings". However, "inline with the biased post war approach it was largely for gotten" (Myrdal 1968, p. 167), and no systematic study on the contribution of education to economic growth could be found in the literature, until The odore Schultz's Presidential Address to the American Economic Association in 1960 (Schultz 1961), which created what is later aptly described as "human investment revolutloa la economic thought" (Bowman 1966).⁵ Schultz's pioneering works that led to this revolutioa has clearly established that education is not merely a consumption activity, but for the most part an investment, that leads to the formation of human capital, comparable to physical capital, making significant contribution to economic growth, were followed by significant and rapid growth in research on the relationship between education and economic development.

Synchronising with the human investment revolution in economic thought, many countries around the world, and more particularly the newly independent developing countries expanded their educational systems and made heavy investments in education. The rates of growth of educational systems in many countries exceed the rates of economic growth. This is not surprising. As Schultz (1989, p. 219) stated, "during the process of economic modernisation the rate of increase in human capital is higher than that of reproducible physical capital." India stands as an outstanding classic example of massive expansion of educational systems among the third world countries. In the post-independent India, particularly since the inception of the plan era, an educational explosion has taken place, which may be described as an "educational miracle". The 'miracle' is particularly important when one examines in the context of the colonial legacy. Mass education, comprising universal primary and secondary education, was never a priority in the colonial educational policy, nor was of course higher education. The colonial rule transformed an 'intermediate' literate society into a predominantly illiterate society (Basu 1982; also Desai 1986). 'The beautiful tree' (Dharampal 1983) was uprooted.

When the planning process was initiated in independent India there was a huge legacy of colonial educational system. The needs and prejudices of the colonial powers determined the basic structure, the shape

and the ethos of the Indian educational system. Educational policy in India was clearly subservient to imperial economic policy. The colonial dependent economic relationship between Britain and India shaped the Indian education to serve the needs of the colonial powers. The policy of making India a raw material appendage and a market for British manufactured goods ruined the indigenous educational system with its great chronological depth. The characteristics of colonial education can be briefly summarised as follows⁶:

- (a) Colonial education was not a modernised transformation of the traditional system of education. As colonial education was not a complement to indigenous educational practices, as rather it was planned as an alternative, the indigenous system was destroyed and in its place the colonial system was developed.
- (b) Education in colonial India was highly restricted, as an economy that was expected to serve as a raw material appendage to the colonial powers, would not need educated manpower. The socio-economic base of education in colonial India was extremely narrow. Education was limited to the upper and the upper middle classes of the urban society. The free enterprise policy of the 1880s also created a system that excluded the vast majority of the toiling people. Further, it concentrated in and around port cities, and "this enclavisation of education was an important element of the spatial system of under development" (Raza 1985, p. 3).
- (c) Education was not required to form an input in economic development. It was to produce not trained manpower, but clerks and 'middle men' or 'graduated cogs and wheels' for the British administration. Education was meant only for colonial government employment.
- (d) The multilevel education system was highly pyramidical with very acute angles at the base. Primary and mass education did not receive any serious attention. It was only higher education that was found to be important, as the British believed in the 'downward filtration theory'. But even at this level, it was literary higher education that was emphasised, and that was also confined to a short period, as the colonial powers felt threatened that higher education was breeding a ground for nationalist movement as in the United States.⁷
- (e) Educational system in the colonial India was intended to weaken the forces of national movement.

India started almost from scratch, and has made significant progress during the post-independence period. When the plan era commenced in the country in 1950-51, 19.2 million children were enrolled in primary schools, 4.4 million in secondary schools and 360 thousand in universities and colleges of higher education. According to the latest available statistics, by 1986-87, the enrollment at primary level increased by more than five times, to 90.0 million, in secondary schools by 10 times to 44.3 million and in higher education by about 15 times, to more than 5.5 million. The number of educational institutions tripled during this period, increasing from about 250 thousand to about 750 thousand. Thus, the educational system got deepened and widened as well during the three and a half decades of planning in the country. Today, the number of pupils in India outnumbers the total population of England, France, Canada and Norway taken together. Every sixth student in the world enrolled at primary level, every seventh in the secondary level and every eighth in the tertiary level is an Indian. The enrollment at primary level is more than double the population of Spain and approximates three times the population of Canada. The enrollment at secondary level is roughly twice the population of Australia, and that at a higher level of education approximates the population of Denmark. In the country four out of every five in the age group 6-11, two out of every five in the age group 11-14 and one out of every five in the age group 14-17 are enrolled in schools. More than 4% of the population of the age group 17-23 are in universities and colleges. In all, the Indian educational system produces the third-largest professional class in the world, an asset that distinguishes India from the developing and some developed countries. The educational network is one of the largest in the world.

Such an educational explosion has been inevitable for at least three reasons (Tilak 1980a):

- (a) Provision of educational facilities in the pre-independence period were very insignificant. Independence has created an unquenched thirst for knowledge, resulting in an abnormal rise in social demand for education.
- (b) Second, building up a new socio-economic system after the end of the colonial rule required large-scale manpower with varied skills, and so the government could not but expand educational structure vertically.
- (c) Lastly, the public policy towards equality in education-led to the expansion of education horizontally.

This massive expansion was of course made possible partly by a rapid increase in investment in education. At the beginning of the planer a 1.2% of gross national product (GNP) was invested in education, which increased to nearly 3.5% by 1987. These figures refer to only the public investment in education. If household investment in education, which is found to be quite important for the educational system to work, is also taken into account, the total investment made in education by the society constitutes about 10% of GNP.8 Some of these details are given in Table 2.1.

All this massive expansion of education has a significant contribution to economic growth. In one of the earliest attempts (Dholakia 1974) to estimate the contribution of education to increase in the productivity, quality of the labour force and to economic growth, the relative contribution of education to increase in productivity per person was estimated to be as high as 14.01% during 1948-49 to 1968-69; and 0.36% of improvement in the quality of labour force was attributable to education. The relative contribution of education to the rate of economic growth was 6.79% during the same period. In fact, it increased significantly from 5% during 1949-61 to 10.06% during 1961-69. According to later works, these estimates were found to be underestimates. The contribution of education to economic growth in India was asserted to be as high as 34.4% (Psacharopoulos 1973).9 It has been noted very clearly that investment in education in India is not at all "uneconomic" (Heyneman 1980). The economic returns to education in India are found to be reasonably high; they are comparable to rates of return to investment in the physical capital on the one hand, and to rates of return to education in other developing and developed countries of the world, and that they are moreover found to be increasing. For example, compared to the social rate of return of 20 and 17% in 1961 to primary and secondary education respectively (Blaug et al. 1969), the estimated returns in 1978 were 23 and 18% (Tilak 1987a), as given in Table 2.2.

Estimates of rates of return based on the earnings function also indicate substantial and increasing returns to education, ¹⁰ as if there exists, paradoxically along with educated unemployment, large unmet demand for educated labour with demand for educated labour force increasing more rapidly than the supply. The effect of education on agricultural development was also found to be quite high. Among several scholars, ¹¹ Sidhu (1974)¹² found that an increase of one year in the level of schooling of the population would result in 1.49% increase in the farm output.

 Table 2.1
 Progress of education in independent India

	1950-51	1960-61	1970-71	1980-81	1986-87
Literacy					
Literates (millions)	59.3	105.3	161.4	237.7	_
Literacy (%)	(16.6)	(24.0)	(29.5)	(36.2)	
Illiterates (millions)	297.6	333.9	386.0	420.4	_
Illiteracy (%)	(83.4)	(76.1)	(70.7)	(65.2)	
Enrollments (millions)					
Primary (I–V)	19.2	35.0	57.0	72.7	90.0
(Age group: 6-11)	(42.6)	(62.4)	(76.4)	(83.1)	(96.0
Middle (VI–VIII)	3.1	6.7	13.3	19.9	28.8
(Age group: 11-14)	(12.7)	(22.5)	(34.2)	(40.0)	(53.2
Secondary (IX-XII)	1.5	3.5	7.2	11.3	18.0
(Age group: 14-17)	(5.3)	(11.4)	(14.5)	(28.2)	
Higher (I degree +)	0.2	0.6	2.0	2.8	3.6
(Age group: 17–23)	(1.0)	(2.0)	(5.2)	(6.8)	
Institutions					
Primary ('000s)	209.7	330.4	408.4	485.5	549.2
Middle ('000s)	13.6	49.7	90.6	116.5	137.2
Secondary ('000s) Colleges ('000s)	7.3	17.3	36.7	51.6	64.2
General	0.5	1.0	2.6	4.0	8.8
Professional	0.2	0.9	3.1	3.3	0.8
Universities ^a	28	44	93	123	130
Teachers (10 thousands)					
Primary	53.8	74.2	106. 0	136.3	152.2
Middle	8.6	34.5	63.8	83.1	89.6
Secondary	12.7	29.6	62.9	90.1	119.9
Expenditure (Rs. 10 mill	ions)				
Plan	20	90	115	309	-
Non-plan	94	254	1003	3238	-
Total	114	344	1118	3547	10,041 ^b
Total as % of GNP	1.2	2.5	3.1	2.8	3.2
Expenditure at 1950–51	prices				
Per capita (Rs.)	3.2	6.8	9.8	10.2	17.6
Per pupil (Rs.)	35.6	46.3	67.3	65.8	95.2

aincludes deemed universities

Source Based on Education in India (New Delhi: Government of India, Ministry of Education, various years); Selected Educational Statistics 1986–87 (New Delhi: Government of India, Ministry of Human Resource Development, 1987); A Hand book of Educational and Allied Statistics (New Delhi: Government of India, Ministry of Human Resource Development, 1987); and Seventh Five Year Plan 1985–90, Vol. II (New Delhi: Government of India, Planning Commission, 1985), p. 265

^bBudgeted Expenditure

⁻ Not available

Notes Literacy refers to Census years, 1951, 1961, 1971 and 1981

Expenditure relating 1980-81 and 1985-86 refer to only government budget expenditure

Figures in () are percent to the relevant age group population

 Table 2.2
 Returns to education in India

A. Internal rates of return to education (%)

Year	P_{r}	Private			Social			Sample reference	Source
	Pr	Primary	Secondary Higher	Higher	Primary	Primary Secondary Higher	Higher		
1960–61 1960–61 1978	23 33		12 19 23	11 19 12	17 20 23	11 17 18	9 15 11	Urban India Urban India males West Godavari Dist.	Nalla-Goundan (1967) Blaug et al. (1969) Tilak (1987a)
B. Coefficient of schooling in the sen In $Y = \alpha + \beta_1 S + \beta_2 EX + \beta_3 EX^2$	ient of + β_1 S	schooling + β ₂ EX -	in the semi-log + β ₃ EX ²	earnings fu	nction with 3	vears of school	ing (S) an	B. Coefficient of schooling in the semi-log earnings function with years of schooling (S) and experience (EX) $\ln Y = \alpha + \beta_1 S + \beta_2 EX + \beta_3 EX^2$	
Year	β_1	Other va	β_1 Other variables included		Sample reference	Soı	Source		
1968–72	6.7	Cropped cultivator labourers	1968–72 6.7 Cropped area, HYV, cultivators, agricultural labourers, tractors		Punjab and Haryana agricultural wages		Chaudhri (1979)	79)	
1978 1980	7.4	7.4 None 9.7 None		West (Udaip	West Godavari Udaipur city	Til	Tilak (1979) Dutta (1985)		

Note See Tilak (1987a) for an elaborate discussion on these estimates

On the whole, the contribution of education to economic growth in India has been significant. What economists can measure, they measure; the rest is qualification. While it could not be so precisely quantified, the contribution of education to social development was also found to be significant, i.e., in reducing birth rate, infant mortality rate and poverty and in improving life expectancy, levels of living, and income distribution.

2.2.2 The Conspicuous Failures

Paradoxically along with the remarkable educational expansion, one finds a pathetic educational scene. A general feeling is that "education in India is in perils." At the very beginning of the 1970s, when the predictions of Philip Coombs (1968) regarding the world educational crisis were yet to be taken seriously, Amartya Sen (1970) warned about the "crisis in Indian education." The "continuing educational crisis" (Naik 1982) has several dimensions. As the recent national policy on education (Government of India 1986, p. 2) stated, "problems of access, quality, quantity, utility and financial out lay, accumulated over the years, have now assumed such massive proportions that must be tackled with the utmost urgency."

India inherited a top heavy-bottom weak, elite, literary, unproductive and irrelevant educational system from the British rule. It was so strongly well entrenched by the time India got independence that these characteristics continue to dominate educational scene even today in independent India. In fact, what has happened in the post-independence period is "merely an expansion of the earlier system with few marginal changes in content and technique" (Naik 1965, p. 13). Even the outer structure of the school system has been preserved. During the post-independence period, as Desai (1987) rightly argued, "indigenous pressures, socio-political and economic, have perpetuated and strengthened this colonial model of educational system." While this reflects the deep roots the colonial policies had taken in the system, this also reflects on the state policies of independent India. After all, education has been under the control of the Indian rulers not just for last 40 years after independence, but since 1921. In sum, despite quantitative achievements, the system is characterised by severe failures on several fronts.

Of all, the "most conspicuous failure of the Indian educational system" has been the failure with respect to universalisation of elementary

education, a goal set by the Constitution, to be achieved within a 10-year frame after the Constitution was framed, which still eludes. The goal has been repeatedly postponed from plan to plan. While the Seventh five-year plan aimed at its fulfilment by 1990, the 1986 *Policy*, that was prepared only a year later, postponed it further to 1995, universalisation of primary education by 1990, and elementary education by 1995.

The present official enrollment figures, if adjusted for over and under age-children, show that only about half the eligible children are presently in the primary and middle schools. There are a today a larger number of children outside schools than there were in 1911. The number of children not attending schools was 46.6 million in the age group 6-14 in 1978, compared to 44.1 million in 1911 and 41.9 million in 1961. The capacity of the system to retain the children is found to be extremely poor. On average out of every 100 enrolled in Grade I, only 23 children reach Grade VIII. "The rest make do with a smattering of literacy or add to the mass of illiterates in the country" (Government of India 1985, p. 35). Rates of drop-out are generally higher for girls, for rural children and for children of backward castes than for other children in the society. The highly impoverished educational structures are partly responsible for this phenomenon. According to the Fourth All-India Educational Survey (NCERT 1982), more than half the primary schools in the country do not have proper or pucca buildings, about one-third have no furniture—benches, 'chairs, or even mats, about 40% have no blackboards, 50% have no material for games and sports, 70% have no library books for children and 85% do not have lavatories. A third of the schools are single teacher schools. The conditions of middle schools are not much different. Some colleges are also in a similar state. It is no wonder that such schools can hardly retain a significant proportion of the entrants. With such alarming rates of drop-outs, many observers believe that universalisation of five years of primary education for the children of the age group 6-11, not to speak of elementary education of eight years for the children of the age group 6-14, cannot be achieved even by the turn of the century.¹³ Accordingly, some began arguing for restricting the universalisation of elementary education to 4-5 years (e.g., Kurrien 1983; Bordia 1985), and/or universalising elementary education through nonformal education, which is considered to be a second-rate one in respect of quality as well as quantity, with smaller resources per student and with less attention paid by the educational planners, policymakers, administrators, teachers and the people at large. Further, non-formal education

which was originally conceived as a supplementary system is now being planned as a part of the main strategy of universalization. The 1986 *Policy* (Government of India 1986, p. 12) clearly states:

It shall be ensured that all children who attain the age of about 11 years by 1990 will have five years of schooling or *its equivalent through the non-formal stream*. *Likewise* by 1995, all children will be provided free and compulsory education up to 14 years of age. (emphasis added)

This, what may be termed as the policy of 'minimizing the minimum needs' has already spread to the programmes of literacy. Even by defining literacy as the most basic skill of writing and reading one's own name, India remains predominantly illiterate with the number of illiterates increasing over the years. In fact, adult literacy has been "criminally neglected" by the planners in India (Naik 1965, p. 23). The result is obvious: the number of illiterates in 1981 was about double the number the country had at the beginning of the century. The country today is not only more illiterate than what she was at the tine of independence, the number of illiterates increasing by about 50% from about 300 millions in 1951 to 437 millions in 1981, but also the rate of growth of illiterates has been higher during the post-independence period than in the comparable period before independence, the respective figures being 1.25% (1951–81) and 0.85% (1921–51). Further, half the illiterates in the world live in India.

Beginning with a policy objective of universal literacy, independent India has been gradually scaling down the objective to adult (15+age group) literacy and further to 'young' adult (15–35 age group) literacy. Yet the problem of adult illiteracy has been haunting the Indian educational planners. The Sixth five-year plan aimed at 100% literacy in the age group 15–35 by 1990. At the beginning of the Seventh Plan, it was estimated that the country was having at least 88 million young adult illiterates (Adiseshiah 1985, p. 87).

2.2.3 Expansion of Higher Education

These under-achievements, if not total failures, in mass education are in contrast to what may be called excessive achievements in higher education. As can be noted from Table 2.1, while enrollments in elementary education grew at a snail's pace by about 4.5 times during 1950–51 to

1986-87, enrollments in higher education increased by 20-fold. While one may argue that this is partly an outcome of the relatively small base of higher education at the time of independence, this nevertheless reflects a bias in the public policy in favour of expansion of higher education. 14 This expansion of higher education does not have any clear public rationale. Universities and colleges were opened without any genuine economic and educational considerations. As Altbach (1982, p. 211) observed, "Indian higher education has grown by accretion in the past quarter-century, and there has been little clear planning based on either the needs of the broader society as defined by the government in the various Five Year Plans or the wishes of the academic community". All this has resulted in a glut in the labour market contributing to problems of educated unemployment, which has been endemic in India for quite some time. The statistics based on the live registers of employment exchange¹⁵ presented in Table 2.3 show that the number of the unemployed who have been educated to matriculation and above, increased by about 100 times from 0.16 million in 1953 to 16.5 million in 1986, the latest year for which these data are available. During this period, the share of the matriculates in the total decreased from 77 to 57%, that of the undergraduates was more than doubled, increasing from 10 to 25%, and that: of the graduates and above also increased but marginally from 13 to 17%. All this suggests the increasing mismatch between manpower requirements of the economy and the output of the higher educational system in the country. Strong positive correlation has been reported

Table 2.3 Unemployment of the educated in India (figures in thousands)

Year	Matriculates	Under graduates	Graduates and above	Total
1953	125	17	21	163
1956	187	31	27	244
1961	463	71	56	590
1966	619	204	494	917
1971	1296	605	393	2294
1976	2828	1255	1120	5103
1981	5088	2325	1685	9018
1986	9446	4145	2861	16,452

Source 1953–61: Factbook on Manpower (New Delhi: Institute of Applied Manpower Research, 1963); 1971–76: Employment Reviews (New Delhi: Ministry of Labour, Directorate General of Employment and Training, various years); and 1981–86: Statistical Outline of India 1988–89 (Bombay: Tata Services Limited, 1988)

between the growth in higher education and growth in unemployment of the educated, suggesting not only that growth in higher education has contributed to building the numbers of the unemployed, as the highly publicly subsidised higher education serves the 'baby-sitting role' as well. This excessive growth in higher education has also contributed to some extent to the 'brain drain', which is estimated at between 5500 and 6500 scientific, technical and professional manpower annually (Sukhatme and Mahadevan 1988). Finally, the rapid growth in number of students attending the colleges and universities has contributed to the deterioration of the quality and standards in higher education.

2.2.4 Growing Inequalities

The Indian educational system has been plagued with growing inequalities. Despite remarkable progress in the quantitative expansion of education and also in narrowing of the gaps between the different socio-economic strata, inequalities in the educational system are still quite sharp (see Subbarao 1987). Even after nearly four decades of development planning many weaker sections of the society are left untouched by the vast educational network, as education, particularly higher education still remains elitist in nature, being accessible mainly to the offsprings of the middle and upper classes. Differences in the rates of literacy and in the enrollment ratios between the rural and the urban population, between the men and the women, and between the backward castes and the non-backward castes are quite high. Further, inequalities in educational development between states in India are also marked. For instance, while as per the gross enrollment figures, primary education is universal among the boys in the country as a whole, hardly one out of every four girls of the scheduled tribes of the relevant age group in Rajasthan is enrolled in school. Similarly, the rate of literacy varies violently between 90% among urban males of Kottayam District (100% for the whole population in the Kottayam town) in Kerala and less than 1% among rural scheduled caste women in Barmer District of Rajasthan. In higher education too the inequalities between states, and by gender, caste, etc., are also very high. Hardly 6-7% of the enrollment in higher education belongs to scheduled castes. Women hardly constitute one-fourth of all the students in colleges and universities, and in some regions, the corresponding figure is less than 10%, and in general, states like Orissa, and Rajasthan lag far behind other states in the number of colleges and enrollments (Raza et al. 1984). All this is despite the explicit assertions in the plans for equality of opportunities, and for balanced regional development in education.

Presenting an overview of the achievements made during the post-independence period, Naik (Citizens for Democracy 1978, pp. 13–14) summed up the situation:

It would ... be incorrect to describe the existing educational system as an instrument for educating the people ... it is more appropriately designed for not educating them. In fact, the primary objective of the system is not to spread education among the people, but to function as an efficient and merciless a mechanism to select individuals, who should continue to remain in the privileged sector or enter it afresh ... The main achievement of the system is to condemn the bulk of the children of the common people to be drop-outs and failures and to confine them to a life of drudgery and poverty which has hardly any parallel in the contemporary world or even in our own history.

Policy makers and planners are not unaware of the diseases of the system. The Indian educational system has had the privilege of having been scrutinised by a series of commissions and committees starting from the late nineteenth century.¹⁷ In addition, it has also had two 'national' policies on education after independence. The report of the Education Commission (1966) is a detailed and comprehensive report on the entire spectrum of education during the post-independence era, the problems it faced, the reforms necessary to establish a genuinely "national system of education" that serves the interests of the common people, the priority of action and steps to be taken to carry out the recommendations. The Commission took into consideration all the previous thinking and experimentation and after analysing critically the then existing situation, observed: "Indian education needs a drastic reconstruction, almost a revolution" (Education Commission 1966, p. 488). The Commission prepared a blueprint of educational development in India for a 20-year period (1966-86). The voluminous report of the Commission is one of the few documents on education that has been discussed and debated in a good number of meetings, committees and conferences. But practically nothing was done. As a final action on the Report, the National Policy on Education 1968 was adopted. 18 The recommendations of not only the Kothari Commission but also those of every commission appointed by

the Government of India, are as much relevant today as at the time when the reports were prepared.¹⁹ Transformation of education has been long overdue.

All this should not mean that the planners in India are unaware of the importance of education. From the very first five-year plan onwards, education has been an integral part of economic planning. Plan after plan sang hymns in praise of education. For example, the *Second five-year plan* stated,

Economic development naturally makes growing demands on human resources and in a democratic set-up it calls for values and attitudes in the building up of which the quality of education is an important element. (p. 500)

The *Third five-year plan* stated more emphatically the versatile contribution of education to social and economic development:

Education is the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded on the values of freedom, social justice and equal opportunity. Programmes of education lie at the bases of the effort to forge the bonds of common citizenship, to harness the energies of the people and to develop the natural and human resources of every part of the country ... in all branches of national life education becomes the focal point of planned development. (p. 573)

Every five-year plan stressed universalisation of elementary education, adult literacy, development of vocational education, equality and quality in education. Yet, both the quantitative and qualitative achievements have been short of the targets. As Laska (1968, p. 113) observed, "India has not been able to implement a relatively optimal educational plan, in spite of the fact that the responsible educational authorities seem to have been aware of the nation's basic quantitative educational requirements." It is beyond the comprehension of the present paper to critically discuss all the policy questions that range across wide variety of issues, including language policy, curriculum development, teacher training, single teacher schools, examinations, financing education, centre–state relations, decentralised planning, etc. The remainder of the paper discusses a few significant financial issues in education, as an illustration, to highlight rather inexplicable divergences between policies and plan objectives and their translation into action.

2.3 Political Economy of Investment in Education

2.3.1 Allocation of Resources to Education

Inadequate investment in education is believed to be inter alia one of the most important factors for all the maladies of the educational scene in India. Recognising the contribution of education to economic development (Education Commission 1966), and keeping in line with the human investment revolution in economic thought, the Government of India for the first time accepted the concept of 'investment' in education in its 1968 Policy and quantitatively fixed a target of 6% of national income to be invested on education from the public exchequer as early as possible. But despite recognising the contribution of education to economic growth and development, the pattern of allocation of resources to education is still far from satisfactory. After 20 years, the proportion of GNP invested in education has not been raised even to 4%. This proportion is not only less than the average proportion of GNP invested in education in the developed countries and the world total, but also less than the average in many other developing regions of the world, including Africa, as can be noted in Table 2.4, and it is barely sufficient to provide any meaningful education to a fraction of the current student population in the country.²⁰ Now it is promised that "it will be ensured that from the Eighth Five Year Plan onwards ... it will uniformly exceed to 6% of the National income" (Government of India 1986, p. 29).

The fraction of the national income that a country invests in education is not necessarily a function of the wealth or poverty of the nation. The social and political pressures considerably influence the scale of expenditure on education. Accordingly, some poor countries invest in education more than some rich countries. Within India, for example, Kerala is a classic example in this case. No strong correlation could be found between state domestic product (SDP) per capita and the proportion of SDP invested in education in various states in the country (Tilak 1988a). As Coombs (1985, p. 164) argued, "with other things being equal, some societies, including some of the poorest, will undoubtedly invest considerably more of their scarce resources in education than other societies."

It is indeed more distressing to note that expenditure on education is still treated as consumption expenditure, included a long with

	As percenti product	age of gross national	Per inhabita (US \$)	ant at current prices
	1965	1986	1965	1986
Africa	3.4	5.9	5	36
Americas	5.1	6.1	95	475
North America	5.4	6.5	187	1113
Latin America	3.1	3.5	14	60
Asia	3.5	4.6	7	56
Europe	4.3a	$5.4^{\rm b}$	61	365 ^b
Oceania	3.7	5.6	63	456
Developing countries	3.0	4.0	5	27
Developed countries	5.1	5.8	87	595

Table 2.4 Growth in public expenditure on education in the world

4.9

Total

Source UNESCO Statistical Yearbook 1978–79 (Paris: UNESCO, 1979); and UNESCO Statistical Yearbook 1988 (Paris: UNESCO, 1988)

5.5

38

165

expenditure on recreation, etc., in the Indian national income accounts, and as a social service expenditure, if not as a social burden, even though the planners are aware that "education is a unique investment in the present and the future" (Government of India 1986, p. 3) and that it presents "a crucial area of investment for national development and survival" (Government of India 1986, p. 29). But in practice, resources are allocated to education on 'residual' or on adhoc basis. No economic investment allocation criteria are seen to be taken into account in the mechanism of allocation of resources to education and their subsequent cuts at various stages of planning (Tilak 1983).

When the needs of the educational system have been increasing, the priority accorded to education in the country has been coming down. The share of the educational sector in the total plan expenditure has been consistently declining—7.86% in the First five-year plan, 5.83% in the Second Plan, 6.87% In the Third Plan, 4.9% in the Fourth Plan, 3.2% in the Fifth Plan and 2.7% in the Sixth Plan. The Seventh Plan, however, proposed an outlay of 3.6%. Thus not only has the relative importance given to education in the plan expenditure gradually declined, but also the relative share of education in any five-year plan has been one of the

^aExcluding USSR

bIncluding USSR

lowest, as shown in Table 2.5. All the major sectors have each received more than five times the allocation made to the educational sector. It is quite shocking that even in absolute terms, there was a marked decline in the plan expenditure on education in constant prices from the Third Plan to the Fourth and to the Fifth Plans.²¹ In the annual budget of the government which is "a relatively more reliable gauge of what is really happening .. (and which] provides direct evidence of the relative priority given to education" (Coombs 1985, p. 142), there is a steep decline in the share of education from a level of 14.1% in 1970–71 to 10.8% in 1985–86.²² But the government is aware that "the deleterious

Table 2.5 Sectoral outlays in five year plans in India (%)

	First plan	Second plan	Third plan	Plan holiday	Fourth plan	Fifth plan	Sixth plan	Seventh plan ^a
Agriculture and allied	14.8	11.8	12.7	16.7	14.7	12.3	13.7	12.7
Irrigation and flood control	22.0	9.3	7.8	7.1	8.6	9.8	10.0	9.4
Power/ energy	7.7	9.5	14.6	18.3	18.6	18.8	28.3	30.5
Industry and minerals	4.9	24.1	22.9	24.7	19.7	24.3	15.8	12.5
Transport and com- munications	26.4	27.0	24.6	18.4	19.5	17.4	16.1	16.4
Social Sectors of which	24.1	18.3	17.4	14.7	18.9	17.3	16.2	18.6
Education	7.9	5.8	6.9	4.6	4.9	3.3	2.7	3.5
Health	5.0	4.9	2.9	3.2	3.9	3.2	3.1	3.7
Total	100	100	100	100	100	100	100	100
(Rs. 100 millions)	(196)	(467)	(858)	(663)	(1578)	(3943)	(10,965)	(18,000)

^aProposed outlay; others are actual

Source Chakravarty, Sukhamoy, Development Planning: The Indian Experience (Oxford: Clarendon Press), pp. 108–9; Educational and Allied Statistics (New Delhi: Government of India, Ministry of Human Resource Development, 1987); and The Economic Times' Statistical Survey of the Indian Economy 1984 (Bombay: Economic Times, 1984)

consequences of non-investment or inadequate investment in education are indeed very serious" (Government of India 1986, p. 28).

2.3.2 Intra-sectoral Allocation of Resources

An equally important question relates to the relative priorities within education. The pattern of intra-sectoral allocation, i.e., allocation of resources across different levels of education as presented in Table 2.6, shows a lopsided emphasis on different layers of education. A clear-cut, but not meaningful shift in the priorities is quite obvious. In the First five-year plan 56% of the total plan resources for education were allocated to elementary education, the highest share it has ever received, 13% to secondary and 9% to higher education. The share of elementary education came down drastically in the subsequent plans-to 35% in the Second Plan, 34% in the Third Plan and to 30% in the Fourth Plan. Then it increased to 35% in the Fifth Plan and again declined to 31% in the Sixth Plan; and then tends to decline to a very low level of 29% in the Seventh Plan, a plan that aimed at universalization of elementary education by the end of the plan, i.e., 1990. Adult education, another area of mass education has received scant attention in the plan period. It received 3% of the educational outlay in the First Plan, and it has been less than or around 1% thereafter. The highest share it has ever received until now was a bare 3.5% of the total outlay on education in the Sixth Plan.²³ Similarly, non-formal education, another branch of mass education has never been paid any serious attention in the allocation of plan resources. At the same time the share for higher education has increased from 9% in the First Plan to 25% in the Fourth Plan, and then marginally declined to 22% in the Fifth Plan and to 19% in the Sixth Plan. The Seventh Plan proposed an outlay of 12%. All this is in contrast to the explicit statements of policy and plan objectives that stressed repeatedly the importance of universal elementary education, and adult literacy, and also the need to 'consolidate' higher education.

There have been three phases in the pattern of allocation of resources to education. The first phase covers the First Plan period (1951–56) that witnessed high priority being given for mass education, elementary and adult education together receiving about three-fifths of the resources for education; the second phase covers the Second, and the Third plans and the plan inter-regnum (1966–69)²⁴ that marked a drastic decline in the importance accorded to mass education, and doubling or trebling of

Table 2.6	Allocation	of plan	outlays	for	education	in	five	year	plans,	by	levels
(%)											

Educational			Ε	xpenditur	re			Outlay
level	First plan	Second plan	Third plan	Plan Holiday	Fourth plan	Fifth plan	Sixth plan	Seventh plan
Elementarya	56	35	34	24	30	35	30	29
	(85)	(95)	(201)	(75)	(239)	(317)	(870)	(1830)
Adult	3	2	_	_	1	2	4	6
	(5)	(4)	(2)	(0.2)	(6)	(32)	(110)	(360)
Secondary	13	19	18	16	18	17	25	16
-	(20)	(51)	(103)	(53)	(140)	(156)	(743)	(1000)
University	9	18	15	24	25	22	18	12
•	(14)	(48)	(87)	(77)	(195)	(205)	(537)	(750)
Art and	b	1	1	1	2	3	4	ì
culture		(3)	(7)	(4)	(12)	(28)	(119)	
Other	7	9	11	10	11	7	12	28
general ^c	(11)	(23)	(64)	(33)	(88)	(58)	(347)	(1761)
Sub-total	87	82	79	75	87	88	89	89
	(133)	(224)	(464)	(241)	(680)	(805)	(2616)	(5701)
Technical	13	18	21	25	13	12	11	11
	(20)	(49)	(125)	(81)	(106)	(107)	(329)	(682)
Total	100	100	100	100	100	100	100	100
	(153)	(273)	(589)	(307)	(774)	(912)	(2943)	(6383)
Percent of total plan outlay for education	7.86	5.83	6.87	4.60	4.90	3.27	2.70	3.55

Note 'Plan Holiday' refers to the period of 'plan inter-regnum'. See the Text; Totals for the Sixth Plan figures may not add up, as some are actuals and some are outlays; and Figures in parentheses are Rs. in 10 million

Source A Handbook of Education and Allied Statistics (New Delhi: Ministry of Human Resource Development, 1987); Five Year Plans (New Delhi: Government of India, Planning Commission, various years); Economic Survey 1985–86 (New Delhi: Government of India, 1986); Annual Reports (New Delhi: Government of India, Planning Commission, various years); and Annual Reports (New Delhi: Government of India, Ministry of Education/Human Resource Development, various years)

resources for higher education; and the third phase corresponds to the period after the Third Plan (after 1969) that experienced a slight reversal of trends in the intra-sectoral allocation of resources for education.²⁵

^aIncludes pre-school education

bIncluded in 'Other General'

^{&#}x27;Includes teacher education, vocational and special education (youth services) etc.

It may be argued that had the pattern of allocation of resources in educational sector adopted in the First Plan continued, universalisation of elementary education would have been an easy task, if not already accomplished by now (Tilak and Varghese 1983). It is not only the plan resources, but also the total expenditure on education, that includes the 'non-plan' expenditure which forms a substantial part in the budget on education, that shows relatively higher rates of growth for expenditure on higher education compared to that on school education, as can be seen in Table 2.7. In real terms, ²⁶ the expenditure on higher education increased by 10 times during 1950–51 and 1979–80, while that on primary education increased by hardly five times. The share of primary education in the total expenditure declined significantly from 40% in 1950–51 to 26% in 1979–80, while that of every other level, excepting secondary vocational level, increased during this period.

2.3.3 The Bias in Favour of Higher Education

In a country where two-thirds of the population are illiterate, universalisation of elementary education still eludes, unemployment of the higher educated increases, primary education brings in better economic returns than higher education, and above all where public financing of higher education is regressive in nature and effect, the benefits of higher education accruing primarily to the upper classes, and those from primary education to the masses, the intra-sectoral priorities are quite important in educational planning in a welfare state whose one of the main objectives is equity. Should higher education be expanded, particularly, if it is at the expense of lower levels of education? Considerations for efficiency and equity lead us to question whether it is desirable to expand investment in higher education faster than in primary education? While intuitive answers are simple and straightforward, the actual process is complicated by the dominance of political forces, which largely favour expansion of higher education. What are the political economy factors that lead to the undesirable patterns of allocation of resources?

"Any developing country that continues to give priority to higher education has far less chance of achieving universal primary education by the end of this century than if it puts a cap on higher education expenditures" (Coombs 1985, p. 160).

The Indian planners are not ignorant of this simple truth. The dangers of a policy of an artificially induced expansion of higher education

Table 2.7 Allocation of total expenditure on education, by level of schools

	50-51	55-56	60-61	65-66	70-71	75-76	80–81ª	Growth rate (%)
At current pri	ces (Rs.	in mill	ions)					
Direct Expendi	ture							
Primary	366	540	630	1213	2365	4463	8156	10.9
Middle	77	154	429	810	1709	3410	5511	15.3
Secondary								
General	231	376	689	1504	2700	4636	10,140	12.6
Professional	60	81	146	105	128	206	Ь	b
Higher	184	293	565	1241	2709	5410	10,236	14.4
Total	1153	1897	3444	5859	11,183	21,047	36,021	12.1
At constant (1	950-5	l) Prices	s (Rs. ir	n millio	ns)			
Primary	366	607	580	774	1147	1317	1613	5.0
Middle	77	173	396	517	829	1007	1090	9.2
Secondary								
General	231	422	635	960	1309	1368	2006	6.6
Professional	60	91	134	67	62	61	b	b
Higher	184	329	521	792	1313	1597	2042	8.3
Total	1153	2131	3176	3741	5422	6213	7125	6.2
Distribution (percent	()						Change
Primary	40	37	25	26	25	25	24	-16
Middle	8	11	17	13	18	19	16	8
Secondary								
General	25	26	27	32	28	25	30	-2
Professional	7	6	6	2	1	1	Ь	_
Higher	20	20	22	27	28	30	30	10
Total ^c	100	100	100	100	100	100	100	

Note Primary includes Pre-Primary, Secondary Professional includes professional, technical, vocational and special types; and Totals include, unless otherwise mentioned, 'indirect'/nonrecurring expenditure, not divisible by levels of education

Source 'At Current Prices': Education in India (New Delhi: Government of India, Ministry of Education/Human Resource Development, various years) for earlier years, and for 1980–81 Statistical Abstract India 1986 (New Delhi: Government of India, Central Statistical Organisation, 1987); Others: Estimated by the present author

became obvious within a few years. The non-optimality arising out of a disproportionate expansion of higher education is clearly felt. The accelerated growth of higher education has out-run the growing capacity of the economy to employ the manpower efficiently; and it is also has out-run the capacity to allocate the scarce resources adequately for higher

^aRecurring or Nonrecurring expenditure

^b Included in 'General'

^cDirect or Recurring expenditure only

education and optimally for the whole educational system. Realising this as early as in the Fourth five-year plan it was proposed that the expansion of university-level education in arts and commerce be slowed down. Such intentions continued to be stressed in the subsequent plans: the emphasis on higher education in the Fifth Plan was on consolidation and improvement of standards; and the Sixth Plan took note of the "undesirable growth of facilities for general higher education, specially at under-graduate stages in arts, commerce and humanities, and the consequent increase in incidence of unemployment among the educated" (Government of India 1980, p. 353).²⁷ But few significant practicable policies were proposed to accomplish this. On the other hand, the allocation to higher education has continued to be high, and the higher educational sector continued to expand unabated. In short, the pattern of allocation of resources seems to be guided by no objective criteria. Policy makers seem to admit this, when it was stated,

There is no point in discussing universalisation of elementary education, vocationalisation of education, removal of illiteracy, qualitative improvement of school and higher, particularly technical education, or of establishment of institutions of excellence *unless a system is evolved for allocation of funds on the basis of an objective determination of norms.* (Government of India 1985, p. 81, emphasis added)

How can one explain the growing bias in public policy in favour of higher education and against mass education, while all the three familiar criteria of educational planning, viz., the criterion of rate of return, the manpower planning approach and the principle of social demand suggest the opposite (see Tilak 1980b)? This also stands in contrast with the empirical situation characterised by (a) the existence of increasing evidence of the contribution of mass education to socio-economic development, ²⁸ (b) the higher incidence of unemployment among the higher educated than among the lower educated (Tilak 1992), and (c) the need for fulfilment of the Constitutional Directive, goals of the five-year plans and social objectives such as eradication of adult illiteracy?

This bias in favour of higher education and against mass education is neither a sudden phenomenon, nor is it unique to Indian education. It indeed represents a colonial heritage in many developing economies. The colonial era ended by leaving the masses of people mostly untouched by any formal education. The ignorance of the masses of the

country owes its origin largely to the colonial policies. The colonial governments by neglecting mass education, and supporting higher education, helped "to preserve and make more insuperable the barrier between an entrenched upper class and the masses of people" (Myrdal 1970, p. 172, emphasis original). Both the colonial and independent governments are influenced by similar class structure and represent the class interests of the elite high-income groups, and accordingly favor expansion of higher education, as t he benefits from higher education tend to go to the elite groups and the benefits from primary education to the masses (Bowles 1972). Only the upper middle and upper class families have the means to send their children to colleges and universities. For example, 80% of the student s in higher education belong to the highest 30% of the society in India (UGC 1978, p. 2).²⁹ In the independent India, the vested interests of the ruling elite, along with social demand, produced an unbridled expansion of higher education. The social demand for higher education comes from the people not necessarily based upon any individual or national economic considerations; it is based more upon social and cultural considerations including social prestige value of education or irrelevant and irrational economic considerations like dowry. Further, the social demand is not truly social, it is 'induced' and supply-determined (Tilak 1986, p. 212). "The effective demand for education," as Myrdal (1970, p. 174) also rightly notes, "comes from the 'educated' and articulate upper class." Not to have responded to such 'social' demand was neither in the interests of the ruling class, nor was it feasible practically, as it might undermine their very survival.

Higher education can be advantageously used in political competition for power by these governments, besides preserving, if not accentuating, the unequal distribution of resources through the regressive effects of public financing of higher education (see Tilak 1989a). Higher education forms an excellent vehicle for the government to transfer the resources from the poor to the rich without obvious dissatisfaction, as in principle higher education is open to all classes, and therefore conceals its inegalitarian effect (Bhagwati 1973, p. 24).

The dominating upper classes are already through primary and secondary schools and hence they feel no need for further expansion or improvement in the quality of school education. They, in fact, feel "a vested interest in maintaining the cleft between the 'educated' and the masses" (Myrdal 1970, p. 191). Further, widespread literacy and mass education are feared as causes for raising the consciousness of the poor

and their organisation that may eventually not only effect the distribution of income and resources in the country, but may also destabilise the upper class capitalist government as the experience of Kerala shows (see e.g., Zagoria 1972). Hence "the governing elites refrained from pushing policies that would rapidly raise the consciousness and power of the vast masses of rural and unorganized poor" (Desai 1987).

Basically, the interest of the political forces in education is related "to the prospect of politicisation, that is the conversion of material, human, and symbolic educational resources into political forces that can be used in political competition for power" (Rudolph and Rudolph 1972, p. 30). Within education, it is more often higher education that is seen as a 'source of political allies' in a class-characterised society like India, compared to primary and secondary education. That nearly 95% of the private colleges in states like Maharashtra are "owned" by politicians³⁰ suggests the extent of the political gains of higher education, at the time when the Government of India (e.g., 1985, p. 113) expresses its desire to "depoliticize" education.

The democratic government in independent India cannot be totally blind to the social realities. The conflict between the vested interests of the ruling elite on the one hand, and the social realities on the other led to the emergence of a dual system of education, a tiny sector providing expensive quality education for the privileged few through the private schools known sarcastically as 'public' schools, and private colleges, and cheap education of poor quality for the masses in the public sector. This debate on private versus public education is taken up in the following section.

2.4 The Private Sector in Education

In a mixed economy where the private sector has contributed significantly to industrial and agricultural development, the role of the private sector in the field of education needs a detailed analysis, particularly during phases of economic shortages, if not crises, when the government ability to invest further is nearing saturation, but when still both quantitative and qualitative development of education is essential. In this context, two aspects are important: the role of the private sector in the financing of education, and the role of the private sector in the administration, planning and management of education. A general view is that the private sector did not contribute significantly in either of these

aspects. What is the scope for enhancing the private sector's role in education in India? Does it come into conflict with equity aspects?

To start with, private sector in education is totally different from private sector in the economy in general. Most private schools and colleges in India, as in many countries (see James 1986), receive as much as 95% or even higher proportion of their expenses from the state exchequer.³¹ Private education or private schools mean necessarily privately managed system, and not necessarily privately funded system of education. Even with respect to management and decision making, the private schools could be 'controlled' by public authorities. The controls extend to use of funds, fee levels, staffing patterns, salary scales, etc. More than threefourths of the total of a bout 5000 colleges in 1981 are such privately managed colleges. There are about a dozen 'autonomous' colleges, which are not subject to control by the government with respect to syllabi, examinations, etc., but they also receive substantial funds from the government (UNESCO-ROEAP 1984, p. 100). A few missionary colleges that were opened with philanthropic motives also receive substantial government aided are also subject to controls. Probably except a few such colleges, most private colleges which have been founded in the recent past are operated as commercial enterprises. They need to survive for a few years before they can qualify for government financial aid, and both during initial and later periods, they make profits by underpaying teachers and other staff, charging various types of non-tuition fees, and through other malpractices.

While a vast majority of the private schools and colleges in India are funded by the public exchequer and hence are called "aided private institutions", there are a few private schools, called "public schools", that do not receive any state subsidy and are least regulated by public authorities; but they constitute an infinitesimally small proportion of the total number of schools in the country. In 1978, private unaided primary schools constituted 1.6% of the total number of primary schools in the country, and in the secondary (including higher secondary) sector 3.5% as shown in Table 2.8. The relative production efficiency of these schools (Hanushek 1986) needs to be examined. But in general, one finds no superiority of private schools over public schools in this regard.

The share of the private finances in total educational finances in India is very limited. Ignoring the unaided private institutions for a moment, the contribution of private sector to educational finances in the form of gift, donations, endowments etc., was a petty 3% of the total educational

	Primary	Secondary/Higher secondary
Government schools	55.9	39.2
Private schools		
Aided	42.5	57.3
Unaided	1.6	3.5
Total	100.0 (475.3)	100.0 (47.1)

Table 2.8 Government and private schools in India 1978

Note Figures in () are number of schools in thousands Source Based on NCERT (1982)

finances. This figure used to be around 12% at the time of inception of planning in the country.

It is not possible to state exactly how much of the financial support for private colleges and schools in India comes from private sector, as no country-wide data on private unaided schools are available. Given that such schools are very few in number, their share in the total educational finances cannot be significant. The scanty evidence available indicates that private schools and colleges have grown largely in response to the prospects of making 'quick profits' (Nair and Ajit 1984, p. 1847), and/or for political power, and are detrimental to all but few (Kothari 1986). "Motives of profit, influence, and political power conspired," as Rudolph and Rudolph (1987, p. 296) observed in a recent study, "to accelerate founding's as local politicians created colleges to secure the reliable political machine a loyal staff and students could provide."

As Foster (1982, p. 5) noted, few educational issues can be discussed in post-colonial societies like India that were not foreshadowed in some way in the colonial past.

Education in private schools in India is no exception. Modern private schools and the payment of fee in these schools in India owe their origin to the Wood's Dispatch of 1854, which made elaborate provisions for grants-in-aid to private schools. Under the provisions of the Dispatch, educational institutions were allowed to be run privately for profit. By the provision for grants-in-aid for the private schools, the colonial government was not only able to reduce financial burden on the public treasury, but also could introduce elitist character into the educational system providing education of the kind the upper classes desired for their offsprings, without a large expenditure by the government. Through this the government was also

able to stop financial assistance to all indigenous schools so that eventually they disappeared and the British could have a better control on the educational system³² The modern system in the independent India in effect is unfortunately a continuation of the same system of grants-in-aid, and it has the same ill effects. The Indian public (unaided private) secondary schools are indeed comparable with the British public schools. As Kumar (1987, pp. 28-29) observes, the Indian public schools "draw their distinctiveness from the spirit of British public schools, which they imitate and whose historical origins they share. Like their British counter parts, Indian public schools breathe the spirit of a bygone era of history and continue to uphold an unmistakable aura of Imperial days." The Indian public schools suffer from the same diseases of the British ones, which were impoverished by the feebleness of the social spirit of the same country and were "victims of its precipitous class divisions, its dreary cult of gentility, its inability to conceive of education as the symbol and spirit of a spiritual unity transcending differences of birth and wealth" (Tawney 1964, p. 55). The private institutions, more particularly the unaided private schools and colleges, practice exclusiveness through charging high tuition fee, and alarmingly large "capitation fees" or "donations" and through selection of children on the basis of intellectual aptitude. The tuition fees in the private institutions are so high that few lower and middle class households can afford even to apply for admission in these schools. For example, in Bombay compared to tuition-free education in government schools, private schools (excepting a few private schools that have been established as charities) charge tuition fee ranging from Rs. 4-5 a month to upwards of Rs. 200 a month (Chitnis and Suvannathat 1984, p. 191).³³ Many "public" schools quite deliberately exclude lower socio-economic strata, taking economic status of parent as a criterion (Singh 1972; Bhatia and Seth 1975).

Second, the process of meritocratic selection of children started at the age of three and a half to six is highly divisive from social and economic point of view. "Merit" is judged in terms of etiquette of the elite society and certain types of skills which may not be necessary for formal education, but which are possessed only by high-income families. Thus, "select ion by merit becomes indistinct from selection according to socio-economic background" (Kumar 1987, p. 30).³⁴

In higher education, growth of private engineering and medical colleges has been a recent phenomenon. As a market response to the unmet private demand of the upper classes for higher education, there has been proliferation of such colleges. There are about 161 private engineering

colleges in the country which charge either capitation fees or a considerably higher tuition fees than the colleges run by the government (Shatrugna 1988, p. 2624). These colleges receive little public support, but charge 'hefty' donations and capitation fees from the students. Engineering colleges in Maharashtra in 1989, for example, charge donations anywhere between Rs. 50,000 and Rs. 90,000. These are in addition to tuition and other normal fees charged over Rs. 8000 per annum compared to Rs. 500 in government colleges. Frivate colleges for general education, such as the 'parallel colleges' in Kerala, have also been operating on more or less the same lines. The tuition fees in these colleges are 2–3 times higher than in government colleges (Nair and Ajit 1984).

There are strong disequalising forces inherent in the private educational system. A World Bank study (Psacharopoulos and Woodhall 1985, p. 144) rightly fears that private schools may "turn out to be socially and economically divisive in the future." In case of India, Dasgupta (1979) has already found that there were disequalising forces inherent in private education system, and that the government school system was not adequate to counteract these forces; as a result the whole educational system was found to be a disequaliser accentuating income inequalities. No evidence is available to show that the external efficiency of these schools and colleges is higher than that of the government system of education. The private costs of education in private schools is so high that the advantage, if any, in the earnings associated with private schooling cannot be significantly higher than the earnings associated with government schooling, and as a result, the rate of return to private education could be quite less compared to education in state-run schools.³⁶

Given all this it seems to be right to argue that the benefits of education in private schools accrue largely to the elites, as private sector attracts mainly the elites, as they provide expensive and presumably quality education, while the benefits of education in public schools, in general, go to the masses, as the public schools are compelled generally to choose quantity in the quantity–quality trade-off and accordingly to provide inexpensive education.

To sum up, private schools and colleges, aided as well as unaided, in India do not fulfil either the efficiency criterion or the equity principle, nor dot they contribute significantly to educational finances in the country. Yet, they grow in number, particularly in cosmopolitan urban areas to satisfy the needs of the "gullible parents" (Government of India 1985, p. 80), and some state governments support their expansion,

so long as they serve their vested interests. With them, "the system of inter locking interests of capital, educated elites, bureaucrats and politicians is thus mutually supportive and complete" (Kothari 1986, p. 596). Private unaided engineering and medical colleges are allowed by the governments in Karnataka, Tamil Nadu and Maharashtra, and recently in Gujarat and Andhra Pradesh. While earlier policies³⁷ would seem to be against the growth of such private schools, the 1986 Policy is conspicuously silent on this, even though the government's Policy Perspective that preceded the *Policy* statement, took note of it, when it stated: "A large number of technical colleges have come up which charge sizeable capitation fee for admissions. There is a strong feeling that their activities should be curbed because they are providing access to education on the basis of economic status of the guardians and not on the basis of merit" (Government of India 1985, p. 98). Why are the policies of the government not in consonance with its own diagnostic perceptions. Kothari (1986, p. 594) rightly stated, "there has come into existence a class of rich and well-to-do people consisting of politicians, top bureaucrats, business executives, small and big industrialists, traders, businessmen, technocrats, professionals in independent private practice and large landholders which is able to pay capitation fee and high recurring fees. It is pressure from these people, which has resulted in the relaxation of the government policy."

Interestingly, the government not only allows the growth of such private colleges, but also for example, in the state of Andhra Pradesh, the government itself is contemplating the creation of such institutions ostensibly to provide high quality expensive professional education to all. Like in the 'public' schools, selection of the students into the proposed professional institute would be based on the aptitude test, and the student number would be restricted to 300. It would refuse capitation fee or donations, but would charge a tuition fee of Rs. 15,000 per annum for engineering and management courses, and Rs. 20,000 for medical courses (Government of Andhra Pradesh 1987).³⁸

One cannot see any clear difference between private colleges and this government institute, and may logically fear that like the elite 'public' schools, such government institutes would promote elitistic character and contribute towards worsening social equities in the society. In the school sector, the *Navodava* schools proposed in the *Policy* may also contribute towards perpetuating the dual school system, unless the proposal is exceptionally sincerely implemented. In course of time, the merit

ordered criterion for admissions into these private or government run expensive institutions would be replaced by ability-ordered criterion, and the high fees, not to speak of capitation fees, would effectively debar the students from middle class and even upper middle-class families, not to mention of the lower income families. "The objective of equal opportunities for education would be jeopardised in a big way. The overall effect would be to convert education into a force for reinforcing the existing stratification of the society" (Kothari 1986, p. 596).

2.5 Towards a Pragmatic Approach to Financing of Education

Until now it has been noted that the story of Indian education is full with quantitative miracles as well as with conspicuous failures, some of which may be attributed to differences between state policies and actions. It is widely felt that the paucity of resources is one of the most important reasons for the failures. It is generally argued that in a mixed economy like India the private sector should be encouraged to take increasingly more significant role in financing education. 39 The limited experience indicates that the Indian private sector is not yet ready to meaningfully shoulder the financial responsibilities of education. The 'public' schools make money by charging exorbitant tuition fee from the students and by not necessarily investing the whole revenue in education. The aided private schools on the other hand, somewhat regulated by the government control, also make profits by charging high fees on the one hand, and on the other hand through malpractices in the payment of salaries of teachers and other staff, and in their recruitment like in the "public" schools. 40 They make profit at the expense of the public exchequer. Hence there is no convincing case for public financing of private institutions, that only yield quick profits to the private entrepreneurs, in this social merit good.

But the near saturation levels of the public ability to finance education require a pragmatic policy that increases the private sector finances for education. Hence what may be suggested is not privatisation of the educational system, but increasing the private share in financing government school system.

Private finances for education are of two kinds: (a) donations, endowments etc., and (b) the fee, together now contribute about 12%

(donations and endowments 3% and fee 9%) of the total educational finances in India (see Table 2.9). In higher education three-fourths of the expenditures are met by the government—52% by the state governments, and 22% by the central government, including transfers through the University Grants Commission, and less than 20% of the total expenditure comes from private sources: 13% in the form of fees, and 7% in the form of donations, endowments and others, as given in Table 2.10 (see also Tilak 1989b). There exists some scope to raise resources by encouraging individuals and organisations to make large endowments and donations to the educational sector through tax incentives and other measures, and also to develop a credit market for the educational system to provide education loans to the students. Nevertheless, the net effect of such voluntary efforts may be limited. On the other hand, one may concentrate on reforming the fee structure.

2.5.1 Fees in Indian Education

The trends in the total fee contributions⁴² to educational finances in India are quite disturbing, some of which can be briefly noted as follows:

(a) During the pre-independence period, fees used to form a significant proportion of finances for higher education. Fees amounted to about 30% during 1896–1947. In 1896–97 universities used to

Table 2.9	Private and public finances to education in India (%)
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1950-51 1960-61 1970-71 1980-81					
Central and State 57.1 68.0 75.6 80.0 Governments 10.9 6.5 5.7 8.6 (Zilla Parishads, Municipalities, Panchayats etc.) Value V		1950–51	1960–61	1970–71	1980–81
Governments 10.9 6.5 5.7 8.6 (Zilla Parishads, Municipalities, Panchayats etc.) Value of the part of t	Government sector				
Local Governments 10.9 6.5 5.7 8.6 (Zilla Parishads, Municipalities, Panchayats etc.) Private sector 20.4 11.2 12.8 8.8 Endowments, Donations, etc. 11.6 8.3 5.9 2.6 Total 100.0 100.0 100.0 100.0	Central and State	57.1	68.0	75.6	80.0
(Zilla Parishads, Municipalities, Panchayats etc.) Private sector Fees 20.4 11.2 12.8 8.8 Endowments, Donations, etc. 11.6 8.3 5.9 2.6 Total 100.0 100.0 100.0 100.0	Governments				
Panchayats etc.) Private sector Fees 20.4 11.2 12.8 8.8 Endowments, Donations, etc. 11.6 8.3 5.9 2.6 Total 100.0 100.0 100.0 100.0	Local Governments	10.9	6.5	5.7	8.6
Private sector Fees 20.4 11.2 12.8 8.8 Endowments, Donations, etc. 11.6 8.3 5.9 2.6 Total 100.0 100.0 100.0 100.0 100.0	(Zilla Parishads, Municipalities,				
Fees 20.4 11.2 12.8 8.8 Endowments, Donations, etc. 11.6 8.3 5.9 2.6 Total 100.0 100.0 100.0 100.0	Panchayats etc.)				
Endowments, Donations, etc. 11.6 8.3 5.9 2.6 Total 100.0 100.0 100.0 100.0	Private sector				
Total 100.0 100.0 100.0 100.0	Fees	20.4	11.2	12.8	8.8
	Endowments, Donations, etc.	11.6	8.3	5.9	2.6
$(1140) \qquad (3444) \qquad (11,183) \qquad (35,469)$	Total	100.0	100.0	100.0	100.0
		(1140)	(3444)	(11,183)	(35,469)

Note () Rs. in million

Source Education In India (various Years); and Statistical Abstract India 1986

Table 2.10 Finances for higher education, by sources 1979–80 (%)

	Government	ıt			University	Fees	Endowments	Others	Total
	Central	UGC^a	State	Local	I				
Recurring									
Universities	7.1	20.1	42.5	0.1	3.1	15.1	9.0	11.4	100 (2273)
Research	84.7	0.2	4.1	0.1	p	3.7	0.1	7.1	100 (476)
Institutions									
Colleges	5.6	3.4	64.1	6.0	5.7	15.5	0.7	4.1	100 (5451)
Total Non-recurring	10.6	7.8	54.7	9.0	4.6	14.7	9.0	6.3	100 (8200)
Universities		30.3	35.9	0.2	2.5	I	S	10.0	100 (547)
Research	93.1	0.4	2.4	p	b	I	c	4.1	100(127)
Institutions									
Colleges	15.1	9.3	43.0	1.1	4.9	I	c	26.5	100 (525)
Total $Total$	26.1	18.0	35.5	9.0	3.3	I	v	16.6	100 (1199)
Universities	8.6	22.0	41.2	0.1	2.9	12.2	0.5	1.1	100(2819)
Research	86.5	0.2	3.7	0.1	þ	2.9	0.1	6.4	100 (602)
Colleges	6.4	3.9	62.3	0.0	ъ. 4 5.6 п	14.1	9.0	6.1	100 (5976)
IOLAI	17.0	7.1	7.70	0.0	c. 1	17.0	0.0	0./	100 (2520)

^aUniversity Grants Commission

^bNil or negligible ^cIncluded in 'Others'; – Not relevant

Note Figures in () are Rs. in Millions Source Based on Education in India 1979–80, Vol. II (New Delhi: Government of India, Ministry of Human Resource Development, 1987)

- be supported to the extent of 92% by fees. Even at the time of independence, in 1946–47, fees in colleges and universities used to form about 45% of total expenditure (Azad 1984, pp. 35–38; see also Misra 1962). They declined to 13% in 1979–80.
- (b) Since independence, even though the total fee income for the entire educational system increased by more than 13 times during 1950–51 to 1980–81, there was a steady decline in the relative contribution from 27% in 1950–51 (30% in 1881) to 17.2% in 1960–61; they declined further to 9% in 1980–81. If these figures are adjusted for the direct subsidies to the students in the form of scholarships, the net income from fees constituted still less, 6.4%, in 1979–80.
- (c) If adjusted for price increase during the same period, the total fee income increased by two and a half times, the index increasing from 100 in 1950–51 to 264.4 in 1980–81.
- (d) On average, in real terms, the fee per student in Indian education in 1980–81 was nearly half of what it was in 1950–51, even though at current prices it increased by three times, as the figures in Table 2.11 show. The fees declined at every level, and subsidies

Table 2.11 Fees in Indian education

		Fee	Fee	Net fee		
	Current prices	Constant prices	Current prices	Constant prices	As percent of tional cost	f instruc-
	(Total Rs. Millions)		(Rs. Per Pupil)			
1950–51	233.3	233.3	9.11	9.11	27.1	20.4
1960-61	590.3	541.4	12.31	11.29	17.2	11.3
1970-71	1432.4	673.8	17.38	8.18	12.8	8.2
1977-78	2410.8	671.7	23.76	6.62	9.8	7.1
1978-79	2505.3	667.4	24.32	6.47	9.2	_
1979-80	2727.7	598.5	24.43	5.36	8.9	6.4
1980-81	3116.4	616.5	27.91	5.52	9.1	_

Note Net fee is defined as fee minus scholarships. See the text

Source Based on Tilak, J.B.G., and Varghese, N.V., "Discriminatory Pricing in Education", Occasional Paper No. 8 (New Delhi: National Institute of Educational Planning and Administration, 1985); Education in India 1979–80 Vol. II (New Delhi: Government of India, Ministry of Human Resource Development, 1987); and Statistical Abstract India 1986 (New Delhi: Government of India, Central Statistical Organisation, 1987)

⁻ Not available

- increased. For example, a university student in 1980–81 paid as fee one-fourth of what he used to pay in 1970–71.
- (e) The fee structure in quite uneven across different levels of education. On average a student in higher education, and more particularly in higher professional education pays fees, which in relation to direct/recurring expenditure per student, are much smaller than what are paid by students in secondary schools. Even in absolute terms, the fees per student in professional education are about 20% less than the fees in general higher education (see Table 2.12).⁴³
- (f) As a proportion of direct expenditure per student, university education, which is generally postgraduate general or professional, is cheaper for the student than college (general) education, or even junior college education, which is presently treated as higher secondary level.
- (g) The decline in the relative contribution of fees to total educational finances over the years has been most pronounced in the university sector. It declined from 45% at the time of independence to about 15% by the end of 1980s.⁴⁴

All this evidences show that education, particularly higher education is heavily subsidised by the government. Such huge public subsidisation causes several 'perverse' effects in the society, particularly on equity, as through higher education a transfer of resources takes place in the society from the lower income groups who pay the bulk of the taxes from which the resources for education are drawn, and who form a small fraction of students in higher education, to high-income groups who constitute the main consumers of higher education (see Tilak 1989a). In India, government expenditure which forms the main basis for financing education is financed from indirect taxation to the extent of 90%, paid mostly by the poor majority. High public subsidy also acts as a "disincentive for [the student for] for becoming self-reliant, kills personal initiative and conditions the students to a state of dependence" (Shatrugna 1988, p. 2624). Thus, there exists much scope for significantly reforming the structure of fees in higher education so that not only more resources are generated, but also that higher education becomes less regressive, and hence more equitable.

There are valid reasons for confining the fee reforms to higher education only. First, elementary education is anyhow expected to be totally free, as per the Constitutional Directive, and the Declarations of the

Table 2.12 Cost and fees in Indian education, by levels

	Cost ^a per pupil (Rs.)	Total fee income (Rs. in millions)	Fee per pupil (Rs.)	Fee/Cost per pupil (%)
1970-71				
Primary	57.00	47.1	1.14	2.01
Middle	84.85	68.2	3.39	3.99
Secondary	168.56	500.0	31.21	18.52
Colleges				
General	421.54	368.4	164.91	39.12
Professional	1180.83	101.0	132.03	11.18
Universities	2942.67	155.2	857.46	29.07
1979–80 (at c	urrent prices)			
Primary	142.20	98.0	1.95	1.37
Middle	189.60	245.0	8.79	4.63
Secondary	366.32	987.0	41.87	11.43
All Higher	1482.83	1230.9	229.50	15.48
Jr Colleges	325.50	27.0	61.46	18.88
Colleges ^b	1142.80	842.0	181.97	15.92
Universities ^c	7464.10	344.1	1240.77	16.62
1979–80 (at 1	970–71 prices)			
Primary	65.35	45.0	0.89	0.63
Middle	87.13	112.6	4.04	2.13
Secondary	168.35	453.6	19.24	5.25
All Higher	681.45	565.7	105.47	7.11
Jr Colleges	149.59	12.4	28.24	8.68
Collegesb	525.18	386.9	83.62	7.32
Universities ^c	3430.19	158.1	570.21	7.64

Note As the classification was changed in 1976-77, exact comparable levels cannot provided in higher education

Source 1970–71: Tilak, J.B.G., and Varghese, N. V., "Discriminatory Pricing in Education", Occasional Paper No. 8 (New Delhi: National Institute of Educational Planning and Administration, 1985); and 1979–80: Based on Education in India 1979–80 (New Delhi: Government of India, Ministry of Education, 1987)

United Nations and its bodies, and in secondary education the students already finance a reasonable proportion of their cost of instruction. Second, the students in higher education are relatively better off economically to start with, and through higher education they increase the probability of quick employment and better wages. Third, it is in higher

^aRecurring or Direct expenditure only

bI Degree and above

^cIncludes other institutions for higher learning

education where the relative contribution of fees declined very steeply, in contrast to other levels of education. Fourth, it should be added that it is the subsidies in higher education that are in general found to be regressive having perverse effects on inequalities, transferring resources from the poor to the rich⁴⁵ (Psacharopoulos 1977). Fifth, it is higher education that has a lower economic rate of return to the society compared to elementary and secondary education, as already noted. Lastly, in general, the demand for higher education is relatively in elastic to fee structure, i.e., increases in fees do not lead to any significant fall in enrollments, as there is large unsatisfied private demand for higher education (Handa 1972), reflected partly by the growth of private colleges in India that charge high fees/donations.

2.5.2 Discriminatory Fees

The anomalies in the present pattern and structure of fees are apparent to the Government of India. The Policy Perspective stated that "the pricing of education at other [secondary and higher] levels will have to be reconsidered and quantum and share of subsidisation will have to be related either to merit or the dictates of social justice" (Government of India 1985, pp. 81-82). How is this objective to be translated into action? Generally, a steep increase in fees has been suggested for a long time by many (e.g., Blaug et al. 1969, p. 247; Government of India 1985, p. 50). But a uniform increase in fees for all students would be regressive. After all, fee is "the most regressive form of taxation ... which falls more heavily on the poorer classes of society and ... [is] an antiegalitarian force" (Education Commission 1966, p. 111).

On the other hand, a structure of discriminatory fees⁴⁶ can be advantageously adopted to generate more resources and at the same time to ensure social justice. Depending upon (a) the income levels of the students' families, and (b) cost of instruction, different fee rates should be charged for different students, the richest paying the maximum share of cost of instruction, and the poorest income groups paying no fee at all.

Along with this, to make higher educational system more equitable, a system of discriminatory incentives may also be adopted that favours lower income groups, while at the same time rewarding merit. The richest quartile of the students could be required to pay 75% of the cost of instruction, the second richest quartile 50%, the third richest quartile 25%, and the bottom quartile could be exempted from payment of any

fees. Thus, the higher the income level of the students, the higher the rate of fees they should pay. Yet, since education is a public merit good, no student should pay the full cost of education. At the same time, poor students would receive the same education as the wealthier students in the same system but without paying any fees. Thus the proposal would generate more resources and at the same time, it would be progressive and equitable. It has been estimated in an empirical exercise (Tilak and Varghese 1985) that such a scheme would generate 2.8 times resources generated otherwise through fees in 1970–71 in professional higher education in India.

Discriminatory fees have certain advantages, in addition to generating additional resources. Being based on costs of education, if the cost of a particular type of education, say engineering education, are higher than that of general education, the proposal automatically guarantees higher level of fees in engineering education, and vice versa.

Similarly when costs of education increase, fees would increase correspondingly. Levels of fees may also vary among the different regions in the country in accordance with the regional variations in costs of education. More important, all students, whether they pay no fees or 75% of the cost of instruction, receive education of the same quality and quantity at the same place. It avoids creation of dual structures of education providing education of high quality for the rich and education of poor quality for the poor.

Simultaneously, half the scholarships could be awarded to the bottom poor half of the students based on the criteria of merit and means of the students, while the remaining 50% of the scholarships should be given purely on merit, irrespective of the fact whether the students belong to the lower or upper economic categories. Such a discriminatory incentive scheme would be both efficient and equitable, as all the meritorious students will be rewarded, at least 50% of the scholarships go to the poor, and higher the proportion of meritorious students in the lower economic classes, higher (than 50%) would be the scholarships to the lower strata. Thus discriminatory fee policy along with discriminatory incentive system could be highly progressive.

The proposal is not likely to have any significant impact on demand for higher education in India. As there is excess demand for higher education, even for expensive education, the suggested increase in fees would probably not result in any significant diminution in the enrollments. Further, since it is only the relatively wealthy who would be required to pay fees, the demand for education form lower income groups cannot be expected to fall, and if at all there is any negative effect, the discriminatory incentive scheme should be able to counterbalance it. Third, since for the wealthy higher education becomes expensive, the quality of education might be improved though better inputs. The baby-sitting role of higher education gets reduced, and only genuinely interested students seek admission into higher education, thereby improving internal efficiency of the system.

Having noted all this, it should be added that the suggested reform of discriminatory pricing and incentive mechanism can be only a partial solution to the problems of financing and equity in higher education in India.

2.6 Summary and Conclusions

This paper presented a quick review of the educational developments in India concentrating on the post-independence period. While the achievements of four decades of development planning are impressive, the failures are also shocking. While colonial policies were responsible for some aspects of the current educational scene, it may be stressed that the state policies of the independent country during the last 40 years also share the major blame. State actions are often found to be not in consonance with the state policies and plans. The divergences are some what inexplicable. In a number of cases in India conflicts between expressed goals and actually proposed programmes are noted. As Myrdal (1970, p. 204) stated, "the distortion of educational efforts from commonly expressed general goals has its basis almost everywhere in a social, economic, and political stratification, giving a small upper class a dominant position." As an illustration, a few major financial policies in education are discussed in this paper.

The government realises that inadequacy of financial resources is generally felt to be one of the critical factors for the desperate state of affairs in education. Accordingly, in Sect. 2.3 the financial aspects are reviewed, briefly analysing the underlying forces that influence allocation of resources to education and between different levels within education. In the context of growing budget squeezes for education, one may feel that in a mixed economy like India the private sector may play an important role in easing the financial crisis in education. But the experiences show that the contribution of private sector to educational finances in India is

extremely limited; and the role of the private sector in the overall educational development, including administration, management and financing aspects of education, is indeed not conducive for the development of the welfare state: it may be socially divisive and financially ineffective as argued in Sect. 2.4. It is felt that while the private sector in India in general, is not ready to shoulder the educational responsibilities of the nation, the contribution of private sector to financing public education can be improved. One proposal often suggested in this context refers to raising the fees. But a general rise in fee may have a highly inequitable effect. Hence, a pragmatic policy is suggested here that involves introduction of discriminatory fee and discriminatory incentive system based on the socio-economic background of the students, cost of instruction, and the pattern of rewarding education in the labour market, may not only generate additional resources for education but also promises to make higher education less inequitable and this proposal may be superior to several other alternatives available for generating additional resources for education. Fee is an important political question. Like most reforms the reform in fee of the kind suggested here too requires strong political will. At the same time, it may also be noted that the suggested reform in fee is not a panacea to all the major problem of Indian higher education. It is only a partial solution. It neither cures all the major problems in Indian education described in Sect. 2.2, nor even the few financial problems out lined in Sect. 2.3.

After all, it is true that the problems of education cannot be solved solely by throwing money. But without money, modern educational systems cannot work. While the educational system is starved of adequate financial resources, mobilisation of adequate finances will not solve all the problems; but the lack of resources do aggravate them. In short, finances are only a necessary, but not a sufficient condition for development. Neither the total resources available to education in India are adequate, nor are they spent efficiently on various levels. The costs of under-investment in education and of the misallocation of resources within education are indeed quite high. To conclude, most educational policies are political in nature. More political factors complicate the realization of these policies, often causing wide differences between state policies, plans and actions. Financial issues like allocation of public resources, and mobilisation of additional finances involve more active political actors with varied interests. Basically the absence of a long-term plan for education is perhaps one of the main sources of the fundamental

problems of the system. The economy that aims at progress based on the principle of development planning cannot afford to have its huge educational system without a perspective plan. The need for long-term educational planning in the country is indeed quite significant. Unless pragmatism and sincerity dominate state actions, most educational goals, including basic needs in education, will remain unfulfilled.

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Notes

- 1. From Palkhiwala (1984, p. 147, emphasis added).
- 2. For instance, one critic observed that there is "not a single new idea in the new policy" (Dinesh Mohan 1986, emphasis original).
- 3. See for an elaborate discussion Naik (1982).
- 4. The only such plan is the Post-war Educational Development in India (CABE: Central Advisory Board of Education 1944), known as the Sargent Plan, prepared before the independence.
- 5. See Blaug (1975) for a description of the views of classical economists on education.
- 6. See Gunnar Myrdal (1968), Kelly and Altbach (1978), and Naik and Nurullah (1945). See for a short discussion, also Misra (1962), Basu (1982), and Desai (1987).
- 7. For example, the British fears were well reflected in the famous statement made by Randle Jackson, a member of the Parliament: "We have lost America by our folly, in having allowed the establishment of schools and colleges, and it will not do good for us to repeat the same act of folly in regard to India. If the natives require anything in the way of education they must come to England for it."
- 8. See Tilak (1988a) for more details. See also Kothari (1966), and Shah (1987).

- In a recent growth accounting exercise, Mathur (1987) estimated the contribution of 'technological change' to economic growth in India to be quite significant.
- 10. Other important studies on earnings functions that include variables on education, are Shortlidge, Jr. (1976), Mann and Kapoor (1988).
- 11. See Tilak (1984) for a review of several studies on the effect of education on agricultural productivity in India.
- 12. As quoted by Jamison and Lau (1982).
- 13. For some futuristic scenarios, see Brahm Prakash et al. (1988).
- 14. This argument is discussed in more detail in the following Sects.
- 15. The data based on the employment exchanges, are however not the best, as all the unemployed graduates do not necessarily register at the exchanges. But on the problem of the educated unemployment, these are the main source of data in India.
- 16. See Tilak (1992), Panchamukhi (1982), and Varghese (1986) for more details.
- 17. During the post-independence period, the Government of India has appointed and received detailed reports from three commissions on education: The University Education Commission (1948–49) headed by S. Radhakrishnan, the Secondary Education Commission (1952) under the chairmanship of S.L. Mudaliar, and the National Education Commission headed by D.S. Kothari. (These are exclusive of special commissions such as the recent two national commissions on teachers.) There were three other commissions appointed during the British rule, viz., the Indian Education Commission (1882), the Indian Universities Commission (1902), and the Calcutta University Commission (1917–19).
- 18. It was indeed a final action because the *Policy* statement generated little action, but aroused hopes that remained unfulfilled and led to frustration (Naik 1982).
- 19. For instance, Naik (1982) while evaluating the implementation of the recommendations of the Education Commission, could classify the recommendations into three groups: recommendations that attracted wide attention, those that attracted little attention, and those that were opposed and rejected or just ignored: but could not find any recommendations that were accepted as well as implemented.
- 20. See Tilak (1985) who highlighted the wide gap between the requirements of the system and the provision of resources in the Seventh Plan period.
- 21. It declined from Rs. 966 crores (a crore equals 10 millions) in the Third Plan to Rs. 764 crores in the Fourth Plan and further to Rs. 585 crores in the Fifth Plan. See Tilak (1987b).
- 22. This refers to revenue budget of the central and state budgets together.

- 23. This is partly due to the high priority accorded to adult education by the short-lived Janata Government in its aborted Sixth Plan (Government of India 1979b).
- 24. The plan inter-regnum is also known as 'plan holiday', the period when a holiday was declared for five-year plans, and annual plans were carried out in 1966–67, 1967–68, and 1968–69.
- 25. See Tilak and Varghese (1983) for more details.
- 26. Statistics on expenditure on education in India are hardly available in constant prices. It is attempted here by using the all-India wholesale price index (base: 1970–71). See also Tilak and Varghese (1983).
- 27. It is interesting to note that not only the Congress government, but also the Janata government recognised this. Indeed the Janata government's *draft* Sixth five year plan was more categorical and clear. It not only stated that "In the Sixth Plan, no new universities should be set up; colleges should be established with great restraint and only after ensuring adequate resources in terms of teachers and finances and material" (Government of India 1979a, p. 416), but also indicated a drastic reversal of trends in the allocation of resources to mass education and higher education.
- 28. For example, the available research on rates of return to education clearly shows that the contribution of primary education is much higher than the contribution of secondary and higher education to economic growth, as already presented in Table 2.2. The effect of primary education on agricultural productivity is quite significant. See Tilak (1984). The impact of education on fertility, practices of methods of birth control, health and nutrition is increasingly felt. See Kothari and Panchamukhi (1980) for an extensive review of research on various economic aspects of education in India.
- 29. See also Bhagwati (1973), and Tilak and Varghese (1985) for some documentation on this aspect.
- 30. *The Statesman* (New Delhi, 10 July 1989), p. 4. While this figure refers to Maharashtra, it is likely to be true in most states as well. The following section discusses the growth of private institutions in India.
- 31. In the mid-1960s this figure was quoted as 93% (Naik 1967, p. 126).
- 32. As Carnoy (1974) noted, this provision in fact "was in part a reflection of capitalist ideology (British influence) that the state should not take the whole responsibility for education."
- 33. See also Lindsey (1978), and Chitnis (1987).
- 34. Interestingly, that private education becomes a dividing force was responsible for the popular demand for nationalisation of the school sector in a number of European countries in the 19th century (Kostecki 1988, p. 8).
- 35. The Statesman (New Delhi, 10 July 1989), p. 4. See also Kothari (1986).
- 36. While evidence on India is not available on this aspect, the Kenyan evidence indicates that government schools yield returns 50% higher than

- private (*harambee*) schools. See Armitage and Sabot (1987, p. 601). Also see Psacharopoulos (1987a) for related interesting details on Colombia and Tanzania.
- 37. E.g., see the 1968 *Policy* (Government of India 1968), the Janata Government's 1978 *Draft Policy* (Government of India 1978), and also the Education Commission (1966).
- 38. See Shatrugna (1988).
- 39. E.g., see World Bank (1986).
- 40. For the same reason, teachers in private schools and colleges demand nationalisation or government take-over of the private schools. See also Naik (1967, p. 126).
- 41. Even in developed countries like the United States, "the private credit market is bad" and education loans cannot effectively work trough private credit market (Tullock 1983, p. 144). Further, Tilak and Varghese (1985) argue that the scheme of loan scholarships would be highly regressive, as "the loan scholarships are given to the poorer students and only those very students will be required at later stages to meet the full costs of education in the form of repayment, while rich students who receive the highly subsidized education are exempted from it."
- 42. The total revenues from fees consist of tuition fee, and other fees such as special fees, examination fees, laboratory fee, etc.
- 43. Evidence from a country-wide sample of universities (AIU 1978) also indicates that in 1974–75 students in professional universities pay fees which amount to 8% of the recurrent costs, while in general universities it was around 34%. Even in absolute terms, the total fee per student was Rs. 608 in professional universities, compared to Rs. 1032 in general universities. Besides the expenditure on scholarships is also higher in case of professional universities.
- 44. See also Tilak (1988b, p. 610).
- 45. It should be noted that government expenditure which forms the main basis for financing education in India is financed from indirect taxation to the extent of 90%, paid by the poor majority.
- 46. See Tilak and Varghese (1985) for an elaborate discussion on the rationale and the mechanism of discriminatory fee system in education.

APPENDIX

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Quality, Equity and Diversity in Education



CHAPTER 3

Education Poverty in India

Education is the root of all progress and every educational problem is at bottom an economic one.

(Mokshagundam Visvesvarayya 1931)

Education pays significant dividends in reducing poverty. Good education pays high returns in the contributions to economic growth... Educating the poor, women, and the disadvantaged is as good an investment as any India can make. India faces many educational challenges and particularly those of narrowing or closing the gaps between rich and poor, boys and girls, privileged groups and undercastes....

(World Bank 1998, pp. 25–26)

3.1 Introduction

Poverty is conventionally defined in terms of income poverty, i.e., number of people below the poverty line and is measured in different ways, predominantly in terms of inadequacy of income to procure a minimum level of calories. Quite a few indices are developed in the literature that broadly relate to this phenomenon. Many scholars also have highlighted the limitations of income poverty as a measure of the complex

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phenomenon of poverty. An Expert Group of the Planning Commission (1993) recommended the broadening of the concept of poverty, so as to include, inter alia, education needs. The World Bank (1994, p. 9) also recognised, "Poverty is not only a problem of low incomes; rather, it is a multi-dimensional problem that includes low access to opportunities for developing human capital and to education...". The World Summit for Social Development (1995) also opted for a broader definition of poverty and correspondingly for a broader integrated strategy for its eradication (see also Drèze and Sen 1989). Further, as UNDP (1996, p. 27) commented, "income poverty' is only a part of the picture. Just as human development encompasses aspects of life much broader than income, so poverty should be seen as having many dimensions" and accordingly developed the concept of 'human poverty'. It observed, "human poverty is more than income poverty: it is a denial of choices and opportunities for living a tolerable life" (UNDP 1997, p. 2). In this sense, denial of human rights itself constitutes poverty, and accordingly, a rights-based approach to poverty eradication is being increasingly argued (see e.g., Speth 1998). But the conventional measure of poverty, i.e., based on income, still dominates the discussions on and measurements of poverty. At the same time, human poverty and income poverty are closely related. Accordingly, poverty is seen as deprivation of opportunities that enhance human capabilities to lead a tolerable life. Education is one such important opportunity, deprivation of which in itself represents poverty—poverty of education or 'education poverty'. In this sense, educational deprivation or poverty of education becomes an integral part of human poverty. Education poverty and income poverty are also closely related. Poverty of education is a principal factor responsible for income poverty, and income poverty does not allow the people to overcome poverty of education. Even when education, generally the first level, is freely provided by the State—as indeed is the case in most developed countries, and indeed is in principle so in India—poverty may force children to be out of school for various reasons, and thus they are denied the opportunity of participating in schooling. Thus the relationship between income poverty and education poverty is mutually reinforcing. Income poverty of the households does not allow them to make adequate investments in education, and low or zero levels of investment in education accentuate their income poverty. This mutually reinforcing relationship is also

true both at the macro level and also at household levels—including at the individual, the family, the community, the region and the wider nation-society levels. The most effective way of breaking this relationship is to begin 'educational reconstruction' (Education Commission 1966). The focus of this paper is on education and it analyses how does income poverty constrain educational development or lead to educational deprivation and education poverty in India.

It is now widely realised that investment in human capital is one of the important keys to break this cycle, to reduce income poverty, in addition to, of course, eliminating poverty of education. Education is related to poverty² at both micro and macro levels. At the micro level, illiterate individuals or households are less productive, join less paying occupations, thus earn less, and remain at very low levels of living, mostly below poverty. At macro level also, nations with illiterate or less educated masses cannot progress, increase their output substantially, and as a result remain at low standards of living.

This was recognised long ago by many. For example, Alfred Marshall (1920, pp. 138–139) stated: "Knowledge is our most powerful engine of production; it enables us to subdue Nature and force her to satisfy our wants...". In India Mokshagundam Visvesvarayya highlighted as long ago as in 1931 the pivotal role of education in economic welfare of the country and cautioned: "the economic future of India is placed in grave peril by the slow progress which mass education is making...". While there is a long tradition of economics who recognised the value of education in development (see Blaug 1975), the importance of education in the well being of the nations is clearly recognised since the 'human investment revolution in economic thought', initiated by Theodore Schultz (1961). Schultz has not only demonstrated that education is an investment leading to human capital formation, but also emphasised and proved empirically from data pertaining to the USA that education and research would lead to 'increasing returns' even in agriculture, where all traditional thought has suggested that 'diminishing returns' must obtain in the area of agriculture. In the twenties of the last century, Perrro Sraffa and Allyn Young also emphasised that 'diminishing returns' is not inevitable, and that 'increasing returns' are possible, indeed are likely as a result of education, training, research and new production methods.

The externalities, including dynamic externalities of education that cause increasing returns, are again emphasised recently by Romer (1986) and Lucas (1988) among others. In India, Rao (1964; and also 1970) and the Education Commission (1966) are first of its kind that had emphasised the links between education and development. Though the earlier research in India and abroad concentrated more on the role of education in economic growth, the impact of education on poverty and well being of the masses was also clearly recognised and of late this began receiving more serious attention in the wider framework of human development.

Available research in the last couple of decades (e.g., Fields 1980a, b; Tilak 1986, 1989a, 1994a) clearly shows that education and poverty are inversely related: the higher the level of education of the population, the lower would be the proportion of poor people in the total population, as education imparts knowledge and skills that are associated with higher wages. In addition to this direct effect of education, the effect of education on poverty could be indirect through its fulfilment of basic needs like better utilisation of health facilities, shelter, water and sanitation, and its effects on behaviour of women on decisions relating to fertility, family welfare and health etc. (Noor 1980; Cochrane 1988; Jeffery and Basu 1996) which in turn enhance the productivity of the people and yield higher wages. The relationship between poverty and education is further strengthened, as education and other basic needs reinforce each other (Noor 1980; Tilak 1989b; UNESCO-PROAP 1998). Poor households and nations are also characterised by high mortality rates, poor health conditions, etc. The role of education in reducing relative income inequalities is also found significant. It is also noted that thanks to education, especially of women, a society could move out of poverty traps and progress into prosperity. It has also been observed historically that education helps to broaden the base of understanding among people, and thereby helps to strengthen the democratic process, which in turn could pave the way to the promotion of sustainable development, through a better understanding of the intimate relation between environment, ecology and sustainable development. Thus by strengthening democratic forces, education would help in promoting sustainable human development, making rapid social progress, including abolition or containment of the elite's discretionary power (see Cohen 1998, p. 15).

Micro level investigations have highlighted the role of education in reducing poverty. The incidence of poverty is the largest among the illiterate households, and it declines consistently by increasing levels of education in developing countries (Tilak 1994a). For example, nearly all of the poor in Pakistan were illiterate; and in Thailand, almost 99% of the poor had no education or less than middle/secondary education (Fields 1980a, pp. 158–160). Poverty was found varying inversely with education and training and household income in India (Harris et al. 1990, p. 102). In short, poverty is predominant among the illiterates and it is almost a non-existent phenomenon among the educated households.³ As Galbraith (1994) observed, there is "no well educated literate population that is poor, [and] there is no illiterate population that is other than poor." Education and incidence of poverty are inversely related, with a large drop in poverty occurring between illiterates and primary/secondary school graduates.

Thus, education is rightly regarded as an important component of anti-poverty programmes in many developing countries. Within education, the focus is on elementary education, including non-formal education and adult education that could ensure sustainable literacy (non-relapsing of the literates into illiteracy), as they are found to be having more significant effects on poverty and also income distribution (e.g., Coombs and Ahmed 1974) than secondary and higher education.⁴ But over the years, as primary education expands, the relative effect of secondary and higher education increases.

Using the most recent data available, this paper presents a brief analysis of a few dimensions of education poverty in India. To start with, the education-poverty profile of the South Asian countries is briefly described in the following section. Using state-wise data, Sect. 3.3 presents a brief analysis of education-poverty relationship in India. Section 3.4 attempts at unraveling several dimensions of deprivation of education of the poor in India. A detailed discussion on the recent efforts of the State, international organisations and also of the non-governmental organisations (NGOs) in improving education is attempted in Sect. 3.5. Section 3.6 presents a short summary with a few concluding observations.

3.2 EDUCATION AND POVERTY IN SOUTH ASIA

South Asia stands as the poorest region of the world, with more than 500 million people below the poverty line (of US\$ 1 per day in 1985 PPP), accounting for the largest proportion—40% of the world's poor. South Asia is also described as the most illiterate and 'anti-education society' (Haq and Haq 1998), accounting for nearly 630 million adult illiterates, who form 46% of the world's illiterate adults. Further, nearly 40% of the population in South Asia is poor and a little more than half the adult population is illiterate.⁵

Several countries have adopted varying development strategies to reduce poverty and inequalities; some have succeeded and some have not. For example, Sri Lanka first tried export oriented policies during the 1940s and the 1950s, but they led to economic crises. Decline in poverty, reduction in inequalities, and the present better levels of quality of living in Sri Lanka can be largely attributable to welfare state policies. In fact, Sri Lanka is regarded as one belonging to a unique category of 'welfare-statism' (Perris 1978, p. 22) with extensive public subsidies, and investment in education and health, which are regarded as basic welfare services. In fact, even under severe economic conditions, the investment priority for these two sectors remained intact (Gunatilleke and Kurukulasuriya 1984), and this has paid rich dividends, making the country singularly distinct in terms of physical quality of life indicators, including poverty and distribution, not only in South Asia, but also among many developed countries of the world as well (see Tilak 1996c).

On the other hand, India concentrating on measures such as nationalisation, and rural employment programmes, and also initiating land reforms, tried to ensure relatively equal distribution of land. However, none of the programmes were satisfactorily implemented. Land reforms were never complete⁶ and nationalisation of private sector units was full of defects. India also invested less in the human capital of the poor and had stronger bias against labour in industry. As a result, no pronounced trend can be noted in decline in poverty and inequalities in the post-independence period. Still more than one-third of the population lives below poverty line (1993–94) (Planning Commission 1999).⁷

There are several factors that explain poverty. But some research that decomposed inequality found that education is either the most or the second most important determinant (Fields 1980a, pp. 116–117), stressing the need to make expansion of education an integral part of future

anti-poverty policies. Nowadays education is an important component of a broad spectrum of governments' anti-poverty programmes in India, Pakistan, Bangladesh and Nepal, though it is not on the top of the social, political or economic agenda of the governments, nor could they receive adequate serious attention. Focus, if any, has also been confined to primary education, including non-formal and adult education in the region.

Table 3.1 presents a poverty profile of South Asian countries.⁸ One finds a close correspondence between income poverty and poverty of education. Sri Lanka has the highest rate of literacy of 90% in the region, its primary education is universal, and the enrolment ratio in secondary education is as high as 74%; and the poverty ratio is also the least in the region—22%. On the other hand, Bangladesh has the highest incidence of poverty—46% and more than two-thirds of its adult population is illiterate. It is also important to note that very few children drop out of schools and also very few repeat in Sri Lanka, compared to other countries, which reflects to some extent, on the quality of education imparted. In contrast, more than half the children in primary education in Bangladesh drop out and about one-fourth of the eligible age group children are outside the school system. South Asia has also the highest pupil—teacher ratio, reflecting the poor quality of education, which is also related to poverty.

Beyond this, no highly systematic pattern could be derived from this small set of data. While it may not be statistically very meaningful to examine the relationship between literacy and poverty, as we have data on poverty on only five countries in the region, nevertheless, we find a strong correlation between poverty and education. The coefficients of correlation are, as one can expect, negative and are also reasonably high, except in case of primary education. To the extent these coefficients indicate, it is adult literacy and secondary education that are found to be very important in influencing poverty. Primary education has a very small and rather insignificant effect. That the threshold level of education for influencing poverty and levels of living, increase with the expansion of primary education was noted in the earlier research as well (Raza and Ramachandran 1990).

Analysis of household level data further confirms the strong relationship between poverty and educational attainment in South Asian countries. Filmer and Pritchett (1999a) have documented that in all the South Asian countries on which such data are available, viz., India, Pakistan, Bangladesh and Nepal there has been a consistent pattern: the

Table 3.1 Poverty profile of South Asia, 1995

	Public	expendsture as % of GNP	2.3	2.9	3.8	2.7	3.2		8.1	3.5
		Tertiary	4.0	5.6	0.9	2.6	5.0			5.4
	Enrolment ratio (%) in	Secondary (gross)	19	36	49	21	74	rc	49	43
	Enrolment	Primary (net)	84	63	87	31	100	53	100	26
		Repeaters (%)	7	27	4	_	19	18	ഹ	3.5
		of Drop-out I I (%) ren	55	48	37	52	8	27	_	41
,	t poverty	Out of school children	26.7	32.3	32.1	47.8	I	59.1	I	33.3
	Education poverty	Adult illiteracy	62	72	48	62	10	58	^	51
	Income	poverty (%)	46	45	35	29	22			35
			Bangladesh	Nepal	India	Pakistan	Sri Lanka	Bhutan	Maldives	South Asia ^a

^aWeighted average

Now Income poverty: % of population below poverty line; illiteracy: adult illiteracy rate
Out of school children: % children out of primary schools; dropout and repetition rates refer to primary education

Source Haq and Haq (1998)

		Primary ((grade V)		Some secon	ıdary (grade IX)		
		Bottom 40%	Middle 40%	Top 20%	Bottom 40%	Middle 40%	Тор 20%	
Bangladesh	1993–94	0.274	0.464	0.794	0.063	0.148	0.447	
Bangladesh	1996-97	0.356	0.550	0.788	0.080	0.174	0.487	
India	1992-93	0.376	0.684	0.932	0.139	0.363	0.730	
Nepal	1996	0.406	0.414	0.743	0.116	0.139	0.430	
Pakistan	1990-91	0.250	0.522	0.852	0.065	0.209	0.552	

Table 3.2 Proportion of population who have completed school education in South Asia

Source Filmer and Pritchett (1999a)

rates of educational attainment (at each grade/level of education) are consistently at the bottom among the poorest 40% of the population, and at the top among the richest 20% of the population (Table 3.2). Correspondingly, it was shown that the deficit in reaching the goal of universal attainment of basic education is the highest in case of the poor and the lowest in case of the rich. The wealth gap in completion rates (rate of the rich *minus* rate of the poor) is the highest in Pakistan, followed by India, Bangladesh and Nepal. Enrolment rates are low, dropout rates are high and correspondingly completion rates are the lowest among the poor income groups compared to middle income and high-income groups. In this sense, the effects of poverty on education in South Asian countries seem to be very strong and systematic.

3.3 EDUCATION AND POVERTY IN INDIA

According to the income criterion of poverty, 36% of the population were poor in India in 1993–94. If we define poverty by literacy, as high as 32% of the population are poor according to the 2001 census estimates. It is possible that all the economically poor are also educationally poor. The incidence of education poverty is higher than income poverty. The relationship between education poverty and income poverty is a complex one. As Minhas (1992, p. 82) observed, differences in access to and participation in schooling by different groups of people are related, in a very complex manner, to the variations in incidence of poverty and other social and cultural factors in the Indian society. Research that exactly focused on education-poverty relationship in India

is not abundant. But a few scholars did focus on levels of educational attainments by broad income groups. Such research includes Minhas (1992), Visaria et al. (1993), Majumdar and Vaidyanathan (1994), Majumdar (1999), and Tilak (1996b). Most of them used the NSSO's 1986–87 (NSSO 1991, 1993) data. Lanjouw and Ravallion (1999) analysed the 50th round data of the NSSO 1993–94 (1997). Another recent dataset was generated by National Family and Health Survey (NFHS) (IIPS 1993), which formed the basis for analysis by Filmer and Pritchett (1999b). Yet another survey data are available from NCAER (1993–94) on rural India, which were analysed briefly by Sipahimalani (1999). Further, all the above studies concentrated on enrolment/dropout rates. The research has shown a clear pattern of low levels of educational attainment among poor sections of the population and higher levels among the rich.

The present paper using the large database that relates to 1995–96 is an addition to this limited literature. It has a few additional contributions, compared to the earlier studies: The evidence on India is largely drawn from one of the most recent household surveys, conducted in 1995–96 across the nation (NSSO 1998) and a school survey that refers to 1993 (NCERT 1997–98). We refer in this paper to educational levels of adult population also, in addition to enrolment and dropouts by household economic levels. The distribution of public subsidies and the pattern of household expenditures by household economic levels are also briefly examined here. Since the NSSO (1998) focuses specifically on education, it is also expected to provide more reliable and meaningful results, compared to, say, analysis based on NFHS survey. Though this is not within the scope of this paper, the present study would facilitate comparisons with earlier studies based on NSSO surveys and also on NFHS and draw trends during the last decade.

The NSSO (1998) covered 73 thousand households in 12,650 villages and urban blocks in the country. Several household characteristics are available in this survey by 'fractile' groups—household expenditure¹³ groups categorised into five quintiles—the bottom 20%, the next 20%, the middle 20%, the fourth 20% and the top (richest) 20%. The bottom group is treated as the poorest group, and the bottom along with the second quintile as poor; the third and the fourth quintiles are called middle-income groups and the top quintile refers to the rich. Most of the analysis here is attempted in this framework of household expenditure quintiles. It is well known that caste is also an important factor in explaining

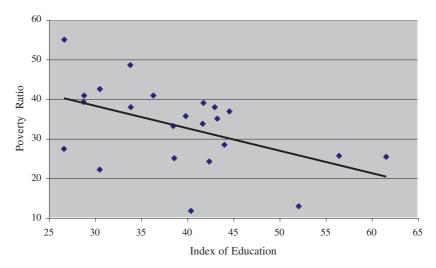


Fig. 3.1 Poverty and index of education in Indian states

educational deprivation in India, the scheduled castes and scheduled tribes being the most severely deprived groups both economically and educationally. It is important to note in this context that scheduled caste and scheduled tribe people are also economically backward. But the available data of the NSSO (1998) does not enable us to look into this aspect in depth, though the original data tapes might be containing it.¹⁴

Before the household survey data are examined, we may briefly look at the macro level relationships between education and poverty in India. According to the Planning Commission's (1999) estimates, 36% of the population in India in 1993–94 was poor. Among the 24 states on which such data are available, there seems to be a strong correlation between poverty and education (Fig. 3.1).

There are 11 educationally advanced states, which are also the states where poverty ratio is small (less than national average). Conversely, there are seven states where poverty ratio is high (higher than national average) and educational index is low (lower than national average) (Table 3.3).

Exceptions to this phenomenon are only five states. At state level, income may be high, yet because of its unequal distribution, poverty

Table 3.3	Education	and p	poverty	in	India
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		Poverty ratio	
		Low	High
Index of education	High	Punjab, Goa, Gujarat, Haryana, Kerala, Mizoram, Himachal Pradesh, Karnataka, Manipur, Tamil Nadu, West Bengal	Maharashtra, Nagaland, Tripura
	Low	Andhra Pradesh, Rajasthan	Meghalaya, Arunacha Pradesh, Uttar Pradesh, Assam, Madhya Pradesh, Orissa, Bihar

Note High and low are defined as above and below on national averages Source Based on Tilak (1999b) and Planning Commission (1999)

could be high. Accordingly, for example in Maharashtra poverty ratio is high and also is the index of education. In Andhra Pradesh and Rajasthan poverty is low and the index of education is also low. But for these exceptions, all this indicates a close relationship between poverty and education in Indian states. The coefficient of correlation, -0.4975, though not high, is negative in value and statistically significant. The trend line fitted here suggests that an increase in the education index from 25 to 60 would reduce the poverty ratio from 40 to 20%. Even though correlations do not necessarily imply causal relationships of this kind, it is widely held that "the role of education in removing poverty is decisive" (Haq and Haq 1998, p. 29). It is widely held that that poverty cannot be eradicated without education, even though at the same time, it can be said that education alone may not solve the problem of poverty. Nevertheless, expansion of education, particularly primary education, is found to be at least as effective as the best of the current anti-poverty programmes such as public distribution system (food rationing), public works Programme, and credit schemes in countries like India (Lanjouw and Ravallion 1999).

3.4 EDUCATIONAL DEPRIVATION

Household level data provide more systematic evidence on the positive relationship between education and economic levels. The evidence provided by the NSSO (1998) here clearly shows that educational levels of

Household expenditure quintiles	All	Rural			Urban		
		Male	Female	All	Male	Female	All
0–20	2.30	2.75	0.86	1.79	4.78	2.75	3.77
20-40	3.19	3.49	1.31	2.40	6.47	4.19	5.37
40-60	3.81	4.04	1.76	2.92	7.51	5.14	6.39
60-80	4.77	4.82	2.41	3.65	8.91	6.92	7.96
80-100	6.42	6.31	3.84	5.14	10.84	9.47	10.21
All	4.26	4.43	2.13	3.29	7.98	5.85	6.97

Table 3.4 Mean years of schooling of population (15+), 1995–96 (%)

Source Based on NSSO (1998)

the population are closely related to the income levels of the population (expenditure levels being taken to represent income levels. As shown in Table 3.4, the mean years of schooling of population¹⁷ systematically increase by increasing levels of household income levels.¹⁸ The mean years of schooling increase from 2.3 for the poorest group to 6.4 for the richest group of the population. This systematic positive relationship between mean years of schooling and economic levels of households holds true in case of any subgroup of the population as well—rural male, rural female, and urban male and urban female (Fig. 3.2). However, the variations between males and females are very high. The poorest among the rural females have mean years of schooling of as low as 0.9, while the mean for the top quintile among the urban males is as high as 10.8—a difference by 12 times! Poverty is a crippling handicap to acquire higher levels of education attainment and low levels of education attainment, in turn, is a critical handicap to come out of poverty.

The mean years of schooling discussed above refer to the stock of educational development. But what about the pattern of enrolments in schools? Despite massive expansion of the system of education and corresponding quantitative explosion in numbers, particularly in terms of enrolments, during the last half a century (see Tilak 1996a), a large number of poor are still outside the formal school system. According to the available reliable statistics (Table 3.5), only 69% of the children of age group 6–10, and 72% of the children of the age group 11–13 attend schools. The corresponding rates are less among higher age groups. ¹⁹ Rural–urban differences are very high, the difference being about 20% points in favour of urban areas.

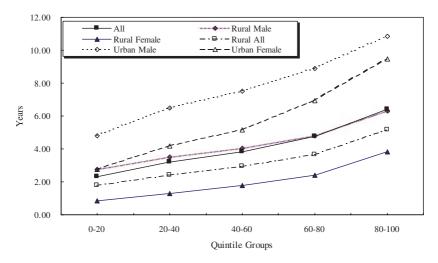


Fig. 3.2 Mean years of schooling of population (15+) in India by household expenditure quintiles, 1995–96 *Source* Based on NSSO (1998)

Table 3.5 Age-specific attendance rate in school education in India, 1995–96 (%)

Age group	6-10	11–13	14–17	18-24
Rural				
Male	71	75	54	15
Female	58	57	33	4
All	65	67	45	10
Urban				
Male	84	87	66	26
Female	82	83	63	20
All	83	85	65	23
All	69	72	50	14

Source NSSO (1998)

There are vast spatial variations in attendance rates between rural and urban areas, and between states. Variations also exist between districts, and even villages and households.²⁰ The variations in attendance rates between several states are quite marked (Table 3.6). The age-specific

Table 3.6 Age-specific attendance rates in school education, 1995–96

		Age į	group: 6–10			Age g	roup: 11–13	3	
		All	Rural female	Urban male	Gap	All	Rural female	Urban male	Gap
1	Andhra Pradesh	75	68	90	22	60	46	80	34
2	Arunachal Pradesh	65	71	89	18	82	81	85	4
3	Assam	73	73	86	13	80	82	93	11
4	Bihar	43	32	66	34	58	40	85	45
5	Goa	99	99	97	-2	89	85	83	-2
6	Gujarat	80	73	86	13	77	65	91	26
7	Haryana	83	77	92	15	87	80	95	15
8	Himachal Pradesh	91	90	96	6	94	90	95	5
9	Jammu & Kashmir	69	53	76	23	82	73	94	21
10	Karnataka	75	65	86	21	70	53	90	37
11	Kerala	97	97	98	1	97	98	97	-1
12	Madhya Pradesh	64	54	82	28	67	52	88	36
13	Maharashtra	88	83	91	8	85	74	94	20
14	Manipur	69	61	78	17	87	85	92	7
15	Meghalaya	69	72	88	16	94	90	97	7
16	Mizoram	71	64	97	33	88	76	97	21
17	Nagaland	71	69	81	12	85	86	88	2
18	Orissa	63	54	80	26	66	54	81	27
19	Punjab	85	80	92	12	86	81	89	8
20	Rajasthan	58	37	83	46	64	36	88	52
21	Sikkim	77	80	79	-1	90	87	86	-1
22	Tamil Nadu	91	85	92	7	74	64	82	18
23	Tripura	81	77	91	14	84	74	97	23
24	Uttar Pradesh	61	49	73	24	66	46	80	34
25	West Bengal	67	61	79	18	74	67	83	16

Note Gap: urban male minus rural female Source NSSO (1998)

attendance rate among the younger children (age group: 6–10) varies between 43% in Bihar and 97% in Kerala. The BiMaRU states along with Orissa are the most deprived states, with very unsatisfactory levels of school attendance. They are also the states with a high concentration of the poor.²¹ Importantly, the gap in attendance rates between

males and females²² is also the maximum in these states, Rajasthan having a gap of 46% points among the younger children. Further, the malefemale gap widens among older age groups (11–13). For example, the gap increases from 46% points in 6–10 age groups to 52 points among the 11–13 aged children in Rajasthan. That social prejudices that lead to the deprivation of schooling for women are somewhat strong in such states is well known. Thus spatial variations and variations by gender are indeed alarming in some states.

Table 3.7 provides estimates on enrolment rates by household income groups in major states in India. The estimates are based on another survey (NCAER 1998) in rural India conducted in 1993–94.²³ These rates show that the enrolment rates increase by increasing levels of household income, consistently in all states. There are only two minor exceptions to

Table 3.7 Enrolment rate of the children (age group: 6–14) in rural India, by household income groups, 1993–94

	Househol	d income (Annu	al/Rs.) groups			Wealth gap ^a
	<20,000	20,001-40,000	40,001-62,000	>62,000	All	-
Kerala	96.9	96.5	96.6	98.9	96.9	1.02
Himachal	88.0	94.4	94.7	90.1	90.8	1.02
Pradesh						
Punjab	77.8	81.5	84.1	93.2	82.1	1.20
Maharashtra	75.9	79.5	85.3	87.8	79.2	1.16
North-Eastern	75.6	76.5	79.6	79.8	78.6	1.06
Region						
Tamil Nadu	75.4	79.2	87.0	94.7	78.1	1.26
Haryana	65.0	76.1	83.2	83.0	74.8	1.28
Gujarat	67.6	83.0	78.7	88.1	74.4	1.30
Karnataka	68.8	73.9	77.8	78.0	71.7	1.13
Andhra Pradesh	68.2	72.1	80.0	96.1	71.6	1.41
Orissa	58.9	77.8	80.2	90.7	65.5	1.54
West Bengal	56.1	71.7	76.8	90.5	62.0	1.61
Uttar Pradesh	52.3	64.4	73.2	82.6	61.5	1.58
Rajasthan	51.6	57.8	73.3	78.5	58.7	1.52
Madhya Pradesh	49.2	62.8	68.0	76.2	57.6	1.55
Bihar	48.1	64.2	68.3	83.2	56.9	1.73
Rural India	60.6	70.8	77.4	84.4	67.1	1.39
Coef. of variation	21.0	14.0	10.4	8.0	16.2	

^aHighest income group/lowest income group Source NCAER (1998)

the consistent pattern: the rates among the two bottom income groups in Kerala and the second and third income groups in Gujarat. In Kerala the difference is negligible, but in the case of Gujarat, it is rather high. Secondly, the enrolment rates among the richest income group in backward states like Madhya Pradesh, Rajasthan and Uttar Pradesh are less than the enrolment rates of the bottom income group in educationally advanced states like Kerala and Himachal Pradesh. Thirdly, the coefficient of variation in the enrolment rates of the bottom income group between various states is much higher than the variation in case of top income groups. Lastly, the enrolment rates by income groups in the better off states fall on a flat curve, while the curve is a steeply increasing one in case of backward states. In other words, the wealth gap, i.e., the gap in the enrolment rates between the top and the bottom income groups is negligible in case of educationally advanced states of Kerala and Himachal Pradesh and is the highest in the backward states. In other words, the average level of educational development in the backward states is not only low, but also the educational inequalities between the rich and the poor are also the maximum. The egalitarian ethos in public policy, including specifically in education, in Kerala and Himachal Pradesh and the lack of the same in other states like the BiMaRU states explains to a great extent these differences in states.²⁴

Enrolment rates by household expenditure quintile groups based on NSSO (1998) survey in Table 3.8 also clearly show that in all cases, i.e., among rural males, rural females, urban males and urban females, enrolment rates increase as one moves to higher economic groups. As one moves from the bottom quintile to the next quintile, the probability of enrolment in schools would increase by 8% points from 37 to 45%, which would further increase by another 5 points if one moves from the second quintile to the third quintile (lower half of the middle-income group). In all, only 37% of the children in the bottom quintile could go to schools, while more than 60% of the richest quintile could do so; in urban areas the latter ratio increases to above 75%. In every economic group, the enrolment rate of rural population is less than that of the urban population; and in every economic group and also in rural and urban areas, the enrolment rate of girls is less than that of boys.²⁵ In all cases, the enrolment rate of the poor is less than that of the middle-income groups and the rich. In short, enrolment rates or rate of participation in education is a function of increasing income (or expenditure) levels of households—in case of total population and also in case of

Table 3.8 Percentage of children (age group: 5–24) attending and non-attending schools, by household expenditure quintiles, 1995–96

		Household	expenditu	re quintiles				
		Poor		Middle income		Richest	All	
		Poorest (first)	Second	Third	Fourth	Fifth		
Rate of a	attendance							
Rural								
	Male	42.1	49.1	54.6	56.8	63.4	53.3	
	Female	26.6	33.3	37.1	45.0	50.0	38.1	
Urban	All	34.5	41.6	46.3	51.4	57.3	46.1	
	Male	47.8	58.0	64.7	69.2	75.9	62.9	
	Female	42.2	54.7	60.0	67.3	76.2	59.	
	All	45.0	56.4	62.5	68.3	76.0	61.	
ALL		37.2	45.2	50.3	55.4	61.7	49.8	
Rate of 1	non-attenda	nce						
Rural								
	Male	57.9	50.9	45.4	43.2	36.6	46.7	
	Female	73.4	66.7	62.9	55.0	50.0	61.9	
	All	65.5	58.4	53.7	48.6	42.7	53.9	
Urban								
	Male	52.2	42.0	35.3	30.8	24.1	37.	
	Female	57.8	45.3	40.0	32.7	23.8	40.9	
	All	55.0	43.6	37.5	31.7	24.0	38.9	
ALL		62.8	54.8	49.7	44.6	38.3	50.2	

Source NSSO (1998)

subgroups, viz., rural male, rural female, urban male and urban female. As the lines in Fig. 3.3 depict, there is no intersection between any two lines: the trends are all parallel. The hierarchical relationships are clearcut: the rates of participation of the poor are the lowest—both in rural and urban areas and among both males and females. The hierarchical order in terms of increase in educational deprivation is: urban males, urban females, rural males and rural females.

The poor have a disadvantage whether they are in rural or urban areas, or whether they are boys or girls. The degree of disadvantage of the poor in enrolment of schools (measured as enrolment rate of the richest quintile *minus* the enrolment rate of the bottom quintile) is to

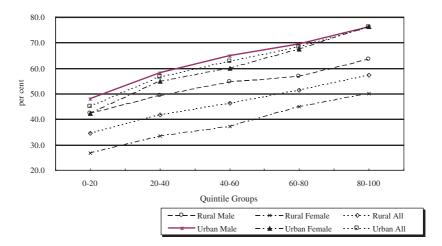


Fig. 3.3 % of children (age group: 5–24) attending schools in India, by household expenditure quintiles, 1995–96 *Source* Based on NSSO (1998)

the extent of 23.5% points. Not very surprisingly such a disadvantage is higher in urban areas (31% points) than in rural areas (23.2% points), and the highest disadvantage is among women in urban areas (34% points). This may be because, given the relatively high cost of living in general and high cost of schooling in particular, in urban areas, the poor in urban areas may indeed be more deprived than their counterparts in rural areas.

The non-attendance rates in Table 3.8 highlight more explicitly the extent of disadvantage of the poor in education. As high as 63% of the children of the age group 5–24²⁶ of the lowest household expenditure quintile, i.e., bottom 20% of the population, were currently not attending schools in 1995–96. In fact, nearly half the children of the bottom income group were 'never enrolled' in any formal school and most of them live in rural areas (Table 3.9). Non-attendance or never enrolment rates²⁷ systematically decline by increasing household economic levels. That is, while 45% of the children of the bottom quintile were never enrolled, it is only 11.3% among the rich group of population who belong to this category. Rural female children constitute the most important deprived group. Thus in a sense, there has been educational

Table 3.9	Percent of never enrolled	children (ag	ge group: 5	-24), by	household
expenditure	e quintiles, 1995–96				

Quintiles		Rural		Rural + Urban		
	Male	Female	All	Male	Female	All
0-20	40.0	61.0	50.3	35.8	53.7	44.6
20-40	29.5	49.3	39.0	25.0	41.5	32.9
40-60	22.0	40.0	30.5	18.2	33.1	25.2
60-80	17.0	30.2	23.1	13.8	24.0	18.5
80-100	9.9	19.2	14.1	8.0	15.3	11.3
All	23.5	40.6	31.5	20.1	34.2	26.8

Source NSSO (1998)

Table 3.10 Out of school children in India, 1995–96

Age group	Population 1996 (million)	Age-specific attendance rate (%)	Children in schools (million)	Out of school children (million)
6–11	144.59	69	79.07	65.52
11-14	86.16	72	62.04	24.12
6-14	230.75	61	141.11	89.64

 $\it Note$ Age-specific attendance refers to children of the given age group enrolled in any level of education $\it Source$ NSSO (1998) for attendance rate; and Registrar General of India (1996) for population

deprivation of the poor and also the rich. But the poor are subject to severe deprivation. One may understand the existence of deprivation of some (poor people) in rich states, but not among rich households in poor states. But we note here that even richer households are deprived of education, due to several reasons, some of which are examined here.

In all, the overall rate of attendance is 69% among the children of the 6–10 age group and 72% among the children of the age group 11–13. Conversely, 31% of the children of the lower age group and 28% of the children of the age group 11–13 do not attend schools. Taking these ratios, it can be estimated that as high as 90 million children of the age group 6–14 were currently outside the formal school system (Table 3.10). They are never enrolled in or currently not attending the schools. Most of these out of school children are obviously poor. The corresponding estimate was about 70–75 million a decade ago, 1986–87

(Minhas 1992). Assuming that the age-distribution of population not to have changed dramatically, an increase in population by 20% approximately over the decade reflects that proportionately there is no improvement in the number of children going to school during the decade. This reflects sadly on the much-hyped focus on education in the post-National Policy on Education (1986) period. The increase in the number of out of school children is indeed a matter of serious concern for all those involved in universalisation of elementary education. Assuming that this growth (of number of out of school children) has continued, which is most likely, it means that India was planning to enter the 'knowledge based society' of the twenty-first century with about 100 million children who perhaps have never been to any school (Tilak 1999a).

Unfortunately, the deprivation in education does not end with enrolment in schools. The poor are more likely to drop out of the system, relapsing often into illiteracy and ignorance. According to the latest available statistics, out of every 100 children enrolled in Grade I, about 40 children drop out before completing primary education, and 54 before completing the elementary level of education (Grade VIII), and 70 children before completing secondary level (Grade X) (MHRD 2001). It is not only the enrolments in schools, but also the rate of dropout from schools is closely related to the economic levels of the population. Rates of dropout are the highest among the poorest households and the least in the richest households (Table 3.11). As Naik (1975, p. 39) observed, "a large proportion of children from poorer segments of the society do drop into the system, no doubt, but they also drop out ...". Rates of dropout systematically decline, as one moves up the economic ladder. When one examines a more detailed data by monthly per capita expenditure classes, it is clear that both attendance rates and dropout rates by expenditure classes fall into a very systematic pattern both in rural and urban areas (Table 3.12). Only 5.9% of the children of the age group 5-14 of the highest expenditure category (Rs. 1055 and above) dropped out of the schools, while the rate is about 8 times higher—56.8% in the lowest category in rural areas. Thus, both attendance rates and rates of dropout by expenditure groups fall into a very systematic pattern. As a result, as Dasgupta (1993) observed, the benefits of government investment in education, even in primary education are disproportionately captured largely by the upper income groups and also by the higher castes, to the extent the income is correlated with caste hierarchy.

Table 3.11	Rates of dropout in school education in India, 1995-96, by house-
hold expendi	rure quintiles (%)

Quintiles	Primary	Middle	Secondary
0–20	44.0	70.2	89.3
20-40	36.2	62.1	89.0
40-60	30.3	57.4	85.6
60-80	26.1	52.5	84.1
80-100	17.4	42.8	79.0
All	30.4	56.6	85.3

Source NSSO (1998)

Table 3.12 Percentage distribution of children of the age group 5–14 by status of attendance for each MPCE (Rs.) class, 1993–94

Rural	Rural			Urban				
MPCE ^a	Status of sc	Status of school attendance			Status of school attendance			
(Rs.) class	Currently attending	Dropped out	Never attended	- (Rs.) class	Currently attending	Dropped out	Never attended	
<120	39.9	56.8	3.3	<160	56.4	39.9	3.7	
120-140	64.1	50.3	3.6	160-190	65.5	30.6	3.9	
140-165	52.5	43.2	4.0	190-230	71.9	24.8	3.3	
165-190	55.1	40.9	4.1	230-265	77.5	19.5	3.0	
190-210	59.7	36.5	3.8	265-310	82.4	14.7	2.8	
210-235	63.7	33.1	3.2	310-355	86.4	11.5	2.1	
235-265	67.4	29.0	3.6	355-410	88.7	9.2	2.1	
265-300	72.1	24.5	3.4	410-490	90.4	7.9	1.7	
300-355	74.6	22.3	3.1	490-605	91.7	5.9	2.4	
355-455	77.5	19.7	2.8	605-825	94.9	3.5	1.7	
455-560	80.2	17.3	2.5	825-1055	95.1	2.6	2.4	
>559	80.6	15.8	3.6	>1054	90.8	5.9	3.2	
All classes	63.3	33.1	3.5	All classes	82.4	15.0	2.6	

^aMonthly per capita expenditure Source NSSO (1997)

Reasons for Non-enrolment and Dropout

Why do children not go to schools and why do they drop out after enrolling in schools? Generally, it is felt that poverty in developing countries in South Asia, like India, prevents families from sending their children to school. It has already been noted that non-enrolment rates and also rates of dropout are higher among the poorer sections of population than among the middle income and the rich. Such explanations need further probing.

Earlier analyses of determinants of participation (or non-participation) in schooling have revealed that participation in schooling is influenced by three sets of factors: (a) household economic factors, (b) school environment, including quality of physical and human infrastructure and quality of instruction and (c) social and cultural/traditional factors. Among the several factors, according to NFHS survey (1998–99) (IIPS 2000), lack of interest is cited as the most important factor for not currently attending the schools; and costs of schooling is reported to be the single most important reason for never attending the schools. It would be interesting and useful to examine the response of the parents by income groups on why their children do not go to schools or drop out from schools. Is there any pattern in the responses of the poor and the rich? The survey (NSSO 1998) has identified a set of dozen factors, though some of them cannot be described as mutually independent. The factors are grouped into three categories in Table 3.13. They are: lack of interest, direct school-related factors, and direct economic factors.

The most important reason for non (more correctly never) enrolment of children in schools reported is lack of interest on the part of the children²⁸ and more importantly of their parents.²⁹ Nearly 50% of the children were never enrolled in schools mainly because they or their parents have no interest in studies. This is very surprisingly more or less true in case of all income groups—poor and the rich and also in case of girls and boys, though there are some marginal variations.³⁰ It would be useful to probe into the aspects relating to lack of interest in education on the part of the children and/or parents. For example, 'lack of interest in schooling' when probed further in other investigations (e.g., Krishnaji 2002; PROBE 1999), the following responses were received from the parents: 'What is the use of schooling?' 'A child can earn some income if he does not go to school.' 'A child can do some "useful" work at home.' Other common responses are: 'Teacher does not come to school or does not teach.' 'No textbooks are available.' 'School costs are high and we can't afford it.' Thus, lack of interest could be due to poverty among the poor, or absence of knowledge of potential benefits of education among the poor or the rich, or due to absence of good facilities for schooling, or absence of a tradition of going to school, or economic difficulties, including costs of schooling or due to certain other factors.³¹

Table 3.13 Why are children 'never enrolled' in schools? 1995–96—percentage of children (age group: 5–24) by reason for non-enrolment

	Reason for 'never enrolment'	Househo	ld exper	ıditure	quinti	les	
		Bottom	2nd	3rd	4th	Тор	All
All ch	ildren						
1	No tradition in family	3.9	3.5	4.0	4.3	3.7	3.9
2	Child not interested in studies	17.4	16.6	20.6	15.9	13.9	17.3
3	Parents not interested in studies	31.2	31.9	31.4	31.9	34.8	31.8
2 + 3	Lack of interest in studies	48.6	48.5	52.0	47.8	48.7	49.1
4	Education not considered useful	2.7	2.3	2.3	3.3	3.4	2.7
5	Schooling/higher education facilities not available conveniently	2.0	1.6	2.0	1.6	3.6	2.0
4 + 5	Direct school related factors	4.7	3.9	4.3	4.9	7.0	4.7
6	Has to work for wage/salary	1.1	1.6	1.4	2.0	1.1	1.4
7	Has to participate in other economic activities	3.8	3.1	3.3	3.8	3.2	3.5
8	Has to look after younger siblings	1.7	1.3	1.0	1.2	0.2	1.3
9	Has to attend other domestic activities	2.7	2.5	2.6	2.4	3.0	2.6
10	Financial constraints	17.9	16.8	13.7	11.6	8.5	15.2
6-10	Direct economic factors	27.2	25.3	22.0	21.0	16.0	24.0
11	Other	15.5	18.9	17.5	22.1	24.7	18.4
Rural	girls						
1	No tradition in family	4.9	5.2	5.8	6.7	5.4	5.4
2	Child not interested in studies	15.5	13.9	18.7	14.2	11.0	15.1
3	Parents not interested in studies	34.3	35.8	35.2	34.6	43.0	35.6
2 + 3	Lack of interest in studies	49.8	49.7	53.9	48.8	54.0	50.7
4	Education not considered useful	3.3	2.6	2.1	3.6	2.8	2.9
5	Schooling/higher education facilities not available conveniently	2.5	1.9	2.2	1.5	4.2	2.3
4 + 5	Direct school-related factors	5.8	4.5	4.3	5.1	7.0	5.2
6	Has to work for wage/salary	0.5	1.3	1.0	0.9	1.1	0.9
7	Has to participate in other economic activities	2.7	3.0	3.1	3.1	3.0	3.0
8	Has to look after younger siblings	1.9	1.7	1.6	1.9	0.3	1.6
9	Has to attend other domestic activities	4.4	3.6	3.9	3.5	4.4	4.0
10	Financial constraints	16.5	15.0	11.8	11.2	6.8	13.6
6-10	Direct economic factors	26.0	24.6	21.4	20.6	15.6	23.1
11	Other	13.4	16.0	14.4	18.8	17.9	15.5

Source NSSO (1998)

Such an argument assumes further credibility, as parents' attitude to education is otherwise found to be highly positive. For example, according to PROBE (1999, p. 14), 98% of the parents surveyed in rural North Indian states felt that education was important for their boys, and 89% felt that it was important for their girls too. Even the illiterate parents and backward castes also highly value education. Parents were also found to be aware of social, economic and cultural gains of their children's education. So it would indeed be useful to examine in depth the 'lack of interest' factor. But information to decompose the 'lack of interest' factor is not available from the NSSO (1998) survey. But it may be plausible to argue that 'lack of interest' could be attributed to a substantial extent to (a) the poor quality and quantity of physical and human infrastructure, and (b) poor quality of instruction, including the alienness and irrelevance of the curriculum on the one side, and (c) economic and other social factors from the side of the families on the other.

Subject to this important limitation, one might say, keeping aside this factor of lack of interest in studies for a moment, on the basis of Table 3.13, that financial constraints form the most important factor that keeps children away from schools.³² This is found to be true, rather surprisingly, not only for the poor, but also for the rich, though there is some difference in numbers between the rich and the poor, in the sense that, for the poor financial constraints and other economic factors are more important than for the rich. Eighteen percent of the bottom quintile report never enrolment due to financial constraints, while the corresponding proportion is about half, 9% for the richest quintile.

Secondly, very often it is stated that children of the poor have higher opportunity costs of schooling and hence they are not enrolled in schools. But wage work or participation in 'other' economic activities³³ has not been cited as major reasons for the non-enrolment or dropout of the children. However, participation in 'other' economic activities, and in domestic work are cited as more important than participation in wage work—though the three factors, viz., wage work, domestic work and other economic activities, together do get a score of 7–8% only. Further, the responses of the households here do not show any difference between the poor, the middle income and the rich households in the participation of their children in wage work, in other economic activities, and in other domestic activities (except looking after younger siblings). It appears thus as if there is no conclusive evidence on the role of opportunity costs of schooling of the children on their participation

in education. It may be noted that these factors—opportunity costs—are treated by NSSO, as shown in Table 3.13, separately from the financial constraints, discussed in the above paragraph. All the economic factors can be listed as follows: (a) financial constraints, (b) opportunity costs: wage work, participation in 'other' economic activities, looking after younger siblings, and other domestic activities. On the whole, economic factors, including financial constraints and opportunity costs together, are an important reason for the non-enrolment of the children from poor families in schooling. These factors together account for more than one-fourth of the responses in case of the poor. After all, children, particularly older children in poor households work and supplement family incomes directly or indirectly.

There are also children who were attending schools and also at the same time were working. The workload (out of school) has serious effects on the studies of the children. Many rural boys and girls who do both, miss school often—some of them rather regularly. They were found to be unable to do homework, and some of them were found to be unable to prepare for school tests/examinations (Table 3.14). These children may eventually drop out of school or stagnate in the same grade for more than one year.

Thirdly, school-related factors—availability of schooling facilities, or perceptions about the value of schooling—no more figure as an important reason for their never enrolment. Only 4–7% of the parents found it relevant. Further, there is a difference of 2% points between the responses of the bottom and the rich quintiles on the role of

Table 3.14	Percentage of children who were attending school and also were
working, by	effect on studies, 1993–94

Effect on studies	Ru	Urban		
	Boys	Girls	Boys	Girls
Misses school				
Intermittently	27.9	15.5	8.8	4.1
Regularly	8.0	6.8	1.6	1.0
Studies affected				
Unable to do home work	18.2	15.1	4.2	3.0
Unable to prepare for tests/exams	6.9	4.9	3.6	7.3

Source NSSO (1997)

school-related factors, the rich feeling more that education is not useful, and that there are not adequate schooling facilities. The low score for this factor could be due to increase in access to schooling facilities.

In case of never enrolment of girls in rural areas, the differences in the relative roles of various factors vary widely between the rich and the poor. A larger number of girls belonging to the poor and middle income groups are not interested in studies than the rich. On the other hand, it is the parents in the richer households who are less interested in their girls' schooling than the parents of the poor. Girl children of the rich and the poor are to participate alike in economic activities other than wage work. This may be necessitated more by social custom than by economic needs. Girls have to participate in domestic work more than boys. The choice between schooling and economic activity may be real and tough for many households. Financial constraints are more important in case of poorer households in being not able to send their girls to schools than of course in case of the richest quintile.

Now the second related question is: Why do children drop out of schools? The factors identified for the phenomenon of dropout are same as the factors responsible for never enrolment of children in schools, though the relative emphasis of various factors varies, as shown in Table 3.15. Lack of interest is the most important reason for the poor; for the rich, it is also important, but it is only the second most important factor. Lack of interest on the part of the children is more important than lack of interest of the parents for the children dropping out of schools, while it is the lack of interest of parents that is more responsible for the non-enrolment of children. This is where the school environment matters. Twenty percent of the children of the bottom quintile and 32% of the top quintile drop out due to school related factors that can be referred to as unattractive school environment. Hence the phenomenon is to be regarded not as dropout but as 'push-out.' Economic factors form the second most important set of factors for the poor for not being able to continue their studies. Among the poorest quintile, 33% children drop out due to economic reasons, while at the same time the corresponding proportion is also high for the rich—28%. Surprisingly, inability to cope with studies in the schools is a more important factor for the rich than for the poor.

The pattern is more or less the same in case of reasons for the dropout of girls in rural areas. One particular point is clear: in case of girls, a larger number of parents report lack of interest in studies on the part of

Table 3.15 Why do children drop out from school? 1995–96

		Househo	old exp	enditu	re quin	tiles	
		Bottom	2nd	3rd	4th	Тор	All
All children							
1	No tradition in family	0.2	0.4	0.8	0.6	0.6	0.5
2	Child not interested in studies	30.7	25.3	23.7	24.0	19.5	24.4
3	Parents not interested in studies	9.3	9.2	11.3	7.0	9.9	9.4
2 + 3	Lack of interest in studies	40.0	34.5	35.0	31.0	29.4	33.8
4	Inability to cope with/failure in studies	16.6	21.5	20.7	25.9	27.2	22.5
5	Unfriendly atmosphere at school	0.4	0.3	0.5	0.4	0.6	0.4
6	Education not considered useful	2.5	1.8	1.5	0.9	2.1	1.7
7	Schooling/higher education facilities not available conveniently	0.8	1.5	1.6	2.1	2.3	1.7
4-7	Direct school-related factors	20.3	25.1	24.3	29.3	32.2	26.3
8	Has to work for wage/salary	4.9	4.4	5.5	5.4	3.9	4.8
9	Has to participate in other economic activities	7.2	8.5	7.3	7.5	8.3	7.8
10	Has to look after younger siblings	1.8	1.3	1.7	0.9	0.9	1.3
11	Has to attend other domestic activities	4.8	5.3	4.3	4.8	3.7	4.6
12	Financial constraints	14.4	13.1	13.0	10.4	11.5	12.4
8 - 12	Direct economic factors	33.1	32.6	31.8	29.0	28.3	30.9
13	Other	4.5	5.6	5.9	7.4	7.2	6.2
Rural girls							
1	No tradition in family	0.4	0.1	1.7	1.5	1.2	1.1
2	Child not interested in studies	26.3	22.1	21.4	20.9	16.8	21.0
3	Parents not interested in studies	20.0	13.1	17.7	12.2	18.7	16.3
2 + 3	Lack of interest in studies	46.3	35.2	39.1	33.1	35.5	37.3
4	Inability to cope with/failure in studies	9.3	19.6	15.9	18.4	23.5	18.0
5	Unfriendly atmosphere at school	0.3	0.2	1.0	0.1	1.0	0.6
6	Education not considered useful	3.0	3.1	2.6	0.7	2.1	2.2
7	Schooling/higher education facilities not available conveniently	1.0	3.3	3.4	4.0	5.0	3.5
4-7	Direct school related factors	13.6	26.2	22.9	23.2	31.6	24.3
8	Has to work for wage/salary	2.0	1.3	1.0	3.0	0.4	1.4
9	Has to participate in other economic activities	1.8	6.5	4.3	3.0	3.7	3.9
10	Has to look after younger siblings	4.0	2.7	3.6	1.4	1.5	2.5
11	Has to attend other domestic activities	11.7	10.4	8.4	9.7	7.3	9.2

(continued)

Table 3.15 (continued)

		Household expenditure quintiles					
		Bottom	2nd	3rd	4th	Тор	All
12	Financial constraints	12.9	9.9	10.4	11.7	7.4	10.2
8 - 12	Direct economic factors	32.4	30.8	27.7	28.8	20.3	27.2
13	Other	6.0	7.2	7.6	11.2	9.5	8.5

Source NSSO (1998)

the parents and also of the girl children as responsible for the dropout (or withdrawal) of girls from schools than in case of boys (rather all boys and girls combined). Girls are also withdrawn from schools in larger numbers as they have to attend to domestic activities including looking after younger siblings, than boys; and boys (or all on average) are withdrawn more for wage work and for participation in other economic activities. What is interesting to note is that there is not much difference between the five quintile groups in their response relating to their children's participation in wage and other economic activities. In sum, it appears that in the literature and popular perceptions (e.g., Weiner 1991), exaggerated emphasis has been placed on opportunity costs of schooling (or simply child labour) as a major factor of the non or never enrolment of poor children in schools (see also Bhatty 1998).

Cultural prejudices and traditional factors—having a tradition to send children to schools—is also yet another factor that is important in this context. Though small in number, on the whole, 4% of never-enrolment of the children is accounted by this factor. This is above 5% among the girls. Interestingly there is not much difference between the rich and the poor. However, once children are put in the schools, they do not drop out due to this factor of having or not having a tradition to go to school. That is, this factor becomes redundant once the children are enrolled in schools. There is no going back.

The implications of the long array of figures on factors responsible for non-enrolment in and dropout of children from schools, can be summed up as follows: To attract children into schools, it is necessary that interest is created in the minds of the children and more particularly their parents in education. To create interest in and change the perceptions of the people about schooling, it is necessary that the school environment be improved. Many researchers have identified school-related factors as

crucially important. The shortcomings of the school system are found to be a more important hindrance to the participation of urban slum dwelling children in schools than even economic factors (Banerji 2000). The second most important thing to do is to make efforts to mitigate the financial constraints of the households. Besides providing truly free education, financial incentives may have to be offered to the poor.³⁴ In addition, to see that the children who are already enrolled in schools do not drop out also, it is important to improve the schooling environment. The phenomenon of dropout of children from school could be seen as reflective of the failure of the school system to retain them in the school until the completion of the given level of education. Mere provision of a school facility is not adequate. A school with reasonably good physical infrastructure and committed teachers providing an attractive learning environment is necessary. As mentioned earlier, all these factors are interrelated. For instance interest in education can be created by providing a good schooling facility and/or by enabling the children or parents to demand education by improving their economic conditions and by reducing the need for household expenditures on schooling, etc.

3.5 Imperative of Educational Improvement

That education reduces poverty is well recognised in India and accordingly, education, specifically elementary education (that includes primary and middle or upper primary levels—in all, eight years of schooling) is regarded as a minimum need and is made a part of national minimum needs programme in the five year plans in India. One of the important components of the 'National Human Development Initiative' announced in the Union Budget 1999–2000 is education. Education is also recognised as an important item of 'basic human development needs' and is one of the items of the Prime Minister's Special Action Plan. But all this has not effected any specific priority of the government to education (see Tilak 1999a).

But realising that education is having direct effect on poverty, government, NGOs working in the area of development and also quite a few external aid organisations began to feel imperative to pay serious attention to education, concentrating more specifically on elementary education in particular. A brief description of some of the recent initiatives is given below. The aim is not to present a critique of these several initiatives, but give a brief idea about certain major programmes, initiatives and interventions.

3.5.1 State Efforts: Recent Experiments, Programmes and Projects

While the initiatives taken by the government in universalising elementary education are many, a few recent measures need a special mention. Government policies and recent efforts in India aim more clearly at the later two sides of the problem: (a) reducing the household costs of schooling, and (b) improvement of school environment. How far are they successful?

Efforts to Reduce Household Costs

'Free' Elementary Education

To reduce the households' direct costs of schooling of children, India, like many other countries had resolved long ago to provide elementary education free—specifically tuition fee free. While official claims reiterate that it is being provided free, the available evidence shows the other way. Based on the 42nd round of the NSSO, Minhas (1992, p. 90) and Tilak (1996b) have shown that only 85% of the children attending schools in rural areas and 51% in urban India receive free primary education. Similarly, the evidence based on the NSSO (1998) given in Table 3.16 shows that only about 75% of the children receive free primary and upper primary education. The remaining children pay tuition fees.³⁵

Table 3.16 How many children get 'free' education in India? 1995–96 (%)

	Primary	Middle	Secondary ^a	Higher
By type of schools				
Government	92.3	87.2	70.5	22.8
Local body	86.7	83.6	73.2	24.9
Private aided	45.7	60.6	59.6	15.0
Private unaided	5.8	6.4	11.2	4.3
Others	93.4		78.6	89.1
All	76.5	74.4	62.7	19.7
By household expe	nditure qui	intiles		
0-20	85.1	82.2	77.9	25.4
20-40	81.3	79.5	71.4	24.4
40-60	77.8	77.8	67.8	21.8
60-80	73.2	74.2	62.8	21.4
80-100	60.9	64.6	53.8	17.6
All	76.5	74.4	62.7	19.7

^aIncludes higher secondary

Note Free means tuition fee free only; number of students fully exempted from tuition fee is also included; others refer to 'not recorded'

Source NSSO (1998)

Most children pay various other types of fees. 36 Though a large majority of the children in government schools receive tuition fee free education, 8% of the children in the government primary schools and 13% in government upper primary schools pay some fees or other. Schools run by local bodies of administration such as *Zilla Parishads*, *Panchayats* and *Mandals* receive grants in aid from the state governments to meet their full expenditure and are governed by most of the rules of the government in providing free education. Yet about 15% of the children in schools run by local bodies have to pay fees for elementary education. Similarly government-aided private schools, popularly called 'private-aided schools' receive aid from the government to meet nearly their full recurring expenditures and are expected to provide free education. But nearly half the children in private-aided schools are charged fees. Private schools that do not receive any State aid are however free to charge fees, and most of the children in these schools pay fees, rather hefty amounts of fees.

The children who do not receive free primary education are not confined to the high income families. They are distributed in all income groups. While 40% of the children belonging to rich families do not receive free education, the corresponding proportions are 15 and 20% in the bottom income quintiles. In all, 25% of the children attending school do not receive free primary or upper primary education. Thus despite the acceptance of the rationale and the need to provide free elementary education, the universally accepted and the Constitutionally guaranteed principle is not being strictly adhered to in India.³⁷

It is not only fees that the students have to pay to schools, but they also have to incur expenditure on other important items related to schooling such as purchase of books, stationery, uniforms, transport and private coaching. The need for such expenditure is high as public expenditure on the same is very small. On average, households have to spend Rs. 500 per student in primary education and Rs. 915 in upper primary education (Table 3.17). At such a level of household costs, a sizeable proportion of families may find it beyond their means to send their children to school and keep them there for the few years to acquire even literacy and a basic level of education. Household expenditure on education increases for higher economic levels of the households. While the poorest households spend Rs. 197 per child in primary education, it increases by six times among the richest quintile. In a sense, primary education which is expected to be available free, also tends to become a 'luxury good' for poor.

	Primary	Middle	Secondary ^a	Higher	All levels
0-20	197	426	768	1353	300
20-40	306	575	961	1645	472
40-60	419	726	1096	1810	647
60-80	598	900	1424	2220	923
80-100	1150	1547	2220	3694	1836
All	501	915	923	2923	904

Table 3.17 Household expenditure on education in India, by household expenditure quintiles, Rs. per student, 1995–96

Provision of Incentives

To reduce the household costs of schooling, government also provides scholarships to poor children, free textbooks and stationery to children, and in the recent past, a national noon meals programme was also launched which enables all children in primary schools to have free meals in schools. Except for monetary scholarships all the other programmes are by design, universal in coverage, while scholarships are only for target groups of population, i.e., socially and economically weaker sections. But the programmes that are meant for universal coverage are also restricted. Only 35% of the children in primary schools receive free/subsidised textbooks, 5% receive free/subsidised stationery and 27% of the children receive free noon meals. The corresponding proportions are much less in other levels of education (Table 3.18). Particularly, the impact of noon meals on the enrolment, retention and even performance of the poor children in schools is believed to be very significant (Rajan and Jayakumar 1992). But the programme has not received serious attention. While compared to private schools, government schools fare better in the provision of these facilities (see Tilak 1994c), yet these facilities are severely restricted to a small fraction of students, necessitating substantial household expenditures even by poor households.

The *Programme of Action* (Government of India 1986b) stressed the need for some more incentives like establishment of day-care centres for pre-school children and infants, so that girl children can go to schools. The Government of India has also recommended in the *Programme of Action* expansion of the existing schemes more intensively to the target population groups. For example, it suggested provision of two sets of

^aIncludes senior secondary Source NSSO (1998)

Table 3.18	How many students receive indirect subsidies in education, 1995-	-
96, all levels	f education (%)	

By quintile group	0–20	20–40	40-60	60–80	80-100	Ali
Scholarships	7.0	7.4	7.1	7.1	5.7	6.8
Free/subsidised textbooks	35.2	32.1	28.6	23.7	13.7	25.6
Free/subsidised stationery	67.0	4.0	4.1	3.8	2.2	3.9
Noon meals	24.3	21.5	19.0	16.4	11.5	17.9
Concession in transport	8.0	39.2	50.3	47.4	58.5	53.1
By type of school	Govt	Local body	Private aided	Private unaided	All	
Scholarships	8.2	6.2	5.5	1.4	6	.8
Free/subsidised textbooks	33.6	29.7	9.9	1.6	25.6	
Free/subsidised stationery	5.0	4.5	1.9	0.8	3.9	
Noon meals	23.0	22.9	7.5	1.8	17.9	

Source NSSO (1998)

free uniforms, free textbooks and stationery and attendance incentives to the girls of all families below poverty line, and provision of free transport in state roadways buses to children attending elementary schools, etc.³⁸ In fact, the Government of India has promised in the *Programme of Action* that "a comprehensive system of incentives and support services will be provided for girls and children of the economically weaker sections of society." Alas, this is yet to be developed.

Efforts to Improve School Environment

Much has been done in independent India through planned efforts to expand schooling facilities, but the quantum and quality of facilities are highly inadequate. Some important initiatives taken in the recent past may be briefly noted.

Operation Blackboard

To improve the infrastructure facilities, and quality of primary education, the Government of India has initiated the 'operation black board' programme, as a follow-up of the *National Policy on Education 1986* (Government of India 1986a). The scheme started in 1987–88 aimed

at substantial improvement in basic facilities in all primary schools run by government and local bodies. It consists of three different components: (i) a building comprising at least two reasonably large all-weather rooms with a deep verandah and separate toilet facilities for boys and girls, (ii) at least two teachers in every school, as far as possible one of them a woman, and (iii) essential teaching learning material including blackboards, maps, charts, toys and equipment for work experience. The third category includes provision of a variety of minimum level of facilities and material, including teachers' material (e.g., textbooks, modules and syllabi), classroom material (e.g., maps, globes, charts), play material (blocks, strips, tiles, puzzles, games and toys), games equipment (skipping rope, balls, rings), primary science kit, mini tool kit, mathematics kit, books for library, musical instruments, classroom equipment (chairs, tables, mats, blackboards, chalks, dusters) and miscellaneous facilities (water facilities), etc.

The Revised National Policy on Education (1992) suggested expansion of the scope of operation backboard to provide three reasonably large rooms and three teachers in every primary school, and to extend the scheme to upper primary level. Accordingly in the Eighth five-year plan, provision was made for (a) continuation of the scheme to cover the remaining schools identified in the seventh Plan, (b) provision of three teachers and three classrooms to primary rooms where enrolment exceeds 80, and (c) extension of the scheme to the upper primary level. This scheme is hoped to improve the quality of education significantly.

But in 1993, when the last All-India Educational Survey (NCERT 1997–98) was conducted, more than 20 thousand primary schools in rural India, i.e., 17.1% of the schools, were still found to be running in open space, nearly 2 thousand in tents, 16 thousand in thatched huts and another 48 thousand in *katcha* buildings (Table 3.19). This is despite a clear resolve that a building with at least two pucca rooms usable in all-weather would be provided to each primary school, according to the *National Policy*. There were a few schools without any rooms of any kind, though it is a small number: 5.3%. Teaching takes place, if at all it does, in these schools under a tree or in a verandah or so. As a result, most of these schools have to be practically closed during rainy days and even during severe winter and summer days. Realising the problem of inadequate building facilities, quite a few states have adopted the practice of running of schools in double shift.³⁹

Table 3.19 Number of schools in rural India, by type of buildings

	Primary		Upper prin	nary
	1986	1993	1986	1993
Pucca	54.5	64.2	66.4	65.7
Partly pucca	16.2	18.7	19.7	22.5
Katcha	14.8	9.5	9.2	7.9
Thatched huts	5.9	3.2	2.0	1.7
Tents	0.5	0.4	0.2	0.1
Open space	8.0	4.0	2.5	2.1
Total	100.0	100.0	100.0	100.0

Source NCERT (1992, 1997-98)

With respect to provision of ancillary facilities, the improvement is modest and the overall situation is still very unsatisfactory. More than 60% of the primary schools and 40% of the upper primary schools did not have even drinking water facilities. The situation worsened between 1986 and 1993, the latest two points of time for which data are available (Table 3.20). Toilet facilities are available only in a rather negligible proportion of schools.

Access to Schools

Several research studies (e.g., Tilak 1996b) have found that proximity to schools, particularly at primary and upper primary level matters a lot for the participation of children in schooling. Accordingly, it is viewed that provision of a complete primary school or at least some sections of a school within the habitation would considerably enhance the enrolment of children in schools. Also in a major introspective critique of its own educational policies and plans, the Government of India (1985) had noted that lack of school facilities for children was a major constraint on universalisation of elementary education. Ever since, improvement in access of the weaker sections to primary schools has been an explicitly stated goal of the government. The growth in the number of schools is indeed impressive. A large number of schools are being opened. The efforts were said to have been intensified after the National Policy on Education 1986 was formulated. However, quite surprisingly, the percentage proportion of habitations having schools or sections (not a complete school, i.e., an 'incomplete primary school' within the habitation itself) declined between 1986 and 1993 (Table 3.21). A little less than 50% of the habitations have a primary school/section within the

Ancillary facility	Primary		Upper primary	
	1986	1993	1986	1993
Drinking water	44.5	41.4	63.4	58.34
Urinals	11.1	14.0	34.8	40.58
Separate urinals for girls	3.0	5.5	16.6	24.51
Lavatories	3.2	6.4	12.8	19.97
Separate lavatories for girls	1.0	2.4	5.9	9.26

Table 3.20 Percentage of schools in rural India, having ancillary facilities

Source NCERT (1992, 1997-98)

habitation in 1993, while in 1986 a little above 51% had the same. Out of the nearly 10.6 lakh rural habitations in the country nearly 35%, i.e., 3.73 lakh habitations did not have a primary school within their own habitations or within a distance of 0.5 km. Young children of the age below 11 are expected to reach a school walking to a nearby habitation located at a distance of more than half a kilometre. Similarly, there is a nearly 3% point decline in the population covered by schools located in the habitations themselves, i.e., 77.8% of the population have access to a primary school within the habitation in 1993, while the corresponding proportion was 80.4% in 1986. The access of the scheduled castes and tribes also did not improve significantly during this period (see Tilak 1999c). It was found that the scheduled tribes are at a more disadvantageous position that the scheduled caste population (Rao and Kulkarni 1999). For every one general population habitation not having a primary school within its jurisdiction, there were 1.71 scheduled tribe habitations without a school within their jurisdiction.

It is generally argued that the habitations that do not have a school or a schooling facility within their own jurisdiction are those where opening up of a school is considered to be an 'unviable' proposition, since the size of the population of the habitation may be very small and that too scattered. The official norm has been to provide a schooling facility in every habitation having a population of not less than 300. But the available evidence suggests that many habitations that satisfy the population norm also do not have primary schools (Table 3.22). Only 73% of the all (rural and urban) habitations having a population of 300 or more were served by a primary school or primary sections in 1993, i.e., 27% of the habitations with a population size of above 300 were deprived of having

Table 3.21 Provision of schools/sections in rural India, 1986 and 1993

	Au ureus				Predominas	ntly schedulei.	l caste popui	lated areas	Predominantly scheduled caste populated areas - Predominantly scheduled tribe populated areas	ıtly schedulea	ł tribe popula	ted areas
	% of habitation schools/sections	% of habitations having schools/sections	% of population covered	ation	% of habitation schools/sections	% of babitations having schools/sections	% of population covered	ation	% of habitations having schools/sections	ions baving ins	% of population covered	tion
	1986	1993	1986	1993	1986	1993	1986	1993	1986	1993	1986	1993
Primary schools/section	ols/sections											
Within	51.16	49.79	80.38	77.81	37.67	37.03	66.31	64.27	45.43	45.96	72.19	71.43
O E l·m	14.83	10 4	77. 9	7 60	31 65	22.74	12.78	77 77	12 28	10.29	707	6.20
0.6-1.0 km	17.86	18.56	7.33	8.27	22.27	22.53	12.05	12.53	16.75	19.97	9.21	10.80
1.1-2.0 km	10.81	10.72	4.06	4.24	12.97	12.19	6.58	6.21	13.14	12.81	9.99	6.64
>2 km	5.35	5.92	1.49	2.00	5.4	5.51	2.28	2.46	12.40	10.89	5.00	4.81
Total	100	100	100	100	100	100	100	100	100	100	100	100
Upper prima	Upper primary schools/sections	tions										
Within	13.13	13.87	36.85	37.02	5.57	6.51	15.42	18.5	6.55	7.85	18.71	21.56
habitation												
<1.0 km	19.06	25.46	14.95	19.89	23.65	32.04	21.56	28.95	12.13	18.20	11.65	16.17
1.1-2.0 km	23.34	21.38	18.43	16.37	25.68	22.91	24.58	20.92	17.41	18.38	17.68	17.01
2.1-3.0 km	18.48	15.43	13.75	11.72	19.53	16.18	17.81	14.16	16.91	15.53	15.81	14.22
3.1-4.0 km	9.51	8.05	6.55	5.52	10.31	8.22	8.74	6.55	11.48	82.6	9.82	8.35
4.1-5.0 km	6.32	60.9	4.22	4.18	89.9	5.91	5.66	4.97	9.50	8.73	8.13	7.39
>5.0 km	10.16	9.72	5.26	5.30	8.58	8.22	6.22	5.94	26.03	21.52	18.2	15.31
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source NCERT (1992, 1997-98). See also Tilak (1999c)

Table 3.22	% of	deprived	habitations	(qualified	by	population	size	but	not
served by sch	iools),	1993							

Habitations	Within habitation	Within 1 km
Primary schools/sections (size of habitation > 299)		
All	26.76	6.97
Scheduled castes ^a	38.33	8.81
Scheduled tribes ^a	21.53	7.97
Upper primary schools/sections (size of habitation > 499)		
All	69.67	16.27
Scheduled castes ^a	83.17	17.58
Scheduled tribes ^a	73.22	26.69

^aPredominant population of the habitation Source NCERT (1992, 1997–98). See also Tilak (1999c)

a primary school within their own jurisdiction.⁴⁰ In case of scheduled tribes the situation is somewhat better, but in case of scheduled castes, the corresponding deprivation rate is 38%. On the whole, a school facility was totally absent for some children and was available at a distance for some.

Education Guarantee Scheme

A novel scheme called Education Guarantee Scheme (EGS) is viewed as an effective answer to this problem. This is a major important initiative that the government proposed at the national level in the Union Budget 1999-2000. Aimed at "providing an opportunity to the rural poor, especially those belonging to the Scheduled Castes, Scheduled Tribes and Other Backward Classes to secure education for their children", drawing from the experience of Education Guarantee Scheme of the government of Madhya Pradesh (see Gopalakrishnan and Sharma 1998) a national programme of EGS was launched. The scheme is meant for those areas where no school currently exists within a radius of 1 km. So these areas could be the areas where the poorest of the poor live. By adopting distance norms, norms regarding size of population of the habitation etc., in educational planning until now, the educational needs of the population in these areas were neglected, stating that it is 'unviable' to open a school in such areas. So payment of attention to these areas now is important. But the EGS has a major internal contradiction. The EGS envisages the poor local community to (a) come forward, expressing demand for a school, (b) specifically provide the premises required for a school, (c) provide for a local part-time teacher, and (d) maintain the school at least for two years with the Gram Panchayat mobilising contributions in cash and kind from the local community (Tilak 1999a).⁴¹ The scheme presumes that a full formal school with all the required basic facilities is not necessary and so dispensable is a qualified and trained teacher. Secondly and more importantly, the notion that a community must demand a school facility rather than receive it as an 'entitlement' or a right from the government, implies shifting of responsibility of opening schools from the shoulders of the government to those of the people themselves. However, claims are being made on the grand success of the scheme. It is reported that the EGS in Madhya Pradesh has made significant progress in opening new schools for the poor.⁴²

Provision of Teachers

A school without a teacher is not a school; and schools with insufficient number of teachers cannot meaningfully serve the purpose. They reflect the poor quality of education. Unfortunately, there is a sizeable number of schools in rural India with inadequate number of teachers. One can obviously expect that the teaching—learning process in these schools gets severely affected, resulting in non-enrolment and dropping out of children from schools.

Government plans to provide an adequate number of teachers to all schools have not progressed well. The Indian education system is identified with the singular feature of zero-teacher and single teacher schools. Though there was a decline in the total number of single teacher schools between 1986 and 1993, still such schools formed a sizeable number in 1993: 1.12 lakhs, constituting 22% of the total number of schools. If a single teacher school is a stigma, the phenomenon of teacher-less schools. i.e., schools without teachers is a worse phenomenon. More than four thousand primary schools in rural areas were without teachers in 1993. The number was nearly doubled from 2.2 thousand in 1986 to 4.1 thousand in 1993.

Many have expected that with the launching of operation black-board programme there would be no more single teacher schools in the country. But the phenomenon continues (Table 3.23). Perhaps all the single teacher and zero teacher primary schools existing in 1987 when the programme was launched, were converted into two teacher schools. But unfortunately, the practice of establishment of new schools with no teachers and/or with just one teacher seems to have continued unabated.

	Schools	with no	teachers		Schools with	one teac	her	
	1986		1993		1986		1993	
	No.	%	No.	%	No.	%	No.	%
Government	1183	0.58	2123	0.90	67,546	33.17	60,447	25.62
Local body	1027	0.40	1888	0.76	79,597	31.19	49,582	19.99
Private aided	7	0.06	29	0.20	1405	11.67	1313	9.07
Private unaided	4	0.08	65	0.71	1000	20.84	684	7.46
Total	2221	0.47	4105	0.81	149,548	31.43	112,026	22.07

Table 3.23 Rural primary schools without any and with only one teacher

Note Percentage of total number of schools in each category Source NCERT (1992, 1997–98)

Table 3.24 Number of pupils per teacher in elementary schools

	Primary	Upper primary
1986–87	41	35
1990-91	43	37
1991-92	44	38
1992-93	43	38
1993-94	50	38
1995-96	47	38
1996-97	45	38
1997-98	42	37
1998-99	42	37

Source MHRD (2001) and earlier years

Further, increase in the number of teachers has not kept pace with the increase in student numbers. As a result, the pupil-teacher ratio in primary schools in India increased according to official statistics of the MHRD, from 41 in 1986–87 to 50 in 1993–94 and later it declined to 43 in 1999–2000. The pupil-teacher ratio in upper primary schools also increased from 35 to 38 during the same period (Table 3.24).

An equally important aspect refers to the quality of teachers. While there are several indicators of teachers' quality, training is an important one. Trained teachers are expected to perform better than untrained teachers. Accordingly, teacher education and training have been emphasised in India for a long time and generally only formally trained teachers are recruited in schools. But in recent years many untrained teachers

Table 3.25	Growth in	part-time	teachers	in	rural	primary	and	upper	primary
schools									

	P_{7}	imary scho	ools	Uppe	er primary s	chools
	1986	1993	Growth ^a	1986	1993	Growth
Government	149	1769	155.3	713	1043	6.6
Local body	496	949	13.0	9	669	1047.6
Private aided	565	352	-5.4	826	781	-0.8
Private unaided	134	891	80.7	116	794	83.5
Total	1344	3961	27.8	1664	3287	13.9

^aGrowth: rate of growth per annum *Source* NCERT (1992, 1997–98)

and part-time teachers including para teachers are being recruited, in some states in large numbers. This may be partly due to serious budgetary constraints on the one hand, and partly to avoid problems relating to teacher management on the other. In some cases, this is also felt necessary as enough fully qualified trained teachers are not available for recruitment on a full-time basis and as many unemployed and untrained youth are available. The proportion of trained teachers marginally declined between 1986-87 and 1992-93 both in primary and upper primary levels. Secondly, part-time teachers in rural primary schools increased at a rate of growth of 27.8% per annum between 1986 and 1993 and the growth rate is alarmingly high, 155.3% in government primary schools. There were only nine part-time teachers in upper primary schools run by local bodies in 1986 and the number has increased by more than 70 times in seven years (Table 3.25). Thirdly, the phenomenon of voluntary/contractual teachers is a new one. Probably there were no teachers of this kind in 1986.⁴³ As many as 25 thousand teachers in primary schools and another 10 thousand teachers in upper primary schools in rural areas in 1993 belonged to such a category of teachers (Table 3.26). There has been a rapid growth in the number of para-teachers in the recent years, particularly as it is also advocated as a part of the DPEP, under different titles in different states, e.g., Shiksha Karmis in Rajasthan and Madhya Pradesh, Shiksha Mitras in Uttar Pradesh and Vidya Sahayaks in Gujarat. All this, though argued to be an effective strategy to reach out the unreached (chidlren) (EdCIL 2008, 2009), it will necessarily have serious adverse impact on the quality of

1.33

10,545

	Prin	nary schools	Upper p	rimary schools
_	No.	As % of full-time teachers	No.	As % of full-time teachers
Government	16,129	3.04	4464	1.18
Local body	5590	0.87	2825	0.99
Private aided	1761	2.87	2121	2.59
Private unaided	1465	3.38	1135	2.62

1.96

Table 3.26 Voluntary/contractual and 'other' teachers in rural primary and upper primary schools in rural India, 1993

Source NCERT (1992, 1997-98)

24,945

Total

instruction. In fact, it was argued to be leading to "rapid weakening and general dismantling of the structure of primary education" (Kumar et al. 2001, p. 565). But the idea of not having full-time qualified and trained teachers, and rather having para-, contractual and part-time teachers has gathered some fashion and is based on the belief that job insecurity brings greater efficiency. This is also broadly in conformity with the new economic policies, adopted by the government from the beginning of the 1990s that favour down-sizing of the public system and its privatisation.

Among the other important initiatives being taken by the government include decentralisation of administration of schools, mobilisation of community support, and encouragement to private schools. With respect to private schools, the present tendencies indicate that government favours in the name of 'building partnerships' the growth of private schools—private schools financially supported by the State and self-financing private schools. With dwindling public budgetary support for education, the government's preference in the recent years is more in favour of the latter. This is also in consonance with the economic reform policies that emphasise privatisation. As a result, there is a rapid mushrooming of private schools. But as De et al. (2001) documented, infrastructure in many of these schools is poor and teachers are generally neither well trained nor experienced; the teachers were, however, generally actively engaged in teaching-learning activities which made them popular with parents; teaching methods still rely heavily on rote learning and memorization; and while most schools offer English as either the medium of instruction or as part of the core curriculum, it is rarely taught properly. Available research (e.g., Tilak 1994c) has shown that

Table 3.27	Share	of	private	(unaided)	schools	in	enrolment	in	schools
in India (%)									

	1978	1986	1993
Primary	3.0	5.1	8.6
Upper primary	5.4	8.5	11.0
Secondary	3.1	6.5	8.7

Source NCERT (1992, 1997-98)

private schools in India cause serious adverse effects on equity, besides effects on other dimensions of education and society. Particularly the poor would be at a serious disadvantage with the growth of private schools. The self-financing private schools do not cater to the needs of the poor. The fee policies of these schools exclude the poor altogether. With the growth of private schools, the government might not feel the need for opening new government schools and as a result, the access of the poor to schools would be seriously affected. Growth in private-aided schools (i.e., financially supported by the State) is found to lead to distortions in the allocation of public resources causing enriching of the private sector and pauperisation of the public schools. Lastly, that private schools promote dualism in education—an expensive system for the rich and a poor quality one for the poor—is well known and such forces get accentuated in the context of economic reform policies. Yet, a steady growth in private schools with all their ill effects is not only allowed but also now encouraged by the government (Table 3.27).

3.5.2 Externally Aided Projects in Education

From the mid-1980s onwards, when the World Bank explicitly recognised the critical role of education in reducing poverty (e.g., see Jones 1992; World Bank 1980), many international aid organisations began targeting their development aid efforts towards education—particularly primary education (Tilak 1988, 1999d). One of the most important developments in primary education in India in the 1990s is flow of international assistance for primary education. Starting with the World Bank assistance for primary education in ten districts in Uttar Pradesh and that of UNICEF in Bihar, a plethora of international—both multilateral and bilateral—aid organisations are currently in operation in India working

for the improvement of the primary education system. Though there is no clear and sound rationale for opting for external assistance for primary education in India, "the eagerness of the international aid organisations to finance primary education in India on the one hand, and the severely deteriorating general budgetary conditions of the government at the beginning of the 1990s on the other," have been responsible for the rapid growth in aid for education in India (Tilak 2000a, p. 43).

First, let us briefly note a few of these projects.⁴⁴

The first major externally financed project in primary education was a project launched by the ODA (Overseas Development Assistance) of the United Kingdom which started as a pilot project in 1983 covering 328 schools in 11 districts in Andhra Pradesh, and later extended to all schools in the state. The project focused on the classroom in the primary schools as a whole and social environment, which influenced the demand for education. It is largely concentrated on pedagogical dimensions, and improvement in teacher effectiveness has been the main objective of the project. Though primarily the project is said to have benefited only the children in schools, by improving the school environment and influencing the demand for education, many children who were outside the school system also came into the system. Now ODA as a part of the DPEP Phase III, runs a project in Andhra Pradesh (1996–2003) with an investment of Rs. 207 crores.

Shiksha Karmi Project started in 1987 in Rajasthan is another major externally aided project in primary education in India. The main strategy of the project is to provide a local educated unemployed youth as a teacher, as a para teacher (Shiksha Karmi or educational worker). An important aspect of the project is that it concentrated on rural areas in the state, that too remote rural areas. It also emphasised on women teachers—Mahila Shiksha Karmis, and gave considerable attention to the empowerment of women, by promoting not only Mahila Shiksha Karmis, but also Mahila Prashikshan Kendras, Mahila Sahyogins and Women groups and their representation and active role in the village education committees.

Another major project that emphasised women empowerment is the Mahila Samakhya Project financed by the Dutch and is in operation in Uttar Pradesh, Karnataka, Gujarat and Andhra Pradesh. The project acknowledged the centrality of education in the empowerment of women.

Bihar education project in Bihar, financed by UNICEF and the Basic Education project in Uttar Pradesh financed by World Bank, are in a sense first of its kind projects that took a comprehensive view of primary education. The projects targeted educationally backward districts in the respective states.

Lok Jumbish is an important innovative project launched in 1992 in Rajasthan for the universalisation of primary education. It was financed by the SIDA (Swedish International Development Agency). It aimed at providing access to education to all children through formal and non-formal schools, ensuring that all children regularly attend classes and improve their performance levels. The project is run by the state government with community participation and with international assistance. The high level of community participation in the project misleads many to treat this as a project of the NGO.

The District Primary Education Project (DPEP) is a major project of external assistance for primary education in India. The external funds flow from a variety of sources, primarily World Bank, but also include ODA, European Union etc. The project aims at universal enrolment, reduction in dropout rates to less than 10%, improvement in learner achievement at least by 25 percentage points, and reduction in inequities of all types to less than 5%. Enhancement of teacher quality through in-service training is a major component of the DPEP. Besides provision of infrastructure facilities, improvement in teacher quality—training, and development of textbooks have been important components of the DPEP. The project also aims at promoting local initiatives, including local area planning, school mapping and micro planning, and assigns an important role to village education committees and similar other bodies. Presently the programme covers 3.75 lakh schools in 248 districts in 18 states with an estimated total credit and grant of Rs. 5885 crores (DPEP Calling, December 2000, p. 68).

Most of the projects aim at improvement of primary education—improvement in access to formal and informal education, improvement in retention or reduction in rates of dropout, and improvement in students' achievement levels. All projects emphasised local area planning. For example, block is the unit of planning in Lok Jumbish, while district has been the unit for planning in most other projects, including specifically the DPEP. The DPEP is launched in selected districts in a good number of states. The districts chosen are educationally backward in terms of enrolment ratio and female literacy. An important aspect of these projects is their recognition of the role of local community in planning and management of schools, in improving the enrolments in schools, in improving teacher attendance and their performance and on

the whole in the efficient functioning of the schools. Mobilisation of local communities—people, physical and financial resources—has been an important dimension of these several projects. For example, much of the school mapping exercises were carried out by the villagers in the Lok Jumbish project. District plans are prepared in most other projects by the district machinery. In all projects, village education committees were constituted and they took active interest in all activities of the projects. "Decentralisation in these projects meant developing, controlling, supervising and inspection systems from below with accountability largely on the community" (Varghese 1998, p. 24).

There are several positive and also severe adverse effects of the foreign-aided projects on the development of primary education in India. 45 Varghese (1998) highlighted some of the major potential implications of these external interventions and approaches for reduction in poverty as follows: (a) many of these externally aided projects in primary education aimed at targeting deprived regions—educationally backward districts and blocks in the country, including educationally backward districts in otherwise developed states in the country; (b) the projects also focus on the government and the government funded (familiarly known as private schools, aided by the State), which in general attend to the needs of the poor, while private schools cater to the demand of the rich; (c) all the projects also focus on decentralised planning; taking the district as the unit of planning, poorer blocks and mandals receive greater attention; Lok Jumbish, of course, considered block as the unit of planning; (d) using school mapping as an essential step in educational planning in these projects the most deprived villages and school-less habitations receive priority in the establishment of schools and provision of other school related infrastructure; (e) by aiming at effective participation of the communities, the available resources could be somewhat efficiently spent taking into account the actual needs of the schools and in the process poorer communities benefited more than the others; and (f) special focus has been laid on deprived sections of the population—women and girls and tribal population in particular. An important strength of the projects is their concentration on backward districts and the education problems of girl children, which may have substantial positive effects on education poverty.

But the adverse effects of external aid on education are also too many in number and too severe in nature. In a detailed critique, Tilak (1999d) has discussed problems relating to sustainability of the projects, likely

dwindling of efforts to mobilise domestic resources, the costs of exclusive concentration on primary education, the debt burden, emergence of pockets of prosperity amidst poverty prevalent in a large number of primary schools, and the overall impact of external aid organisations on the Indian education scene. Of all, as Tilak (2000a, pp. 43–44) observed, "a very important and damaging consequence of DPEP... has been of a different kind. A view, which people used to question, has been now widely accepted and has been least questioned, and it is: government does not have money even for primary education and for the development of any qualitative or quantitative or any dimensions of primary education. An unfortunate and not necessarily a correct impression is being created that improvement in primary education in the country will be possible only with the help of external assistance... This, what can be described in familiar terms, as dependency culture, has widely spread in no time both horizontally across all parts of the country in all states, irrespective of political ideologies of the ruling parties in the states, and vertically at all layers of government in administration, and people in general in the whole country, creating a euphoria that primary education in the country cannot be developed without external assistance."

3.5.3 Role of NGOs in Education in India

Relationships between governments and Non-Governmental Organisations (NGOs) in education were often fraught. During the recent years, the relationships between the two underwent a significant change. NGOs have now emerged as important agents in developing countries since the beginning of the 1980s. They have become accepted by governments and also by people. With their meteoric rise as a "new developmental force," it is widely felt by governments, aid organisations and others that development would considerably benefit from increased collaboration between the government and NGOs (Sen 1999). India is not an exception. There are several thousand NGOs and many more NGOs have been born regularly in the recent past. NGOs cover a wide spectrum—from a small group of like-minded people forming a group, and small loosely knit local organisations to nationwide organisations and international networks. They may also include people's organisations. Some of the NGOs might have grown out of such people's organisations. Economic reform policies including specifically liberalisation would further add to the growth of NGOs, as the role of the State undergoes a significant change.

Government favours the emergence and growth of NGOs, as governments feel relieved that NGOs will take over their responsibility, substituting (and sometimes complementing) public efforts. Where governments do not perform their jobs well, NGOs have great opportunities. Otherwise, they supplement public efforts. It may not be necessarily true that all NGOs are favoured by the government. Government may favour or be hostile to some NGOs. They may be disliked if there is political discontent, or if they are engaged in religious activities, or in activities not favoured by government, or in profit-making activities (even while claiming to be non-profit organisations), or sometimes even duplicate public efforts. While the government may support NGOs, the latter's excessive reliance on the State cannot also be regarded as a plus point.

NGOs have not only grown in terms of numbers, but also in terms of the diversification of their activities. Earlier most NGOs used to be engaged in the direct delivery of certain services, and then there was a phase when they concentrated on development of capacities of the people to better meet their own needs. Later they got involved in 'sustainable systems of development' in a larger institutional and policy context. Of late, NGOs have begun to be involved in social and political advocacy, supporting people's movement, and in promoting a broader social vision. ⁴⁶ In fact, NGOs of all these types can be found operating in the education scene in India.

Today, there is a great degree of heterogeneity and variety among NGOs in India working for the improvement of education. There are many field-based organisations implementing education programmes. In contrast, there are some 'knowledge-based' organisations that provide support to grassroots organisations (Wazir 2000). Many NGOs are found working in the area of rural development in general that include often literacy and primary education including non-formal education and adult education. Some do focus exclusively on primary education. While some organisations focus on primary education directly, some others aim at promoting education indirectly by focusing on elimination of child labour, as child labour displaces schooling (Ravillion and Wodon 2000). While many confine their work to rural areas, some are also operating in urban areas, particularly urban slums.

Another important feature of NGOs in India is: quite a few, if not many, of them depend upon State or external support for finances. The number of NGOs that rely on funds from international sources has been rapidly increasing of late, and poses difficult and different kind of

questions. In general, NGOs are non-profit institutions. But the ethos is not common. Some may be really commercial; indeed, they may even be commercial companies in disguise. Several NGOs in India have set themselves up as consultancies working for a fee with the voluntary sector (UNDP 1993, p. 88).

According to the latest available statistics, there are more than 772 NGOs or voluntary organisations working on various aspects of education in India.⁴⁷ These are the organisations that received grant-in-aid from the Ministry of Human Resource Development, Government of India in 1997–98. A large number of them, more than 550, work in the area of non-formal education, and 61 in the area of adult education. The others operate in various other areas of education. There may be several other NGOs or voluntary organisations working, but not receiving any aid from the government.⁴⁸ On the whole, there is a large number, and a wide variety of NGOs operating in India. It is just impossible even to list all the NGOs working in India in this area. It is also difficult to judge how effective they have been. There has been very little systematic analysis of the impact of the NGOs by the NGOs themselves or by others, except for some case studies. Based upon the limited documentation available, we may briefly note here about a few major NGOs, some of which have made remarkable progress.⁴⁹

The M. Venkatarangayya Foundation (Hyderabad) focuses on elimination of child labour and putting the children back in schools. The Foundation feels that all children must attend full-time formal schools. Every child out of school is considered a child labour, according to the charter of the Foundation. Further, it is assumed that all child work is hazardous and harms the overall growth of the children. The Foundation works in about 400 villages in rural Rangareddy district in Andhra Pradesh and is said to have pulled out 50,000 children from work and are put into schools in the last couple of years. Campaigns are held against child labour and on the need for sending the children to schools; bridge courses are offered to children for the children aged group 11-14 for 18 months and they are prepared for formal schooling. By helping in a small way the parents of younger children 5-8, the Foundation feels that these children could be easily brought into the schools. Viewing local youth as a valuable resource, they are relied upon to bring the children to schools, to run camps and offer bridge courses.

An important strength of the M.V. Foundation is its strong belief that there is no alternative to government formal schools for universalisation

of education. The overall impact of the work of the Foundation was found to be very important on schooling, economic structure of the village economy and on social habits: there has been improvement in the schooling facilities; villages began to compete with each other to achieve maximum enrolment and retention of the children. In as many as 100 villages 99% of the children were in schools and in another 400 villages 95% of the children were in schools. In terms of economic structure, wages for adults have improved with the withdrawal of children from labour market; there has been a shift in cropping pattern so that agriculture could be managed without child labour; and adults became more organised in their work. An important development has been an increase in the age of marriage of girls (and also of boys) and improvement in their nutritional levels.

Kishore Bharati, a voluntary organisation in Madhya Pradesh started in 1972 was engaged in education and rural development. Its interventions in school system developed into the famous Hoshangabad Science Teaching Programme. Kishore Bharati also launched a Total Education programme for school dropouts and left-outs. The Total Education programme, however, ended in 1977, having started in 1975. The Hoshangabad Science teaching programme was later entrusted to Ekalavya.

Ekalavya, an NGO involved in primary education for more than two decades aimed at improving the classroom processes. Grown out of science teaching programme in Hoshangabad in Madhya Pradesh, Ekalavya developed a package of teaching learning material for primary school children, which are contextualised reflecting the situation in rural areas where the children are located. The aim is to create a situation in which children can be more active, intellectually stimulated and creative. Ekalavya now covers 75,000 children in 500 government middle schools through its science teaching programme and 15,000 children in 150 primary schools through primary education programme. In collaboration with DPEP, it is likely to spread across 75,000 primary schools in the state. Ekalavya also involves subsidiary activities outside the school system in order toc5ate a suitable social and intellectual environment in which innovations can flourish.

The SWRC, Tilonia (Rajasthan) represents another innovative educational programme meant for street children and working children. The Tilonia programme started in 1975, attempts to reach the vulnerable children through night schools. Children are encouraged to stage street

plays on various issues and thus the programme ensures community participation. This may be one of the experiments, in which village education committees were constituted to look after the routine work of the schools. Teachers are recruited from local community. The experiment now extends beyond the state; in fact, it has organisations in as many as eight states. It receives support from the government and also in recent years from external sources.

The Bodh Shiksha Samiti is another NGO that works for 'appropriate' education for urban deprived children. The programme is in operation in Jaipur and covers about 3000 children in 17 schools. Bodh works for an 'integrated school' environment where the child, the teacher, and the community participate in building creative relationships. The aim of the Bodh is foster cognitive abilities, democratic attitudes, human sensitivity and outlook.

There are also some NGOs that focus on pre-primary education, but view it as an essential pre-requisite for universalisation of primary and elementary education. Pratham is one such NGO working in Mumbai with financial support from ICICI. Pratham started with opening up of 100 Balwadis, later expanded to 450, in the slum communities in Mumbai and plans to provide access to balwadis to all pre-school children in all the 23 wards of Mumbai Municipal Corporation by the end of 1999. The balwadis are run by women, and girl children are given a priority. One important aspect of the Pratham is the involvement of corporate sector not as a donor, but as a partner in the development of education.

Another important NGO working in India is ACTIONAID. It is an NGO with international support, involved in a diverse kind of activities. In addition to its direct intervention in school improvement, it also helps other NGOs in their work. Its main objective is to facilitate the empowerment of the poor in the process of social development. Working since 1971, it supports a wide range of approaches to education and is involved both at micro and macro level in education development—literacy, adult education, pre-school and elementary education. Apart from funding, and also running 'supplementary schools', ⁵⁰ it has been extending training and other technical support to local NGOs in the field of education. More than 80 NGOs are long-term partners of ACTIONAID and there are more than 150 NGOs with whom short-term relations are built up. For example, ACTIONAID lent support to the establishment of satellite schools by the Rishi Valley Foundation.

It supports a project by Urmul Trust that runs marushalas (desert schools) in the deserts of Bikaner district of Rajasthan. Children attend Marushalas and also are able to contribute as family labour. The teaching—learning plans in Marushalas are prepared and modified by the children and teachers together.

The role of NGOs in advocacy and thereby in exerting pressures for social action is also important. In fact, advocacy may clearly be the NGOs' major strength. For example, ACTIONAID has initiated a citizen's campaign for improvement in primary education (e.g., ACTIONAID 1997). ACTIONAID also took initiative in forming Citizen's Initiative for Elementary Education at national level and corresponding chapters at state level, with the help of a large number of NGOs in various states. While this is at a macro level, many NGOs do take such initiatives at regional and micro levels. To cite a few, Bal Adhikar Manch in Rajasthan has been able to get 275 villages to resolve that education should be made available to all the children in their area; the M.V. Foundation has been able to mobilise around 40 organisations in the coastal belt of Andhra on right to education; Pratham in Maharashtra has initiated activities towards mainstream children in formal schools in slums and villages of the state; the West Bengal Education network, a group of 30 organisations, has been actively pursuing the cause of education in West Bengal; Gram Sabha resolutions in Orissa have been passed for universalising education for children with the efforts of the Forum Against Child Exploitation; Jeevika in Karnataka has initiated a campaign in 16 taluks of the Bangalore urban district to ensure every child below 14 years is in school; and so on.⁵¹ Thus NGOs have certainly increased their outreach in recent years, in term of providing financial and other material help to the poor, in term of number of people reached, area covered, and in creating awareness and advocacy. But mostly the NGOs concentrated on non-formal education, and as OXFAM (1999, p. 205) noted, an important lesson that emerges from a broad array of NGO experiences is that "non-formal education does not, except in rare cases, offer a genuine alternative to state action."

On the whole, the role of NGOs in education is important, but nevertheless, it is somewhat limited. First, the NGO community in India is diverse and widely spread. They are engaged in a variety of educational activities, including action and action research. They impart pre-school education, formal primary education, non-formal education, adult literacy, post-literacy etc. Their target groups are also varied: children, girls,

women, adults, socio-economically deprived, street children, tribal, handicapped children etc. They also focus their work in different geographical areas—rural areas, urban slums, tribal areas, and hilly regions. A majority of the NGOs depend to a great extent on charity and public (national and international) contributions; but there are also some, which collect membership fees, generate resources through the sale of material and other items (see Niwani 2000). Despite the large number of NGOs, they are not everywhere. For example, the PROBE (1999) noted that only in six out of 188 villages in six north Indian states, covered by the PROBE, NGOs were found working particularly in education. Further, there is a large number of NGOs, but many of them could be located only on paper. There are, however, quite a few important NGOs doing commendable work. Secondly, there is very little coordination among the NGOs themselves; at the same time, they do not compete with each other in any formal sense. Thirdly, some NGOs may like increased state control and give into the government for monetary and non-monetary gains. Fourthly and more importantly, many projects run by NGOs could be seen as experiments on a small scale, concentrated in small areas. It is important to realise that NGOs cannot operate on scales necessary to universalise education in the country as a whole. So it is important to acknowledge that NGOs actually play a relatively minor role in size in the development of education in the country, as a whole, but quite importantly, they could produce significant demonstration effects. They could also influence development policies and programmes of other NGOs, and even those of the government.⁵² In this sense, as the UNDP (1993, p. 92) noted, the indirect impact of the NGOs is often much wider than their direct contribution. Fifthly, there are problems of sustainability of programmes and projects of NGOs, as the funding of NGOs is subject to whims of private donors or the government.

Some of these experiments provide a few important insights into the problem. For example, it is clearly shown that people are increasingly aware of the importance of education and accordingly there exists a huge demand for education; and also that people are ready to make enormous sacrifices for good quality education. They demonstrate that there is considerable scope for involving the village communities in improving education of the poor. The main focus of many NGOs is development, and education is only one of the several components, sometimes it is an important component. When education is properly integrated with other development activities, probably the improvement is faster.

Further, when NGOs work in close collaboration with the Government, the impact could be significant (e.g., M.V. Foundation), though it can produce a different kind of problems, including the possibility that the government might abdicate its own responsibilities in favour of NGOs. The danger could be "crowding out" the government by NGOs.⁵³ Some people rightly fear that this could be disastrous because the reach of the NGOs by nature should remain limited; and should not aim at taking away the responsibility of the State onto themselves. But the need for collaboration and partnerships among the NGOs and also with the corporate sector and with the local bodies is widely felt (Cordeiro 2000).⁵⁴

Success of NGOs depends upon the individuals within NGOs and their interest and commitment. NGOs that are motivated by values to serve people would, of course, be able to contribute to development. The strength of the NGOs lies in their ability to break bureaucratic hurdles and in breaking vested local power relations. There may be danger that they may also play into the hands of the powerful at the local levels. Such a danger has to be avoided. Secondly, NGOs should realise that they could play a limited, but an important role—in creating good practices, agenda-setting, networking and assisting social movements. As Wazir (2000, p. 264) observed, a certain degree of modesty is required about what NGOs can realistically achieve.

3.6 Summary and Conclusions

While the relationship between education and poverty is a complex one with a multitude of interactions between several factors, it is also increasingly clear that lack of access to education and correspondingly low levels of participation in education is the single most important long-term factor responsible for the poverty of the masses. Education can be a life-empowering experience for all and what the poor need most is empowerment. Education empowers the poor by attacking ignorance, building skills, and by changing the outdated attitudes and values (UNESCO-PROAP 1998). In the human capital framework, by imparting skills, education enhances the productivity of the people in the labour marker and thereby enhances their earnings, taking the poor above the poverty line. In the wider human development framework (Sen 1997), it enhances the very quality of life—much more of the poor than the rich. Despite the awareness of the contribution of education to empowering the poor, there has been a criminal neglect of education

in India and in other South Asian countries for the last several decades. The educational challenge has now become quite formidable because of earlier neglect. This neglect has been conspicuous. This could be due to the conservative upper class notion that education is not important for the poor and/or due to the belief that it would indeed be against the interests of the rich and the powerful, as education empowers the poor against the rich (see Drèze and Sen 1995, p. 111).

This paper presented a brief account of the general macro level relationship between education and poverty in India and a detailed examination of several facets of educational deprivation. The long array of tables and figures expose the most disturbing feature of the Indian education system, i.e., utter lack of equity in access to education over different economic classes of people. The evidence on Indian states and also the evidence by household income (expenditure) groups confirm significant, strong and inverse correlation between levels of educational attainment and levels of poverty. Poverty blocks the educational opportunities of the poor children—opportunities to enrol in schools, opportunities to continue in schools and opportunities to acquire literacy and basic skills. Educational opportunities provided by the society to the poor are also inadequate—in terms of access to schools, and access to quality education in the form of schools with good infrastructure, teachers and attractive learning environment. Low levels of educational attainments in turn, block access of the poor to economic opportunities that would allow them to come out of the poverty trap. Though many of the findings here are not new, the fresh empirical evidence discussed here does provides new insights into some of the commonly and widely held perceptions on the extent and causes of educational deprivation of the poor. Some puzzling associations such as the rich also feeling the financial constraint in sending their children to schools or withdrawing of girls for domestic work by the rich parents etc., need more elaborate probing.

Participation in education is a consistently increasing function of household economic levels and the conformity of such a systematic pattern in case of all groups of population—rural and urban, male and female, rather with no exception at all—is rather appalling. On the whole, the results suggest that a child in the richest quintile is about 25% points more likely to be enrolled in school than a child from the poorest quintile. Further, once enrolled in schools, the former is also 27% points more likely to complete elementary education than the one in the poorest quintile. Thus poverty effects seem to be very important

in participation in schooling. Economic factors are important for enrolment of children in schools, and these factors are more important for the retention of those who are already enrolled.

Even though the paper largely concentrated on economic classes of population, the limited evidence reviewed by gender, rural-urban regions etc., makes it clear that inequalities in education by gender, income and social groups are rather high; and economic class, social and gender relationships reinforce each other in perpetuating education deprivation of the weaker sections, viz., the poor, low castes and women, and in increasing their vulnerability.

One of the most widely held beliefs regarding educational status of the poor in developing countries relates to lack of awareness of the value of education and motivation on the part of the parents and other members of households and correspondingly their lack of demand for education. Recent studies (e.g., PROBE 1999; also Bhatty 1998) have shown that there has been a tremendous increase in the awareness among the people on the value of education and that huge demand for education exists. According to the PROBE (1999), more than 80% of the parents in poor states in India feel that education of boys and also of girls is important. Yet, people, particularly parents are not interested in sending their children to schools. What could be the reason? As argued earlier, 'lack of interest' could be essentially due to a variety of factors, including poverty conditions of households, costs of schooling and the poor quality of schooling facilities available—with dilapidated buildings, absentee teachers, etc. A reasonably good quality school—with good quality infrastructure facilities, and trained and skilful teachers, may be able to attract most of the children into schools. As 'inability to cope with studies and/ or failure' is also found to be a very important reason for the children dropping out-more surprisingly for higher income groups as well-it is also necessary that reforms in the quantum and quality of curriculum, the methodology of instruction, and the other pedagogic aspects are paid serious attention (see, e.g., MHRD 1993). It is important to note that improvement in school environment benefits not only those who are already in schools, mitigating the 'push out' role of the schools, but also helps in attracting the non (and never) enrolled children into schools.

While child labour and wage work are not an important factor, financial factors are an important constraint for the households in sending the children to schools and in retaining them there. This requires public programmes that can ease the financial constraints of the poor. The

effect of economic factors can be mitigated by (a) providing truly free education—with no fees of any kind at all, free provision of textbooks, stationery, transport etc., (b) providing financial scholarships, noon meals, uniforms, etc., and (c) over all improvement of economic conditions of the households through increasing employment opportunities for the adults, facilities for health care, improvement in public distribution system etc. Since economic factors are found to be important for all economic groups—poor as well as the rich, (a) and (b) above may have to be provided to all, rather than following an approach of targeting them. In fact, a programme like noon meals could be made compulsory for all children, as it produces huge social benefits. The important and usually unnoticed factor of 'levelling' or 'equalising' involved in it, as all children, high caste and rich as well as scheduled caste and scheduled tribe and poor children sitting down together to eat the same meal, is a major positive externality.

The paper also briefly reviewed recent efforts of the government, international aid organisations and non-government organisations towards improvement of education in India. The discussion of these efforts is neither exhaustive nor thorough. The choice of issues has been highly selective. For example, recent efforts towards decentralisation, mobilisation of community support, and the efforts towards making elementary education a fundamental right with an amendment to the Constitution, or the programmes such as total literacy campaigns, are not discussed here. The intention here is to briefly note a few major initiatives with a focus on poverty. Some of these efforts are regarded as "incremental and partly successful" in the short run (Srivastava 2001, p. 236). Their sustained and long-term effects are yet to be observed. There has been an increase in the provision of schooling facilities. But provision of schooling facilities is only a provision of first level of educational opportunities. The second level refers to provision of educational opportunities to continue in the school, and the third level of opportunities are those that enable the children to acquire a minimum level of learning and skills. On the whole, the recent initiatives of government are found to be highly inadequate to improve (a) the access of the poor to education through opening of good formal schools everywhere, (b) the school environment through provision of needed infrastructure and other facilities, and (c) enrolment and retention of the children in schools through provision of economic and educational incentives to children. With respect to certain dimensions of the problem, such as provision of schooling facilities within habitation, provision of teachers, and trained teachers in particular, the situation might be worsening.

External assistance began to flow into education in India recently, and it is found to have eased the financial constraint to some extent, but it is not free from evils, some of which are inherently associated with international aid mechanism, including substitution of domestic resources with external resources. One of the major outcomes of the external assistance programme in India has been the spread of a belief that nothing is possible in Indian education without foreign aid. This belief has spread in no time horizontally and vertically across all levels of administration and even among others in and outside the government. This results in a high degree of dependency on aid. Apart from other problems, this causes a sense of complacency, and weakens the national resolve to give priority to this important part of government's sacred responsibility.

The role of the non-government organisations seems to be important in this context. Though limited in coverage, NGOs could produce significant demonstration effects, influence public action and policies of the government and also of other NGOs. But given the size of the problem—say in terms of 90 million out of school children—the contribution of the NGOs is quite small, and cannot but be so. There is thus the distinct possibility that this may induce a tendency on the part of the government to shift the responsibilities to the NGOs. This is certainly not desirable.

The recent efforts of the government, the aid organisations and the NGOs clearly highlight the importance of decentralisation and the role of local communities in improving educational status of the poor. This is despite the fact that micro level studies and the experience of NGOs have shown that the local elite has no great interest in improving the educational status of the poor. In this context, the efforts of the government towards strengthening decentralised planning and administrative institutions such as Panchayat Raj institutions may be viewed with considerable hope towards the empowerment of the poor. It is, however, absolutely necessary to see that efforts towards decentralisation do not lead to abdication of responsibilities by the union and state governments. The recent efforts of the government on decentralisation focused not only decentralised methods to improve the efficiency in delivery of education, but also decentralised mechanisms of resource mobilisation—mobilisation of resources by the communities and local level bodies. Creation of School Education Fund, Village Education Fund, Panchayat Education Fund, etc., with a view to mobilise resources at local levels is a point in this direction. But this is against a cardinal maxim of public finance that while the delivery of services is best undertaken locally, at a decentralised level, the collection of revenues is best taken up centrally. The importance of the principle is higher in the case of education in particular.

Political commitment to education is important. It is unfortunate that political activism is completely lacking in favour of education. As Drèze and Sen (1997, p. 15) lamented, even 'left-wing' political parties are least interested in combating inequalities in education; they treat them as 'given' and not particularly worth battling against. All parties and the government should realise the importance of education in reducing poverty and human deprivation and in enhancing economic growth, and accord high priority to education. The magnitude of education deprivation of the masses reflect, as Rao (2000, p. 528) rightly stated, "mainly the neglect of the Constitutional directives regarding education and social justice and lack of long-term vision of human development on the part of the central and state governments." For example, the Government of India has repeatedly promised to allocate 6% of GNP to education, but still the current allocation is below 4%. While this in itself may not ensure education for all, this may have to be viewed as an essential step, as the education system is found to be severely starved of financial resources. As Minhas (1992, p. 90) observed, the inadequacy of public expenditures in relation to the numbers of 6-14 year olds in India is "a matter of crying shame for the nation." It is imperative that adequate allocation of resources is are made and that all schools are equipped with good infrastructure and human resource facilities so that reasonably good quality of education is imparted to all. Second, the provision of instructional material and other incentives such as textbooks, uniforms, noon meals etc., may have to be made on a universal basis rather than attempting at targeting them. Universal provision of facilities promotes equity on the one hand, and the participation of the non-poor in the same would ensure quality of this material, as well as creating a feeling of equality among all children, rich and poor. Third, instead of relying on semi-skilled/trained and less educated teachers and para teachers, it is important that teacher training facilities are strengthened. After all, one of the important quality-enhancing inputs relates to teacher training (World Bank 1997). Fourth, the role of the private schools and also NGOs, however important they are, should be viewed at best as peripheral, and the responsibility of the government should not be diluted.

Lastly, the poor need to be guaranteed of education. This may be ensured by making education a fundamental right in the Constitution of India, and making it compulsory—compulsory on the part of the parents to send their children to schools and on the part of the government to provide access to good quality schooling to all. The union and state governments have to assume full responsibility for organising, managing, providing and

financing free and compulsory elementary education of acceptable quality to all, including the provision of the necessary economic, education and financial incentives to the poor. The major role of the NGOs, the community and the local level bodies could be to help in bringing children back to school, and monitor the functioning of the school on the one hand, and to build social pressures on the government and the political leadership towards making the Constitutional amendment of free and compulsory elementary education. This, as Rao (2000, p. 540) rightly opines, is a desirable model of 'participatory growth and authentic human development.'

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Notes

- 1. See Prabhu and Kamdar (1998) for a discussion on the linkages between the two and their implications.
- 2. Unless otherwise mentioned, for brevity poverty hereafter refers specifically to income poverty.
- 3. It is possible that when there is a sudden change in technology, even educated people may lose their jobs and could sink into poverty. But this would be a short-term phenomenon.
- 4. The effects of education are found more pronounced in any analysis, if some time lag is allowed for education to influence poverty (see McMahon 1999; also Tilak 1989a).
- 5. These figure are from Haq and Haq (1998) and the Mahabub ul Haq Human Development Centre (2000).
- The reforms were very partially implemented in Uttar Pradesh after independence, abolishing only talukdars—big landlords. Kerala was successful in implementing them first in 1958–59, which were intensified later; and West Bengal

- could implement the reforms only in the late 1970s. Tripura was serious about it. But no other state has done anything concrete about land reforms.
- 7. See Tendulkar et al. (1993) for time series details on poverty in India.
- 8. Of the seven countries in the region, data on poverty are available only on five countries. Bhutan and Maldives on which data are not available, are very small countries, together comprising of 1.8 million population.
- 9. The estimated coefficients of correlation are as given below:

Coefficients of correlation (r) between poverty and	
Adult literacy	-0.7949
Net enrolment ratio in primary education	-0.0701
Gross enrolment ratio in secondary education	-0.6404
Public expenditure on education as % of GNP	-0.4074

- That secondary education has a higher effect than primary education was found to be true in larger studies as well (McMahon 1999; also Tilak 1986).
- 11. See Bhatty (1998) for a survey of some of these studies.
- 12. The principal focus of the NFHS was health and family welfare of the population.
- 13. Household expenditure is taken as a close proxy for household income. Ideally the economic levels of households could be measured in terms of ownership of physical assets. An 'asset index' can be expected to provide more meaningful results, though it is found to be yielding similar results in terms of distribution by quintiles (see, e.g., Filmer and Pritchett 1999a).
- 14. The published Report (no. 439) of NSSO (1998) does not provide details on several other aspects, that the earlier Reports (*Sarvekshana*) has provided on the 42nd Round. Tables cross classified by, say e.g., state-wise attendance rates by levels of education and by expenditure quintiles, are not presented.
- 15. More recent data are now available, which shows that poverty has increased in India to 43% (Gupta 1999); and that poverty has declined to 26% in 1999–2000. These data are not used here.
- 16. Data are given in Table 3.28 in the Appendix. In case of education, an index of education (Tilak 1999b) that is based on literacy (1991) and mean years of schooling (1992–93) has been used (see Table 3.29 in the Appendix). Data on poverty ratio (1993–94), i.e., proportion of population living below poverty line, are taken from the Planning Commission (1999).
- 17. Mean years of schooling of population is estimated, by assigning different weights to different levels of education (higher weights to higher levels of education). Mean years of schooling of population is regarded as a more valuable summary statistic of stock of human capital in a society and is being extensively used (e.g., UNDP 1992). This is estimated as a weighted sum of the population with different levels of education. Algebraically,

$$SCH_i = (\sum_{j} POP_{ij} * YRS_{ij})/100$$

where SCH_i refers to mean years of schooling of the population of *i*-th quintile, POP_{ij} refers to proportion of population with *j*-th level of education in the *i*-th quintile, and YRS_{ij} to duration (years) of *j*-th level of education in the *i*-th quintile. See Psacharopoulos and Arriagada (1986) and Tilak (1999b) for more details.

- 18. Household income levels in this table and other tables are measured in terms of household expenditure quintiles, as defined by the NSSO (1998).
- 19. These age-specific attendance rates refer to the number of children of the relevant age group currently attending (any) education institution, as a proportion of the same age group (NSSO 1998, p. 7). This can be considered superior to *gross* and *net* attendance rates.
- 20. A series of studies conducted under the Research Project on Strategies and Financing of Human Development sponsored by the UNDP and the Ministry of Finance, Government of India (see Vaidyanathan and Nair 2001), have highlighted intra-state—between districts, taluks, villages and households—variations in literacy and education development.
- 21. While the case of BiMaRU states is typical—high poverty and low education levels, Kerala is an exception to this. It has a low level of state income (but of course low levels of poverty) and a high level of education development. The high level of education development is attributed to its long tradition of high investments in education and 'political activism' in the direction of educational expansion for the lower classes/castes, which in turn reduced poverty to a significant extent (Drèze and Sen 1997, p. 16). See also Ramachandran (1997), Kannan (1999).
- 22. To know the maximum gap, we considered in Table 3.6 the attendance rates among the urban male and rural female children, as they represent the two extreme groups, the least and the most deprived.
- 23. NCAER survey concentrates on household incomes, while NSSO surveys focus on household expenditures. Generally, household income estimates are regarded unreliable, compared to estimates on expenditures. Yet the NCAER survey provides some meaningful results.
- See Prabhu and Kamdar (2001) for similar comparisons between Maharashtra and Kerala.
- 25. The exception is only the top quintile in urban areas, where females are slightly at a better position.
- 26. The age group covered in the NSSO (1998) refers to 5–24 only. It would be more appropriate to disaggregate it into different age groups, viz., 6–11, 11–14, 14–17 and 17–24 that refer to different levels of education. But most of the information is not available by disaggregated age groups.

- 27. NSSO does not make clear distinction between attendance and enrolment, even though in the 52nd round, some attempt was made to distinguish between the two terms. 'Never enrolment' is a different but a clear category referring to those who have never enrolled in any school.
- 28. Since children are not interviewed, the citing of 'lack of interest on the part of the children' as a reason for the non-enrolment in or dropping out of schools, indicates a tendency on the part of the parents to shift the responsibility from their shoulders to children's.
- 29. Earlier survey (NSSO 1986–87; see Tilak 2000b) also found that 'lack of interest' was the most important factor. But it was not disaggregated into lack of interest among parents and among children.
- 30. Because of the pronounced effects of gender and rural-urban differences on enrolment (e.g., Majumdar 1999; Filmer and Pritchett 1999a), as a category of special interest, factors responsible for non-enrolment of rural girls are also listed separately in the same table.
- 31. Many of these factors are independently listed in the questionnaire used for the survey (NSSO 1998). But it does not mean that the lack of interest could be treated as an independent factor.
- 32. It may be noted that financial constraints are listed in the NSSO (1998) separately from other economic factors including opportunity costs.
- 33. While no details are available on 'other economic activities', they may refer to non-wage/salary work.
- 34. Incentives such as midday meals in Tamil Nadu, and the more recent food for education programme in Bangladesh are found to be quite effective.
- 35. The corresponding proportions of fee-paying children are higher in secondary and higher education levels.
- 36. See Table 3.30 in the Appendix for details on various types of fees charged in public primary schools in various states.
- 37. See also Minhas (1992) and Tilak (1996b) for more details based on an earlier survey of NSSO (1986–87) (NSSO 1991).
- 38. However, as the Working Group on Elementary Education (Department of Education 1989) rightly felt, it may not be proper to treat items like textbooks, stationery and learning material as incentives, as they are essential prerequisites for learning. See also MHRD (1997, 1999a). Keeping in view the spirit of "free" education, it is necessary that these requisites be provided free to all children going to schools.
- 39. For example, in West Bengal, in one or two districts existing school buildings have been used for a second shift of teaching in the evening and this practice was reported to be successful in attracting many pupils, who are otherwise busy during the day.
- 40. See Tilak (1999c) for more details on the 'progress' made between 1986 and 1993. See also Tilak (1996a).

- 41. See also Rahul (1999) and Khera (1999) for a critique of EGS in Madhya Pradesh; and Gopalakrishnan and Sharma (1999) and also Vyasulu (1999) for a rejoinder. See EGS (2000) for a compendium of articles on the scheme.
- 42. A similar scheme is being planned in Madhya Pradesh to open adult literacy centres: the illiterates are supposed to come together to form a little literacy council, and select a local teacher for themselves... (Kumar 2000).
- 43. The *Fifth All India Educational Survey* (NCERT 1992) does not report any details on such a category of teachers.
- 44. See Varghese (1998) for an elaborate description on some of these projects.
- 45. See Tilak (1999d) for a critique of the impact of these projects.
- 46. See Korten (1987) for such a classification of NGOs into four generations of NGOs. See also Atack (1999).
- 47. Annual Report 1998–99, Department of Education, Ministry of Human Resource Development, Government of India, New Delhi, 1999.
- 48. Additionally, there is a list of 300 organisations in the *Annul Report* from whom audited accounts are awaited. Some names in this list do not necessarily figure in the list of organisations that received the aid in 1997–98.
- 49. The descriptions of NGOs here are drawn from several sources, such as Saxena (1998), Mehendale (1998), PROBE (1999), UNICEF (1999), UNDP (1993), OXFAM (1998) and publications of some NGOs including specifically the ACTIONAID. The discussions with several officials of the ACTIONAID, Bangalore are also gratefully acknowledged in this context, of course along with usual disclaimers.
- 50. Looking at some such schools, sometimes NGOs are seen as viable low-cost alternatives to government schools. But that may not be right, given the relatively small size of their operation.
- 51. Communicator, no.1, vol. 1 (August 1999) (National Alliance for Fundamental Right to Education).
- 52. For instance, the Lok Sampark Abhiyan, which was originally conceived by Ekalavya in Madhya Pradesh, has become an integral part of the Education Guarantee Scheme of the Government of Madhya Pradesh.
- 53. For example, it is widely felt that in Bangladesh, the Bangladesh Rural Advancement Committee (BRAC) has taken over the responsibility of primary (non-formal) education to such an extent that the government's role seems to have been minimised.
- 54. For instance, many NGOs came together and formed the National Alliance for the Fundamental Right to Education to press for the 83rd amendment of the Constitution. Such alliances may prove to be quite effective.

APPENDIX

Table 3.28 Education and poverty in India

	Index of education, 1981				Poverty, 1993–94	
	Index	Rank	Index	Rank	Ratio	Rank
Punjab	27.43	17	40.41	12	11.77	1
Goa	45.01	4	52.09	4	12.92	2
Andhra Pradesh	24.43	18	30.52	20	22.19	3
Gujarat	35.78	7	42.40	9	24.21	4
Haryana	30.06	14	38.59	14	25.05	5
Kerala	55.76	1	61.57	1	25.43	6
Mizoram	50.51	2	56.46	2	25.66	7
Rajasthan	20.60	22	26.64	24	27.41	8
Himachal Pradesh	35.03	8	44.04	6	28.44	9
Karnataka	31.61	13	38.49	15	33.16	10
Manipur	34.05	11	41.68	11	33.76	11
Tamil Nadu	37.27	6	43.26	7	35.03	12
West Bengal	33.05	12	39.85	13	35.66	13
Maharashtra	38.21	5	44.58	5	36.86	14
Meghalaya	28.80	15	33.89	17	37.92	15
Nagaland	34.42	9	42.99	8	37.92	16
Tripura	34.25	10	41.76	10	39.01	17
Arunachal Pradesh	17.46	23	28.77	22	39.25	18
Uttar Pradesh	23.07	20	28.83	21	40.85	19
Assam			36.34	16	40.86	20
Madhya Pradesh	23.44	19	30.54	19	42.52	21
Orissa	28.00	16	33.83	18	48.56	22
Bihar All-India	21.97 29.91	21	26.68 36.06	23	54.96	23

Source Index of education: Tilak (1999b); poverty: Planning Commission (1999)

Table 3.29 Index of education, 1981 and 1991/1992-93

		1981		1991/1992-	-93		
		LIT	SCH	IOE	LIT	SCH	IOE
1	Kerala	81.6	4.07	55.76	89.81	5.115	61.57
2	Mizoram	74.3	2.95	50.51	82.27	4.859	56.46
3	Goa	65.7	3.54	45.01	75.51	5.279	52.09
4	Delhi	71.9	5.07	49.67	75.29	6.302	52.29
5	Maharashtra	55.8	2.92	38.21	64.87	4.027	44.58
6	Himachal Pradesh	51.2	2.69	35.03	63.86	4.427	44.04
7	Tamil Nadu	54.4	2.98	37.27	62.66	4.469	43.26
8	Nagaland	50.3	2.64	34.42	61.65	5.683	42.99
9	Gujarat	52.2	2.87	35.78	61.29	4.621	42.40
10	Tripura	50.1	2.47	34.25	60.44	4.405	41.76
11	Manipur	49.7	2.78	34.05	59.89	5.283	41.68
12	Punjab	39.7	2.84	27.43	58.51	4.209	40.41
13	West Bengal	48.7	1.81	33.05	57.70	4.153	39.85
14	Karnataka	46.2	2.37	31.61	56.04	3.411	38.49
15	Haryana	43.9	2.38	30.06	55.85	4.091	38.59
16	Assam				52.89	3.236	36.34
17	Meghalaya	42.1	2.25	28.80	49.10	3.483	33.89
18	Orissa	41.0	2.02	28.00	49.09	3.314	33.83
19	Madhya Pradesh	34.2	1.82	23.44	44.20	3.215	30.54
20	Andhra Pradesh	35.7	1.95	24.43	44.09	3.379	30.52
21	Uttar Pradesh	33.4	2.47	23.07	41.60	3.301	28.83
22	Arunachal Pradesh	25.6	1.27	17.46	41.59	3.153	28.77
23	Rajasthan	30.1	1.56	20.60	38.55	2.826	26.64
24	Bihar	32.1	1.77	21.97	38.48	3.081	26.68
	All-India	43.7	2.35	29.91	52.21	3.767	36.06

Note LIT: Literacy; SCH: Mean years of schooling; IOE: Index of education Source Tilak (1999b)

 Table 3.30 Fees in public primary schools in India, 1993 (Rs. per annum)

State	Type of fees	Fees	Total fee:
Arunachal Pradesh	Pupil fund	60	60
Assam	Development fee	10	10
Jammu & Kashmir	School improvement fund	10	35
	Red Cross fund	5	
	Poor fund	5	
	Games fund	12	
	News fund	3	
Karnataka	Spl sports fund	1]
Madhya Pradesh	Games fee	2	3
•	Scout and guide	1	
Manipur	Admission fee	4-10	10-22
1	Development fee	6–12	
Meghalaya	Tuition fee (classes III–V)	24	24
Mizoram	Pupil fund	1]
Punjab	Building fund	3	10
	Games fee	3	
	Others	4	
Rajasthan	?(Classes III–V)	20	20
Tripura	Examination fee	10	13–16
	Sports fee	1.50-3	
	Library fee	1.50-3	
Uttar Pradesh	Games fee	2	12
	Others	10	
A & N Islands	Games fees	20	20
	Aided schools		390–735
	Admission fees	100	-, -, -,
	Development fees	300-600	
	Sports and exam fee	35–50	
Chandigarh	Stationary fund	2	28
C.T.u.T.C.T.guill	Building fund	2	
	Red cross fund	6	
	Amalgamated fund	12	
	Child welfare	6	
	Model schools		504
	Admission fee	2	
	Building deprecation fund	20	
	Excursion	20	
	Magazine	20	
	Tuition fee (for boys)	120	
	Amalgamated fund	120	
	Red Cross	36	
	Child welfare	36	
	Health	30	

(continued)

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State	Type of fees	Fees	Total fees
	Stationery	96	
	Audio-visual	18	
Delhi	Scouts/guide	1.20	1.20

Source Unpublished results of the Sixth All-India Educational Survey (1998) New Delhi: NCERT (unpublished)

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CHAPTER 4

What Matters for Outcomes in Elementary Education in India?

If this [social] 'change on a grand scale' is to be achieved without violent revolution (and even for that it would be necessary), there is one instrument, and one instrument only, that can be used: EDUCATION.

Education Commission (1966, p. 8)

Universal elementary education has been the most important objective of educational policy in independent India. The Directive Principle of the Constitution of India that promised provision of universal elementary education was reinforced with the 86th Amendment of the Constitution in 2002 and the following Right to Free and Compulsory Education Act 2009. Universal elementary education is defined to include not only the enrolment of all children of the concerned age group (6–14) in primary and upper primary schools and ensuring of completion of minimum eight years of schooling by all the children, but also that every child comes out of the elementary education system with at least a minimum level of learning. However, the focus of the educational planners has been mainly on universal enrolment, and second, the retention of children in schools until they complete eight

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years of schooling. The third component has not received adequate attention. With respect to all these three dimensions, children in rural areas lag far behind their counterparts in urban areas.

While focusing on rural-urban inequalities in education, this paper presents an overview of the growth, achievements and problems in elementary education in India. The role of elementary education in development is briefly described in Sect. 4.1. A critical review of achievements and failures in case of the Constitutional goal is presented in Sect. 4.2. With the help of the most recent data collected from different sources, an attempt has been made to analyse questions such as: why do children not go to schools? Once they enrol in schools, why do they drop out soon, before completing a given cycle of education? When they continue in schools, why are their levels of learning not satisfactory and why are the overall education outcomes of the primary and upper primary schools not up to the mark? Sections 4.3 and 4.4 focus on these questions. The availability of teachers and infrastructure facilities is found to be crucial in explaining the low outcomes. Section 4.5 presents a brief account of the current status of elementary education in India, particularly in terms of the infrastructure facilities, and the quality and quantity of teachers available in schools. A few major policy implications are outlined in the concluding section. The paper does not claim to be presenting an exhaustive account of the problems of elementary education in India. The paper is highly selective and only a few important dimensions relating to the problem have been analysed in it. Second, while the intention is to examine rural-urban inequalities in elementary education, constrained by the availability of data, discussion on some of the aspects is general and not specific to rural or urban areas.

4 1 ELEMENTARY EDUCATION AND DEVELOPMENT

The Post-war Plan of Educational Development in India (CABE 1944) recommended the speedy introduction of a system of universal, compulsory and free education for all boys and girls between the ages 6 and 14 years. Accordingly, the Directive Principle of the Constitution of independent India (Article 45) stated in 1950:

the State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years. (emphasis added)

The *National Policy on Education 1968* has also emphatically stated that "strenuous efforts should be made for the early fulfilment of the Directive Principle under Article 45 of the Constitution, seeking to provide free and compulsory education for all children up to the age of 14"; the *National Policy on Education 1986* also reiterated the resolve that "by 1995, all children will be provided free and compulsory education up to 14 years of age" (Government of India 1986, p. 12).

By resolving and repeatedly reiterating the resolve to provide elementary education 'free' to all, the Constitution and the Government of India have implicitly recognised the 'public good' nature of elementary education. Elementary education is, in fact, recognised by many as a 'pure public good', as the benefits from elementary education are immense; they are not confined to the individuals who go to the school; and the rest of the society also benefit considerably. In fact, the neighbourhood or externality benefits of elementary education are believed to outweigh the direct private benefits. Besides, it is a 'social merit want'.

The Constitutional Directive received further boost with increasing research evidence which establishes that the contribution of primary education to development—in all socioeconomic development spheres—is very significant. Education, particularly primary education, is regarded as a very valuable unique investment, serving as a major effective instrument of various facets of development. First, it has its own intrinsic value, enhancing, as it does, the human capabilities to enjoy life, inculcating better habits and approaches to life, and thereby improving the quality of life. For the same reason, primary education is regarded in many countries, as in India, as a fundamental right, and literacy and enrolment ratios in school education have become an integral part of the measurement of quality of life, well-being of the people (Dasgupta 1993) and human development (UNDP 1991). Second, as a valuable component of human capital, it is an important instrument of economic development at the personal level, as it enhances the productivity of the labour force in the labour market, and thereby increases the latter's earnings. A labour force with primary education more than doubles its earnings as compared to illiterates, and compared to mere literacy, primary education enhances individual earnings by 20% (Tilak 1987, 1990, 1994; Psacharopoulos and Tilak 1992; Patrinos and Psacharopoulos 2010). The economic returns to primary education are estimated to be positive and high—higher than the alternative rates of return. The additional effects of primary education are found to be significant not only in terms of monetary returns but also for labour productivity. Education changes the habits of the people,

makes people ready for change and for adopting new methods of farm practices and production (Raza and Ramachandran 1990). As Jamison and Lau (1982) concluded, four years of primary education results in an increase of 7.4–8.7% in agricultural productivity. On the national economic front, primary education has been found to work miracles in terms of transforming nations from poor undeveloped societies to rapidly developing or industrialising tigers (World Bank 1993).

The contribution of primary education is not restricted merely to economic returns. Education is also found to contribute significantly towards the improvement of health (Cochrane et al. 1988; Muennig 2010). The effects are more significant in the case of education of women. Further, primary education contributes to a reduction in fertility rates, indirectly by increasing the rates of participation of women in the labour force and increasing the minimum age at marriage and directly through the adoption of better approaches to family planning and development (for example, see Nair 1981), thereby reducing the population growth. Primary education is also found to significantly improve the rates of child survival and life expectancy.

Effective elementary education also contributes to mitigating some of the ills of the society, such as child labour and the exploitation of children, and even phenomena like child marriage and correspondingly early teenage pregnancies. Elementary education is also rightly considered as a basic need fulfilment, which further helps in fulfilling other basic needs. The effective provision of elementary education might reduce the level of public expenditure required on other basic needs. It might even obviate the need for spending on certain other basic needs (Tilak 1989b; Panchamukhi et al. 1995; Minhas 1992). Lastly, it not only improves the efficiency of the system through increased labour productivity, and personal and social development, but is also found to be an effective instrument for reduction of poverty, promotion of upward social and occupational mobility, empowerment of people, redistribution of resources, and thereby of improvement of equity in the system, besides itself reducing educational inequalities. As Carnoy (1992, p. 35) has argued, education is a more effective instrument than several direct measures of income redistribution. In fact, elementary education is one of the few sectors wherein equity-efficiency trade-offs do not seem to exist. It is both an equitable, and at the same time, an efficient investment for development.

Thus, the significant effects of primary education are well recognised in terms of a reduction in poverty, improvement in income distribution,

health and the nutritional status of the population, its negative relationship with fertility and population growth, positive association with the adoption of family planning methods, and its positive relationship with the general social, political and economic development and the overall quality of life (see Lockheed et al. 1991; Tilak 1989a, 1994; Carnoy 1992; Psacharopoulos and Woodhall 1985; Drèze and Sen 1995; McMahon 2010).

Universal elementary education is, therefore, one of the greatest values enshrined in the Constitution of India and in several declarations of the UNESCO and other United Nations organisations. In short, universal access to education can reduce class and social status barriers to individual advancement; it can help equalise earned incomes by educating people and leading to the mobility of people from out of historically low paid jobs to historically higher paid positions; it can help people become better decision-makers in many aspects of their lives (for example, health and consumer expenditure), and thus help equalise individual maximisation of life chances; it can lead to greater participation in the political process, and thus to wider distribution of power; to greater tolerance for and consideration of one's fellow persons, and thus to more voluntary concern for their welfare; and finally it can lead to greater emphasis on the rights to and the availability of free choice for all individuals (Rawls 1971, p. 83). Primary education also helps in promoting socialisation among young children and in their effective functioning in the modern societies (Inkeles and Smith 1974). Education contributes significantly to the transformation of traditional societies into modern ones. It also helps in the formation of a national culture. It facilitates more effective participation of people in the socio-political and economic spheres of development of the societies. In short, education is a major instrument of social change.

Given all this, it should be applauded that Government of India, like its counterparts in several other developed and developing countries, has decided to provide free and compulsory elementary education. Elementary education is accorded a high priority in national development strategies in India and is regarded as an important component of the minimum needs programme in the five-year plans. This was expected to ensure favourable treatment in the allocation of resources.

Thus, much before the Jomtien Conference (1990) and the adoption of the *World Declaration on Education for All* at the same conference, the Government of India had resolved and repeated its resolve to universalise elementary education in the country as early as possible.

India is also a signatory to the World Declaration on Education for All (adopted at Jomtien in 1990, and then at Dakar in 2000); and is also a signatory to the Convention of the Rights of the Children. Education was also made an important component of the 'national human development initiative' in the Union Budget 1999–2000 (see Tilak 1999). Further, the 86th Amendment to the Constitution of India in 2002 has made elementary education a fundamental right. The Free and Compulsory Education Act was passed in 2009 (Government of India 2009) to operationalise the amendment. The 86th Amendment and the 2009 Act of Free and Compulsory Education were, of course, necessary, as the achievements in universalising elementary education have had not been satisfactory.

4.2 Spectacular Growth and Conspicuous Failures in Elementary Education

The saga of elementary education in India is one of spectacular quantitative achievements and conspicuous failures. During the post-Independence period, there has been rapid progress in terms of schools, number of students and number of teachers. There were more than one million primary and upper primary schools in the country in 2007–08, as compared to 220,000 at the inception of planning in the country. Elementary education is also offered in some secondary and senior secondary schools. Students in elementary education number about 180 million, and are taught by nearly four million teachers. Impressive improvements can also be noted in the gross enrolment ratio (GER), which was as high as 100% in elementary education (primary plus upper primary levels) in 2007–08, as per the official statistics. These numbers mark a significant stride over the weak base that India had inherited at the time of Independence from the colonial rulers (Fig. 4.1, Table 4.1).

Despite this reasonably impressive progress, the elementary education system is said to be facing a few daunting problems. One can identify at least four such persistent problems, viz., (a) non/never-enrolment of children in schools, (b) high rates of dropout, (c) a high degree of inequalities in participation in schooling, and (d) low levels of learning. Since 90% of the schools are located in rural areas, with an enrolment of nearly three-fourths of the total number of enrolments in elementary education, most of these problems are also essentially related to rural schools, though schools in urban areas are not completely devoid of such problems.

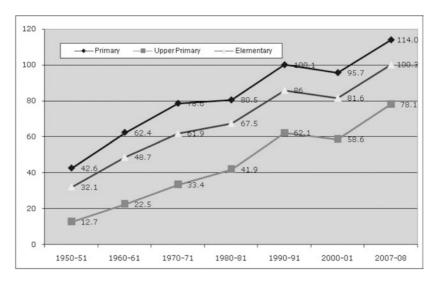


Fig. 4.1 Progress in gross enrolment ratio in elementary education in India (%) (*Source* Selected educational statistics, various years)

 Table 4.1
 Quantitative achievements in elementary education in India

		1950–51	2007-08
Schools ('000s)	Primary	210.0	787.0
,	Upper primary	14.0	325.0
Teachers (lakhs)	Primary	5.4	17.8
	Upper primary	0.9	23.1
Enrolment (mln)	Primary	19.2	135.5
,	Upper primary	3.1	57.2
Gross enrolment ratio (%)	Primary	42.6	114.0
()	Upper primary	12.7	78.1

Source Selected educational statistics

According to the official statistics, the gross enrolment ratio in primary education were above 100%, in upper primary education, about 78%, and in elementary education 97%, in 2007–08, though many believe that the net enrolment ratios would be much lower than these rates. As per the District Information on School Education reports (DISE), the net enrolment ratio was 85% in 2005–06, which increased to 96% in 2007–08.

Table 4.2 Age-specific attendance rates in education in India, 2007–08 (%)

Age-group	Rural	Urban	Rural + Urban
6-11	87	91	88
11-13	85	89	86
14-17	61	72	64
18-24	15	27	18

Source NSSO (2010)

Table 4.3 Enrolments in government and private schools (%), 2007–08

	Rural			Urban
	Government ^a	Private ^b	Government ^a	$Private^b$
Primary	85.7	14.3	57.0	43.0
Middle	87.9	12.1	67.0	33.0
Secy/hr secy	84.5	14.5	73.2	26.8
Total gen	86.2	13.8	66.3	33.7

^aIncludes government-aided private schools;

Source DISE (2010)

The National Sample Survey Organization (NSSO) provides estimates on age-specific attendance rates in schools, which can be regarded as much better than the gross and net enrolment ratios. The age-specific attendance rate refers to the number of children of a given age group attending schools (of any level) as a percentage ratio of the population of the same age group. According to the age-specific attendance rates, only 86–88% of the children in the age group of 6–13 years attend schools. While the rural–urban difference against rural areas is only four points in the age group of 6–11 years, the difference widens as one goes to the higher age groups, touching 12 points in the age group of 18–24 years. It can be easily noted that a whopping 12% of the children in the age group of 6–13 years are outside the school system. According to the IRMB estimates, 13.5 million children of those who should be going to schools remained outside the school system in 2006–07, of whom 84% were in rural areas and 14% in urban areas (Tables 4.2 and 4.3).

It is important to note that there has been rapid growth in private schools in recent years, as shown in Fig. 4.2, but a majority of children still go to government schools. Less than 15% of the children in rural areas go to private schools. The rest go to the government and

^bOnly private unaided schools

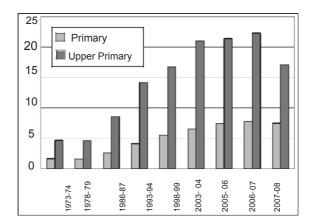


Fig. 4.2 Growth in private (unaided) schools in India (% of all schools) (Source Selected educational statistics)

Table 4.4 Enrolments in unrecognised schools (% of total), 2007–08

	Rural	Urban	All areas
Primary	17.7	9.7	14.2
Middle	10.7	5.0	8.0

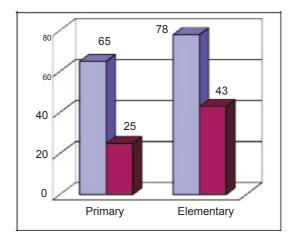
Source NSSO (2010)

government-aided local body and private schools. It is only in urban areas that children tend to go to private schools. It is also important to note that even in the urban areas, the percentage of children going to government schools increases by increasing levels of education.

Further, it may be noted that a sizeable number of children attend unrecognised schools in rural areas, either because of ignorance, or because of the absence of recognised schools nearby or due to other constraints in terms of the access to recognised schools (Table 4.4).²

The second most important problem refers to the high dropout rates or low completion rates. Special measures initiated in the recent years have resulted in a significant reduction in the dropout rates, yet they continue to be high. Out of every 100 children enrolled in Grade I, only 75 were found to be reaching grade V, and 57, grade VIII in 2007–08. The high enrolment ratios, when contrasted with the high dropout rates, lose all significance (Fig. 4.3).

Fig. 4.3 Dropout rates in elementary education in India (%) (*Source* Selected educational statistics)



The third important problem refers to the extent of inequalities in education. Although there has been a significant reduction in inequalities in education between different sections of the population during the last six decades of development planning, we can still note the persistence of a high degree of inequalities. Inequalities in education include inequalities between lower caste groups [Scheduled Castes/Tribes, (SCs/STs) and Other Backward Castes (OBCs)] and high caste groups (non-backward or forward castes), between backward minority communities and other religious communities, between males and females, between the rich and the poor, and regional inequalities—interstate inequalities and rural—urban inequalities. While there has been a remarkable improvement in gender parity and reduction in inequalities by caste groups, rural—urban inequalities are quite marked, and inequalities between the poorest and the richest strata of the society are most striking.

We find inequalities with respect to not only the flow variables—enrolments, enrolment rates, etc.—but also the stock variables. The age-specific attendance rates given in Table 4.2 highlight the extent of inequality between rural and urban areas. In the case of illiteracy rates also, marked rural—urban inequalities can be noted, as shown in Table 4.5.

There is a large 17-point difference in literacy between rural and urban areas, as against the rural population, and the difference is higher

Table 4.5 Literacy rate of population (age: 7 and above) (%)

	Male	Female	All
Rural	77.0	56.7	67.0
Urban	89.9	78.1	84.3
Rural + Urban	80.5	62.3	71.7

Table 4.6 Distribution of adult (15+) population by educational level, 2007–08 (%)

	Rural	Urban
Not literate	40.3	18.0
Below primary	9.6	6.6
Primary	16.0	13.2
Middle	16.2	17.4
Secondary	9.0	17.0
Higher secondary	4.7	11.1
Diploma	0.6	1.7
Higher	2.7	14.9
Total	100.0	100.0

Source NSSO (2010)

in the case of females. Further, it can be noted that a gap in educational levels between the rural and urban population increases by increasing levels of education. It has been seen that 16% of the population in rural areas has acquired primary education, in contrast to 13% in urban areas. The distribution shifts in favour of the urban population from the upper primary (middle) level of education onwards. While people with secondary/higher secondary education account for only 16.7% of the population in rural areas, the corresponding figure is 28% in urban areas. When it comes to higher education, the ratio in favour of the urban people is five times higher than their counterparts in the rural areas (Table 4.6).

Perhaps, the most important problem in elementary education refers to poor levels of learning and overall education outcomes. Although the pass percentage rates in the examinations in the terminal grades are very high—around 90% in both rural and urban areas at the primary as well as the upper primary levels, the actual levels of learning are generally believed to be very low.

According to Pratham (2008, 2010),³ which periodically conducts tests on a large sample of children in the schools on their actual learning

levels, the situation is not very satisfactory, though there seems to have been some improvement over the years. However, inter-temporal comparisons need to be made with caution, as both the sample size and the nature and content of the tests used vary.

The mean scores of children in primary schools were barely 50% in Mathematics and Environmental Studies in 2002–03, which did not improve much in 2006–07. The scores were slightly better in languages. More recent reports suggest that among the students in Grades III–V, hardly half the students can do a simple subtraction; less than 20% of the children can read a simple sentence in English. Interestingly, a large proportion of students in grades III–V perform well in currency-related tasks.

These national averages, given in Fig. 4.4 and Table 4.7, conceal wide variations between different states. For example, only about 40% of the children in Tamil Nadu and Gujarat can do a simple subtraction, while the corresponding figure is around 82% in Himachal Pradesh and Madhya Pradesh, as shown in Table 4.8. Surprisingly, educationally backward states like Bihar, Chhattisgarh and also Orissa fare much better than

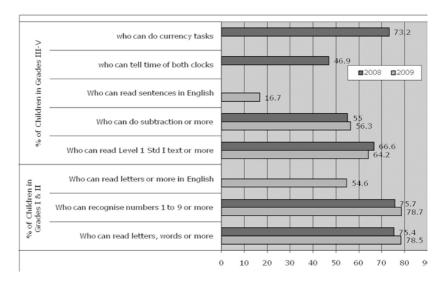


Fig. 4.4 Learning levels in primary schools in rural India (*Source* Pratham 2010)

Table 4.7	Achievement	levels in	primary	schools

	Maths	Language	EVS
2002-03	46.5	58.6	50.3
	(21.3)	(18.3)	(20.7)
2006–07	48.5	60.3	52.2
	(20.0)	(17.6)	(20.0)

Source Pratham (2008)

Table 4.8 Levels of learning in primary education in India, by states, 2009

	Reading	Subtraction	English
Andhra Pradesh	66.2	63.8	26.3
Assam	58.4	50.4	14.8
Bihar	62.1	63.7	18.2
Chhattisgarh	73.4	66.8	10.5
Gujarat	57.3	41.1	5.0
Haryana	70.2	67.9	32.1
Himachal Pradesh	82.4	81.8	43.4
Jammu & Kashmir	48.6	45.7	30.6
Jharkhand	57.5	51.3	10.6
Karnataka	64.0	46.0	10.3
Kerala	83.0	75.5	42.4
Madhya Pradesh	87.5	81.9	18.5
Maharashtra	86.8	73.7	18.5
Orissa	69.5	64.4	17.4
Punjab	71.9	70.0	24.4
Rajasthan	55.9	47.5	10.7
Tamil Nadu	53.0	39.7	14.9
Uttar Pradesh	48.6	35.7	8.9
Uttarakhand	73.8	62.2	23.2
West Bengal	64.2	56.3	16.7

Source Pratham (2010)

Tamil Nadu, Gujarat and Karnataka, which are generally regarded as educationally advanced.⁴

While learning levels constitute an important indicator of the performance of the school system, there are several other dimensions that are too important to ignore while one is examining the performance of schools. Based on the extensive data collected on each school under the DISE Project at the National University of Educational Planning and Administration (NUEPA), a few indexes have been developed at the state level. One such index is called the index of education outcomes. The outcome index, a composite index is constructed on the basis of the following indicators:

- Overall gross enrolment ratio
- Gross enrolment ratio among Scheduled Castes
- Gross enrolment ratio among Scheduled Tribes
- Gender parity index in enrolment
- Repetition rate
- Dropout rate
- Ratio of enrolment in Class V to enrolment in Class I
- Percentage of children who passed in the examination (out of all those who appeared in the examination)
- Percentage of children who passed in the examination (out of all those who appeared in examination) with marks > 60%.

It is clear that the outcome index captures certain important dimensions relating to the internal efficiency of the school system, though it is also not completely comprehensive. It captures certain quantitative aspects, as well as qualitative aspects such as the percentage of children's performance in the examinations, and performance in the same with high scores, etc. Although one may say that it reflects the level of learning, to some extent, it has also been widely noted that the outcome index does not sufficiently reflect the actual levels of learning of children in schools. The values of the index for primary and upper primary education are given in Table 4.9 for 2006-07 and 2007-08, the two latest years for which such estimates are available. One can note very wide variations in educational outcomes between the different states.

In many states, one also notices an improvement, sometimes a remarkable one, between 2006-07 and 2007-08, that is, within a year, even though the relative rank order of the states does not seem to have changed very much. States like Bihar, Jharkhand and Orissa continue to be in the bottom group, while Tamil Nadu, Kerala, Himachal Pradesh and Karnataka are in the high performing group of states.

Table 4.9 Composite index of education outcomes in elementary education in India, by states

	2006-07		2007–08	
	Primary	Upper primary	Primary	Upper primary
Andhra Pradesh	0.646	0.609	0.826	0.780
Assam	0.557	0.533	0.622	0.648
Bihar	0.388	0.228	0.530	0.485
Chhattisgarh	0.539	0.448	0.675	0.461
Gujarat	0.593	0.560	0.698	0.672
Haryana	0.385	0.335	0.692	0.605
Himachal Pradesh	0.683	0.684	0.777	0.648
Jammu & Kashmir	0.577	0.547	0.791	0.662
Jharkhand	0.460	0.316	0.551	0.578
Karnataka	0.662	0.638	0.880	0.819
Kerala	0.665	0.693	0.732	0.764
Madhya Pradesh	0.492	0.384	0.546	0.451
Maharashtra	0.629	0.659	0.767	0.720
Orissa	0.467	0.326	0.563	0.463
Punjab	0.453	0.308	0.721	0.498
Rajasthan	0.502	0.448	0.589	0.593
Tamil Nadu	0.735	0.763	0.859	0.833
Uttar Pradesh	0.528	0.464	0.700	0.690
Uttarakhand	0.513	0.673	0.711	0.634
West Bengal	0.527	0.295	0.666	0.469
Delhi	0.564	0.409	0.570	0.525

Source DISE (2008, 2009)

4.3 Why Do Children Not Go to Schools And/or Drop Out of Schools?

We may start with the examination of the first question: Why do children not go to schools? NSSO reports provide certain insights into this question. Earlier analyses of determinants of participation (or non-participation) in schooling have revealed that participation in schooling is influenced by three sets of factors: (a) household economic factors, (b) school environment, including quality of physical and human infrastructure and quality of instruction, and (c) social and cultural/traditional factors (Tilak 2002). Is there any pattern in the responses of the poor and the rich? The NSSO (1998, 2010) has identified a set of dozen factors, though some of them cannot be described as mutually independent.

Based on the 52nd and the 64th Rounds of the NSSO, the factors are grouped into three categories and the results based on the 52nd Round are given in Table 4.10. They are: lack of interest, direct school-related factors, and direct economic factors. The summary results for 2007–08 are given in Table 4.11.

Since data on factors in detail are not available for 2007-08, let us examine the available information for 1995-96. The most important reported reason for non- (more correctly never-) enrolment of children in schools is lack of interest on the part of the children⁵ and more importantly of their parents. Nearly 50% of the children were never enrolled in schools mainly because they or their parents have no interest in studies. This is very surprisingly true in the case of almost all income groups the poor and the rich, and also in the case of girls and boys, though there are some marginal variations. It would be useful to probe into the aspects relating to a lack of interest in education on the part of the children and/or parents. For example, the reason 'lack of interest in schooling', when probed further in other investigations (for example, Krishnaji 2001; PROBE 1999), the following responses were received from the parents: 'What is the use of schooling?' 'A child can earn some income if he does not go to school.' 'A child can do some "useful" work at home.' Other common responses are: 'The teacher does not come to school or does not teach.' 'No textbooks are available.' 'School costs are high and we can't afford it.' Thus lack of interest could be due to poverty among the poor, or absence of knowledge of potential benefits of education among the poor or the rich, or due to the absence of good facilities for schooling, or the absence of a tradition of going to school, or economic difficulties, or due to certain other factors. Many of these factors are independently listed in the questionnaire used for the survey (NSSO 1998). But it does not mean that the lack of interest could be treated as an independent factor. Such an argument assumes further credibility, as the attitude of the parents to education is otherwise found to be highly positive. For example, according to PROBE (1999, p. 14), 98% of the parents surveyed in the rural North Indian states felt that education was important for their boys, and 89% felt that it was important for their girls too. Even the illiterate parents and members of the backward castes were fund to value education highly. Parents were also found to be aware of the social, economic and cultural gains of their children's education. Thus, it would indeed be useful to examine in depth the 'lack of interest' factor. But information to decompose the 'lack of interest' factor is not

Table 4.10 Why are children 'never enrolled' in schools? Percentage of children (age group: 524) by reason for non-enrolment, 1995–96

	Reason for 'never	Household expend	liture i	quintil	es		
	enrolment'	Bottom (poorest)	2nd	3rd	4th	Top (richest)	All
		All children	:				
1	No tradition in family	3.9	3.5	4.0	4.3	3.7	3.9
2	Child not interested in studies	17.4	16.6	20.6	15.9	13.9	17.3
3	Parents not interested in studies	31.2	31.9	31.4	31.9	34.8	31.8
2 + 3	Lack of interest in studies	48.6	48.5	52.0	47.8	48.7	49.1
4	Education not considered useful	2.7	2.3	2.3	3.3	3.4	2.7
5	Schooling/higher education facilities not available conveniently	2.0	1.6	2.0	1.6	3.6	2.0
4+5	Direct school related factors	4.7	3.9	4.3	4.9	7.0	4.7
6	Has to work for wage/ salary	1.1	1.6	1.4	2.0	1.1	1.4
7	Has to participate in other economic activities	3.8	3.1	3.3	3.8	3.2	3.5
8	Has to look after younger siblings	1.7	1.3	1.0	1.2	0.2	1.3
9	Has to attend other domestic activities	2.7	2.5	2.6	2.4	3.0	2.6
10	Financial constraints	17.9	16.8	13.7	11.6	8.5	15.2
6-10	Direct economic factors	27.2	25.3	22.0	21.0	16.0	24.0
11	Other	15.5 Rural girls	18.9	17.5	22.1	24.7	18.4
1	No tradition in family	4.9	5.2	5.8	6.7	5.4	5.4
2	Child not interested in studies	15.5	13.9	18.7	14.2	11.0	15.1
3	Parents not interested in studies	34.3	35.8	35.2	34.6	43.0	35.6
2+3	Lack of interest in studies	49.8	49.7	53.9	48.8	54.0	50.7
4	Education not considered useful	3.3	2.6	2.1	3.6	2.8	2.9
5	Schooling/higher education facilities not available conveniently	2.5	1.9	2.2	1.5	4.2	2.3
4+5	Direct school related factors	5.8	4.5	4.3	5.1	7.0	5.2

(continued)

Table 4.10 (continued)

	Reason for 'never	Household expenditure quintiles						
	enrolment'	Bottom (poorest)	2nd	3rd	4th	Top (richest)	All	
6	Has to work for wage/ salary	0.5	1.3	1.0	0.9	1.1	0.9	
7	Has to participate in other economic activities	2.7	3.0	3.1	3.1	3.0	3.0	
8	Has to look after younger siblings	1.9	1.7	1.6	1.9	0.3	1.6	
9	Has to attend other domestic activities	4.4	3.6	3.9	3.5	4.4	4.0	
10	Financial constraints	16.5	15.0	11.8	11.2	6.8	13.6	
6-10	Direct economic factors	26.0	24.6	21.4	20.6	15.6	23.1	
11	Other	13.4	16.0	14.4	18.8	17.9	15.5	

Source NSSO (1998)

Table 4.11 Why children are never enrolled in schools? (2007–08)

	Rural		Urban		All
	Female	Male	Female	Male	
Economic reasons	35.5	45.9	31.5	46.3	40.7
Parents not interested	36.7	29.5	32.8	22.5	33.2
Education not considered necessary	23.2	20.3	21.0	17.2	21.8
School is far	2.2	1.6	1.1	0.9	1.8
Other reasons	28.1	25.7	28.3	25.4	26.8

Source NSSO (2010)

available from the NSSO (1998) survey. However, it may be plausible to argue that 'lack of interest' could be attributed to a substantial extent to: (a) the poor quality and quantity of physical and human infrastructure and (b) poor quality of instruction, including the alienness and irrelevance of the curriculum on the one side, and (c) economic and other social factors from the side of the families, on the other (Tilak 2002).

Subject to this important limitation, one might say, keeping aside this factor of lack of interest in studies for a moment, on the basis of Table 4.11, that financial constraints form the most important factor that keeps children away from schools. This is found to be true, rather surprisingly, not only for the poor, but also for the rich, though there is some difference in numbers between the rich and the poor, in the sense that, for the poor, financial constraints and other economic factors are more important than for the rich. About 18% of the people in the bottom quintile report never enrolment due to financial constraints, while the corresponding proportion is about half, that is, 9%, for the richest quintile.

Second, very often it is stated that children of the poor have higher opportunity costs of schooling and hence they are not enrolled in schools. But wage work or participation in 'other' economic activities has not been cited as a major reason for the non-enrolment or the dropping out of the children from school. However, participation in 'other' economic activities, and in domestic work, are cited as more important than participation in wage work, though the three factors, viz., wage work, domestic work and other economic activities, together get a score of 7-8% only. Further, the responses of the households here do not show any difference between the poor, the middle income and the rich households in the participation of their children in wage work, in other economic activities, and in other domestic activities (except looking after younger siblings). It thus appears as if there is no conclusive evidence on the role of opportunity costs of schooling of the children on their participation in education. It may be noted that these factors—opportunity costs—are treated by NSSO, as shown in Table 4.11, separately from the financial constraints, discussed in the above paragraph. All the economic factors can be listed as follows: (a) financial constraints, (b) opportunity costs: wage work, participation in 'other' economic activities, looking after younger siblings and other domestic activities. On the whole, economic factors, including financial constraints and opportunity costs together, constitute an important reason for the non-enrolment of the children from poor families in schooling. These factors together account for more than one-fourth of the responses in the case of the poor. After all, children, particularly older children in poor households, work and supplement family incomes directly or indirectly.

There are also children who were found to be attending schools and working at the same time. The workload (out of school) has serious effects on the studies of the children. Many rural boys and girls who do both, often miss school—some of them rather regularly.

They were found to be unable to do homework, and some were even unable to prepare for school tests/examinations. These children may eventually drop out of school or stagnate in the same grade for more than one year.

Thirdly, school-related factors—availability of schooling facilities, or perceptions about the value of schooling—no longer figure as important reasons for the never-enrolment of the children. Only 4–7% of the parents found it to be relevant. Further, there is a difference of 2 percentage points between the responses of the bottom and the rich quintiles on the role of school-related factors, with the rich feeling more that education is not useful, and that adequate schooling facilities are not available.

In the case of never enrolment of girls in rural areas, the differences in the relative roles of various factors vary widely between the rich and the poor. A larger number of girls belonging to the poor and middle-income groups are less interested in studies than the rich. On the other hand, it is the parents in the richer households who are less interested in their girls' schooling than the parents of the poor. Girl children of the rich and the poor participate equally in economic activities other than wage work. This may be necessitated more by social custom than by economic needs. The choice between schooling and economic activity may be real and tough for many households. Financial constraints are more important in the case of poorer households, which are unable to send their girls to schools than of course in case of the richest quintile.

The summary results of a recent round of NSS (64th Round) given in Table 4.11 show similar patterns. The factors are reclassified into different categories. Economic factors constitute the single most important factor for children not attending schools.

The two other significant reasons reported for never-enrolment are lack of interest of the parents and/or children in education and 'other' reasons. Lack of interest of the parents may be due to several factors. But it is important to note that even in rural areas and among the illiterate parents of the backward communities, many have recognised the importance of education and a huge demand does exist for education (PROBE 1999). We also note significant differences between rural and urban responses citing economic reasons, or even with respect to lack of interest and other factors.

The fact that economic factors constitute the single most important constraint for sending the children to schools has to be noted along with the point that households have to spend considerable amounts of money

	Rural			Urban			All areas		
	Male	Female	All	Male	Female	All	Male	Female	All
Primary	897	741	826	3764	3458	3626	1501	1308	1413
Middle	1434	1289	1370	4587	3893	4264	2193	1959	2088
Secondary/ higher secondary	3166	2803	3019	7615	6721	7212	4503	4140	4351
Above higher secondary	6582	5924	6327	8404	8532	8466	7386	7324	7360

Table 4.12 Household expenditure on primary education, 2007–08 (Rs.)

Source NSSO (2010)

 Table 4.13
 Recipients of public subsidies in elementary education

	Rural	Urban	All areas
% children in government schools receiving subsidies			
Scholarships	20.7	10.2	19.0
Free/subsidised books	71.7	53.4	68.8
Free/subsidised stationery	9.1	9.2	9.1
Mid-day meal (from government)	60.9	40.2	57.6

Source NSSO (2010)

on acquiring education, even elementary education that is provided free by the state, as shown in Table 4.12.

The need to spend much on education necessarily constrains the poor households in sending their children to schools, though government offers free education and a few additional incentives in the form of scholarships, free or subsidised textbooks and stationery, uniforms, noon meals, etc. Some of the incentives like the noon-meals, though expected to be universal in coverage, are not received by all the children. Many other subsidies are also received by only a fraction of student community (Table 4.13). However, an important feature is that a higher proportion of children in rural areas receive these incentives than those in urban areas, as shown in Table 4.13.

The second related question is: Once they enrol in schools, why do children drop out of schools before completing elementary education,

Fig. 4.5 Why do children not attend schools? 1995–96 (Source Based on NSSO 1998)

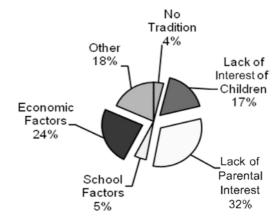


Table 4.14 Reasons for children dropping out of schools, 2007–08 (%)

	Rural		Urban		All
	Female	Male	Female	Male	
Economic reasons	32.2	48.1	33.5	53.3	41.8
Child not interested in studies	17.0	24.0	15.0	20.3	19.9
Parents not interested in studies	15.5	4.8	12.1	2.2	8.9
Unable to cope up with studies/failure	10.1	12.3	7.7	8.5	10.3
Other reasons	15.7	4.3	12.9	3.3	9.0

Source Based on NSSO (2010)

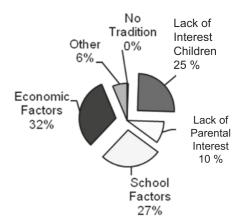
and some even before completing the primary cycle of education? The factors identified for the phenomenon of children dropping out are the same as those responsible for never/non-enrolment of children in schools, though the relative emphasis of various factors varies, as shown in Fig. 4.5 for 2005–06, which is based on the same NSSO survey. The results based on the 2007–08 figures are given in Table 4.14. Lack of interest is the most important reason in the case of the poor, whereas in the case of the rich, it is only the second most important factor. Lack of interest on the part of the children is more important than lack of interest of the parents for the children dropping out of schools, while it is the lack of interest of parents that is more responsible for the non-enrolment

of children. This is where the school environment matters. It has been found that 20% of the children in the bottom quintile and 32% in the top quintile drop out due to school-related factors such as an unattractive school environment. Hence, this phenomenon could be regarded not as one of dropout but as 'push-out.' Economic factors form the second most important set of factors for the poor for not being able to continue their studies.

Among the poorest quintile, 33% of the children drop out due to economic reasons, while the corresponding proportion, at 28%, is also high for the rich. Surprisingly, the inability to cope with studies in schools is a more important factor for the rich than for the poor.

The pattern is more or less the same in the case of reasons for the dropout of girls in rural areas (Fig. 4.6). One point is particularly clear: in case of girls, a larger number of parents report lack of interest in studies on the part of the parents and also of the girl children as being responsible for the dropout (or withdrawal) of girls from schools than in the case of boys (rather all boys and girls combined). Girls are also withdrawn from schools in larger numbers as they have to attend to domestic activities including looking after younger siblings, than boys; and boys (or all on average) are withdrawn more for wage work and for participation in other economic activities. What is interesting to note is that there is not much difference between the five quintile groups in their response relating to their children's participation in wage and other economic activities. In sum, it appears that in the literature and popular

Fig. 4.6 Why do children drop out? 1995–96 (Source Based on NSSO 1998)



perceptions (for example, Weiner 1991), exaggerated emphasis has been placed on opportunity costs of schooling (or simply child labour) as a major factor responsible for the non- or never-enrolment of poor children in schools.

Cultural prejudices and traditional factors—having a tradition to send children to schools—constitute yet another factor, though small in number. On the whole, 4% of the never-enrolment of children, and above 5% among girls, is accounted for by this factor. Interestingly, there is not much difference between the rich and the poor where this factor is concerned. However, once children are put in the schools, they do not drop out due to this factor of having or not having a tradition to go to school. That is, this factor becomes redundant once the children are enrolled in schools. There is no going back.

NSSO (2010) lists these factors by using a different classification. Yet, they also reveal that economic factors constitute the most important factors responsible for both boys and girls in rural as well as urban areas dropping out of schools. Lack of interest among parents and children accounts for about half the total figure of dropouts. The differences between rural and urban areas are quite significant with respect to the difficulties in coping up with studies—both in case of boys and girls, and also with respect to lack of interest.

4.4 What Matters for Educational Outcomes? Why Do Some States Perform Better Than Others?

In addition to the outcome index, and an overall education development index based on DISE data, three indexes relating to the specific dimensions of elementary education are also constructed, which reflect access to primary and upper primary education, infrastructure in these schools, the quality and quantum of teachers available in these schools, and the outcomes: the index on access to education, index of infrastructure and an index on quality and quantity of teachers available in schools.

The access index is based on:

- Percentage of habitations not served by a schooling facility;
- Number of schools per 1000 child population; and
- Ratio of primary to upper primary schooling facility.

The infrastructure index is based on:

- Average student–classroom ratio;
- Schools with student classroom ratio \geq 60;
- Percentage of schools with common toilet facilities; and
- Percentage of schools with girls' toilet facilities.

The teacher index is based on:

- Percentage of female teachers:
- Pupil-teacher ratio;
- Percentage of schools with pupil–teacher ratio \geq 60;
- Percentage of single teacher schools where the number of students > 15;
- Percentage of schools with ≤ 3 teachers; and
- Percentage of teachers without professional qualifications.

As it is clear, the indicators chosen while constructing the indexes are not comprehensive enough to capture various dimensions. This is essentially due to data constraints. Nevertheless, it is hoped that the indexes would reflect some major aspects relating to those indicators. Table 4.24 in the Appendix gives these indices, by states, for 2007–08. These indexes are used to explore whether the performance of the children or the educational outcomes are related to any of these factors.

Let us see how the learning levels are related to these indices. Simple coefficients of correlation between levels of learning in 2009 (Pratham 2010) and the three indices referring to 2007–08 are given in Table 4.15.

While the access index is negatively related to all the three types of learning, the infrastructure index and teacher index are positively related,

 Table 4.15
 Coefficients of correlation of levels of learning

Levels of learning in	Access index	Infrastructure index	Teacher index
Reading	-0.471	0.351	0.250
Subtraction	-0.373	0.204	0.115
English reading	-0.482	0.326	0.454

Source Estimated by the author

though some of the coefficients, for example, those between the teachers' index or infrastructure index and 'subtraction' are small. Going by the coefficients of correlation, one may observe that the availability of quality teachers seems to be very important for improving reading in English, but infrastructure facilities are relatively more important when it comes to improvement in reading levels, in general, and reading levels in English of children in primary classes.

How are the indexes of education outcomes related to these indexes?

Despite the simplicity of the simple coefficients of correlation, the coefficients given in Table 4.16 suggest which index is most related to outcomes in primary and upper primary education. The infrastructure index and teachers' index in case of primary education and all the three indexes in case of upper primary education are significantly related to the outcome index. More importantly, among the three, the teachers' index is more strongly related to the outcome index. The teachers' index includes a number of variables on the teachers available and also the quality of teachers as reflected in the professional qualification of the teachers.

Thus, both the number of teachers—the pupil—teacher ratio—and the academic qualifications of the teachers are important for improving the outcomes of the schools. Schooling facilities are widely available in the country. There are 1.1 million schools offering primary/upper primary

Table 4.16 Simple coefficients of correlation	elation
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With outcome index	Primary	Upper primary
	2006–07	
Access index	0.141	0.447
Infrastructure index	0.307	0.493
Teacher index	0.674	0.525
	2007–08	
Access index	-0.150	0.259
Infrastructure index	0.380	0.387
Teacher index	0.517	0.496
Pooled da	ata (2006–07 and 2007–08)	
Access index	0.038	0.444
Infrastructure index	0.341	0.426
Teacher index	0.527	0.523

Source Estimated by the author

education in the country. As 98–99% of the population has schools at a walking distance of below 2 km, access is not a big problem and in fact, we find very little variation in terms of access to schools between different states. Hence, it is understood that the coefficient of correlation between the access index and the outcome index is low and insignificant. Just providing a schooling facility is not sufficient (see also Filmer 2004). This is at the primary level. At the upper primary level, however, the access to schooling facilities seems to be important. The infrastructure, and more importantly, teachers are strongly related to the outcomes. When the data of 2006–07 and 2007–08 are pooled together, we get better estimates of coefficients of correlation, as the degrees of freedom have improved.

The three indexes are regressed on the outcomes index of the pooled data, and the results are given in Table 4.17.6 The outcome index, as already noted, is not just an index of learning. It also includes other aspects such as enrolment rates, repetition and rout rates, gender parity, etc. Of the three indexes, only the teachers' index has a statistically significant effect on the outcomes first at the primary level, and then at the upper primary level, at a lower level of statistical confidence. The other two turn out to be statistically insignificant. In fact, there can be several

 Table 4.17
 Regression results

In outcome index = a + b access index + c infrastructure index + c teacher index Regression coefficients					
	Regression coefficien	ets			
	Primary	Upper primary			
Access index	0.2407	0.2564			
	(1.653)	(1.471)			
Infrastructure index	-0.0327	0.0921			
	(-0.341)	(0.701)			
Teacher index	0.3147^{a}	0.2292^{b}			
	(3.226)	(2.032)			
Intercept term	-0.5084	-0.6522			
No. of observations	42	42			
F-value	6.446	6.395			

Note Figures in parentheses are t-values

^aStatistically significant at 99% level of confidence

^bStatistically significant at 95% level of confidence

other factors. But constrained by the availability of data, we have concentrated on these three indexes only.

The simple coefficients of correlation and the regression coefficients stress the importance of the availability of teachers in the required number and also of professionally qualified teachers for facilitating an improvement in education outcomes.⁸ An increase in the number of teachers has been found to very effective in improving quality (Banerjee et al. 2007). But in practice, the focus has been more on providing schooling facilities and infrastructure in the schools and less on providing qualified and trained teachers in sufficient numbers. Both with respect to infrastructure and teachers, the current situation is indeed worrisome, particularly in rural areas.

Let us briefly examine the current status of elementary education in India with respect to some of the components of the three indexes, viz., access, infrastructure and teachers.

4.5 Access, Infrastructure and Teachers in Elementary Schools: The Current Status

The policy of opening a primary school within a habitation or at a walking distance of every child has resulted in the availability of widespread schooling facilities all over the country. According to the seventh all-India Educational Survey, primary and upper primary schools were available in 2002 to 86% of the habitations, respectively, within a walking distance of 1 or 3 km. More recent estimates indicate that these proportions have increased further in recent years (Fig. 4.7).

Although there has been considerable improvement in general over the years, with respect to the access to schooling facilities and infrastructure in schools, there are wide variations between rural and urban schools, and the situation in rural areas needs special attention. The available data indicate that 13% of the primary schools are run in a single classroom in rural areas. Hardly 30% of the schools have two classrooms. On an average, there are not even three classrooms per primary school in the rural areas, while there are nearly five in urban areas, that is, one per grade. About 30% of the classrooms in primary schools in rural areas are in poor condition, requiring major or minor repairs. About half the schools do not have playgrounds, which are necessary to ensure the complete all-round development of the children. Nearly 30% of the schools in rural areas do not have *pucca* buildings, while the corresponding ratio

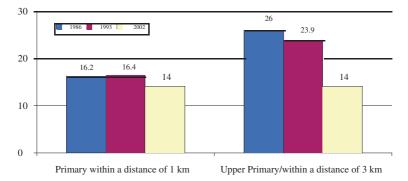


Fig. 4.7 Accessibility of schools: geographical spread of schooling facilities in India (% of habitations not having schooling facility) (*Source* Based on All-India Educational Surveys (NCERT))

is 25% at the primary and 14% at the upper primary level in urban areas. Only one-third of the primary schools have a ramp, which is specially required by the children with physical disabilities. Not even 20% of the primary schools in rural areas have electricity, while more than half the schools in urban areas do so. The gap in the availability of computers in the schools is very wide between rural and urban areas. With respect to almost every aspect on which we have data, rural schools are in a much worse situation than their counterparts in urban areas (Table 4.18).

The figures given in Table 4.19 are national averages; there are wide variations between several states and within states. There were about 151 districts in the country in 2007–08 wherein such a ratio is above 40, which was the official norm until recently. Further, the pupil–teacher ratios are very high—above 60—in 13% of the schools. But more than 40% of the primary schools in rural areas have only two teachers, and 14% have just one teacher.

Although a single-teacher school is considered as a major drawback in the system, such schools are still sizeable in number. In fact, 10% of all schools, and 13% of primary schools were single-teacher schools in 2008–09. On an average, there are hardly three teachers in each primary school and four in upper primary schools in the rural areas though the situation is much better in urban schools.

An equally, if not more important, aspect refers to the quality of teachers. Among the most important indicators of teachers' quality are

Table 4.18	Infrastructure in	elementary	schools.	2007-08
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		Rural	Urban		
	Primary	Upper primary ^a	Primary	Upper primary ^a	
% of schools having					
Pucca building	71.5	72.0	74.8	83.6	
Boundary wall	40.3	63.9	68.2	81.9	
No building	6.0	0.7	3.5	1.0	
No drinking water	15.2	8.6	10.2	4.0	
Drinking water	84.1	91.0	87.0	95.4	
Common toilet facility	57.9	68.5	66.4	74.8	
Separate toilet for girls	40.6	60.6	55.6	78.3	
Electricity	18.1	50.6	55.5	82.9	
Ramp	35.1	43.0	55.5	82.9	
Playground	45.2	58.6	52.1	69.7	
Book-bank	43.9	61.1	49.5	63.9	
Computers	4.7	19.2	19.2	44.4	
Kitchen-shed ^b	39.8	32.5	22.1	21.3	
No (zero) classrooms	6.6	1.3	7.3	1.8	
One classroom	12.9	1.1	7.1	0.6	
Two classrooms	33.0	7.5	15.9	2.8	
Classrooms needing					
Major repair	21.1	18.9	12.9	9.9	
Minor repair	10.6	9.1	5.5	3.3	
Average number of classrooms	2.8	6.6	4.8	8.9	

^aUpper primary schools having primary level also;

Table 4.19 Rising pupil-teacher ratio in elementary schools

	Primary	Upper primary	Elementary
1950–51	24	20	
1970-71	39	32	
1990-91	43	37	41
2000-01	43	38	41
2007-08	47	35	40

Source Selected educational statistics (various years)

their academic qualifications and training. Qualified and trained teachers are expected to perform better than untrained teachers and help in improving participation and continuation of children in schools and their learning levels. Although a majority of the teachers are qualified—with

^bGovernment and government-aided private schools only Source DISE (2009)

higher secondary and above qualifications, yet about one-fifth of the teachers in both primary and upper primary schools have only secondary education or less. Further, a very small proportion of the teachers seemed to have received in-service training.

In recent years, there has been a significant growth of under-qualified and under-trained teachers, functioning under different names, such as para teachers, Shiksha karmis, Gurujis, Sahayaks, Vidya volunteers, etc. Para teachers are appointed on a contractual basis, mostly by the local bodies. The salaries, or rather the honoraria received by such teachers are much lower than the salaries of the regular teachers. The para teachers are employed in sizeable numbers in primary schools in rural areas, though they have also been recruited in upper primary schools and in urban areas. In 2007-08, there were in all, 584,000 para teachers in primary education, constituting 10.5% of the total number of teachers. The phenomenon of para teachers is much more predominant in the rural areas as compared to urban areas, and as many as 93% of these para teachers are working in schools in rural areas. While a majority of them are in primary schools, they are also working in upper primary and secondary schools, particularly in those schools that have primary sections also. In addition to para teachers, part-time and community teachers have also been appointed in many schools. All these non-regular teachers constituted 17.4% of all teachers in primary schools and 8.9% in upper primary schools in rural areas, while the corresponding figures in urban areas were 5 and 3%, respectively, in the primary and upper primary schools. The proportions in rural areas are indeed high (Tables 4.20, 4.21, 4.22 and 4.23).

The practice of recruiting para-, contractual and part-time teachers instead of full-time qualified and trained teachers is bound to have a

Table 4.20 Single teacher schools (% of all schools)

	%
2002-03	14.4
2003-04	12.9
2004-05	13.4
2005-06	12.2
2006-07	11.8
2007-08	10.1
2008-09	9.7

Source DISE (2010)

Table 4.21 Distribution of schools by the number of teachers, 2007–08

	Rural		Urban		
	Primary	Upper primary	Primary	Upper primary	
Percentage of schools having					
Only 1 teacher	14.4	1.6	6.7	1.5	
Two teachers	41.1	5.6	21.3	3.6	
A head teacher	43.1	59.1	54.3	66.6	
A Pupil-teacher ratio > 60	4.1	3.1			
A Pupil-teacher ratio > 100			3.9	4.2	
Number of teachers per school	2.8	4.0	4.8	7.9	

Source DISE (2010)

Table 4.22 Academic qualifications of teachers, 2007–08

	Rural		Urban		
	Primary	Upper primary	Primary	Upper primary	
Percentage of teachers who have acad	demic qual	ifications			
Below secondary level	3.6	2.0	2.9	2.3	
Secondary level	19.2	20.6	17.8	20.3	
Higher secondary level	33.5	27.7	23.9	20.8	
Graduate and above	43.3	49.2	54.2	55.7	
Percentage of teachers who received	46.5	46.3			
in-service training					
Males			30.6	20.3	
Females			28.5	22.4	

Source DISE (2010)

Table 4.23 Para teachers in elementary level of education (% of all teachers)

	Rural	Urban	All areas
2004–05	10.72	3.27	9.09
2005-06	12.87	3.27	10.91
2006-07	11.87	3.36	9.86
2007-08	12.39	3.58	10.48
2008-09			9.39
2007-08			
Primary schools	17.7	5.0	15.9
Upper primary schools ^a	8.9	2.9	7.4

^aWith primary levels Source DISE reports serious adverse impact on the quality of instruction. But the idea of not having full time qualified and trained teachers, and rather having para-, contractual and part-time teachers has gathered some fashion, and is based on the belief that job insecurity brings greater efficiency, besides helping in saving public funds.

4.6 Summary, Conclusions and Policy Implications

This paper presents an overview of the growth, achievements and problems prevalent in elementary education in India. Despite significant progress having been made during the post-Independence period, elementary education is still not universal in its coverage. A sizeable number of children have never been to schools. Even among those who enrol in schools, about 50% of the children drop out before completing the Constitutionally defined free and compulsory education cycle of eight years of schooling. Third, inequalities in education are predominant—inequalities between girls and boys, between the lower and forward castes, between the rich and the poor, and very importantly, between the rural and urban areas. The paper has focused on the rural–urban inequalities in education, which are found to be very serious. Lastly, a characteristic feature of the system is the low levels of learning among the children in schools, and low overall education outcomes.

Why do children not go to schools? Once they enrol why do they drop out of schools before completing a given level of education? When do they not continue in schools? Why are their levels of learning not satisfactory and why are the overall education outcomes of the primary and upper primary schools not up to the mark? With the help of recent data, an attempt has been made to analyse these questions. The simple rudimentary analysis attempted here indicates that the major areas which need the attention of policymakers are need for an improvement in access to schools, for enhancing the quantity and quality of infrastructure, and above all for the provision of qualified and trained teachers in required numbers are identified as the areas that require attention of the policymakers. Among these three areas, it has been found that provision of teachers requires more serious attention, followed by infrastructure.

A few general observations may be made before this paper is concluded. Given that the Right to Free and Compulsory Education Act

has been enacted only recently, it can be expected that efforts would be made to ensure the provision of truly free education to all children in such a way that households no longer need to spend on the elementary education of their children and that economic factors do not constitute a constraint in education. It has been widely noted that poverty blocks the educational opportunities of the poor children—opportunities to enrol in schools, to continue in schools, and to acquire literacy and basic skills. There is a need to not only expand schooling facilities by opening more schools, but also to ensure that all the schools are provided with proper infrastructure facilities in terms of all-weather buildings with an adequate number of spacious classrooms, drinking water, toilets and other facilities, so that the school atmosphere becomes attractive enough for the children to prevent them from dropping out. Additional focus is also necessary on the provision of an adequate number of qualified and well-trained teachers. As regards the Right to Education Act and other related contexts, it has been argued that the pupil-teacher ratio needs to be improved to 1:30, and preferably gradually to 1:20, as good pupil-teacher ratios and class size ratios are found to be strongly related to school participation rates, rates of continuation of children in schooling and their levels of learning. It has been suggested that an ideal minimum teacher-class ratio of 1:1 has to be ensured in all schools, with an additional (head) teacher in upper primary schools. The importance of pre-service and in-service teacher training cannot be undermined. Qualified and trained teachers form the backbone of a strong education system. Lastly, it is important to ensure that public policy focuses on strengthening government schools, as a large majority of the children attend these schools. This is also important, because in the absence of government schools, children may feel compelled to go even to unrecognised private schools. In short, the attempt should thus be on providing an attractive learning environment for children in the government schools. Rural transformation is tantamount to the transformation of schools in rural areas into powerful centres of learning in such a way that children, parents, and the whole community look at schools as the pivot of transformation. In fact, a school is a key resource in rural areas and is considered to be 'the heart of the rural community'. Its relative position in the rural community is much higher than the relative place of a school in urban areas. Hence, the development of schools in rural areas necessitates the special attention of policymakers and planners.

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Notes

- 1. As per the NSS (64th Round), the proportion was 19.2% in the age group of 6–17 years in 2007–08.
- 2. Soon all these schools will have to either be closed or seek government recognition and become recognised institutions, as the Right to Education Act (2009) requires all schools to be necessarily recognised.
- 3. NCERT (2008) is another important source for information on achievement levels. NCERT achievement surveys report better performance rates. However, despite some weaknesses, the results of the Pratham survey are used here.
- 4. Such findings lead many to suspect the quality of the estimates of Pratham.
- 5. Since children are not interviewed, the citing of 'lack of interest on the part of the children' as a reason for the non-enrolment in or dropping out of schools, indicates a tendency on the part of the parents to shift the responsibility from their shoulders to those of the children.
- Despite some familiar problems with production function studies of this kind, they have been found to yield meaningful results (see Hanushek 1986, 2010; Glewwe and Lambert 2010).
- 7. For example, one of the most cited reasons for the high dropout rates dropout and low levels of learning are ill-health and malnutrition levels among children.
- 8. Extensive research since the Coleman Report (Coleman et al. 1966), has made it clear that teachers do indeed matter when assessed in terms of student performance. See also Hanushek (2010).

APPENDIX

Table 4.24 Indexes of education development in elementary education in India

	Primary				Secondary	٨		
	Access	Infrastructure	Teachers	Outcome	Access	Infrastructure	Teachers	Outcome
Andhra Pradesh	0.631	0.690	0.674	0.826	0.676	0.797	0.851	0.780
Assam	0.701	0.316	0.328	0.622	0.607	0.386	0.659	0.648
Bihar	0.556	0.233	0.334	0.530	0.481	0.343	0.412	0.485
Chhattisgarh	0.673	0.555	0.448	0.675	0.783	0.570	0.473	0.461
Gujarat	0.574	0.762	0.794	0.698	0.820	0.789	0.818	0.672
Haryana	0.525	0.903	0.727	0.692	0.766	0.945	0.763	0.605
Himachal	0.445	0.684	0.660	0.777	0.803	0.724	0.803	0.648
Pradesh								
Jammu &	929.0	0.540	0.648	0.791	0.743	0.627	0.798	0.662
Kashmir								
Jharkhand	0.636	0.339	0.379	0.551	0.482	0.495	0.555	0.578
Karnataka	0.540	0.691	0.711	0.880	0.775	0.765	0.795	0.819
Kerala	0.257	0.894	0.950	0.732	0.687	0.920	0.950	0.764
Madhya Pradesh	0.554	0.721	0.446	0.546	0.694	0.764	0.501	0.451
Maharashtra	0.477	0.739	0.732	0.767	0.70	0.821	0.807	0.720
Orissa	0.485	0.616	0.536	0.563	0.634	0.626	0.615	0.463
Punjab	0.487	0.917	0.663	0.721	0.720	0.917	0.810	0.498
Rajasthan	0.586	0.716	0.471	0.589	0.737	0.817	0.685	0.593
Tamil Nadu	0.505	808.0	0.811	0.859	0.605	0.819	0.876	0.833
Uttar Pradesh	0.487	0.691	0.414	0.700	0.640	0.838	0.265	0.690
Uttarakhand	0.537	0.772	0.543	0.711	0.731	0.769	0.572	0.634
West Bengal	0.481	0.521	0.508	999.0	0.269	0.458	0.539	0.469
Delhi	0.515	606.0	0.937	0.570	0.784	0.871	0.935	0.525

Source DISE (2009)

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CHAPTER 5

Vocational Education and Training in Asia

5.1 Introduction

General or vocational education? This is a "tough choice" in many developing countries (Yang 1998, p. 289). In the human capital framework, general education creates 'general human capital' and vocational and technical education 'specific human capital' (Becker 1964). The former is portable across one's life and from job to job, while the later one is not and hence many advocate general education, as more suitable to the flexible labour force that can change task and even the type of work; but the later one has an advantage, imbibing specific job-relevant skills, that can make the worker more readily suitable for a given job and would make him/her thus more productive. Hence both are important, and education systems in many countries therefore include both general and vocational streams of education in varying proportions.

Countries in the Asian region have placed varying emphases on general and vocational education, depending upon several historical, social, economic and political considerations. While general secondary education is somewhat of homogenous nature, there is a diverse pattern of provision of vocational and technical education and training

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(abbreviated hereafter simply as VET) in many countries. It includes at least two major forms: vocational and technical education in formal education systems (lower and senior secondary schools, post-senior secondary but less than college level institutions like polytechnics, and colleges at tertiary level), and training outside formal system of education (pre-employment training and on-the-job training). The later kind also includes apprenticeship training systems, non-formal training centres, enterprise-based training, etc. Polytechnics in many countries, industrial training institutes in India, technical colleges in Sri Lanka, etc., belong to the post-secondary level (below tertiary level). Vocational and technical education has been an important part of senior secondary education, but it was also introduced in the tertiary level (colleges) in India in recent years. Most countries have both exclusive vocational schools and diversified secondary schools with general academic as well as vocational courses. In several East Asian countries, the emphasis was not on formal vocational/technical secondary schools, but on training institutions and on-the-job training. In many of the countries of the region, employers are also responsible for specific skill training.

With rapid transformation of societies in social, political, economic, technological, and education spheres, there has been a change in the perspectives on the need for and nature of VET. New challenges have begun to emerge, and old ones to remerge. This chapter provides a brief account of the progress made by countries in the Asian region in VET, and discusses a few important emerging issues of serious concern.

5.2 WHY AND WHY NOT VET?

The issue of VET has been a matter of concern of many countries for a long time. In India, back in the British days of the Wood's Dispatch (1854), there was a cry for the introduction of occupational education. Several commissions and committees of the British India suggested the introduction of two streams of education—academic and technical. These arguments by the colonial rulers in India and other developing countries were viewed as measures "to stabilize traditional agricultural life and to curb educational 'over-production'—the tendency of individuals from rural areas to continue in school past the capacity of labour markets to absorb them" (Grubb 1985, pp. 527-528). During the post-independence era also arguments have been advanced in favour of VET in developing countries; leaders such as Mahatma Gandhi, Mao and Julius Nyerere have been quoted in support of such educational reforms.

Leading social scientists have lent strong support for vocational education. For instance, Thomas Balogh (1969, p. 262) was emphatic in arguing: "As a purposive factor for rural socio-economic prosperity and progress, education must be technical, vocational and democratic." He in fact suggested that even "elementary education must impart technical knowledge to rural youth in an eminently practical way ... " (p. 265). The case for VET received much support in the context of the global educational crisis. VET was viewed as the solution to the educational problems in the developing economies. It was believed that many educational problems could be solved by diversifying the secondary education curriculum: the unbridled demand for higher education could be controlled, the financial crisis in education would be eased by reducing pressures on higher education budgets, and unemployment among college and secondary school graduates would be reduced. All this was based on the following assumptions:

- Differentiation of occupation in the developing economies requires secondary school graduates with varied skills. Because of changes in production processes resulting from technological advances, the nature of the demand for skills, both in terms of quantity and quality, changes. Modern technology requires fewer highly qualified middle and lower level skilled personnel. Vocational education can produce exactly this kind of manpower.
- Vocational education would contribute to such progress, both by reducing unemployment, through creating employment in the fields of pre-vocational specialisation and self-employment, and by engendering a higher propensity for labour force participation at the end of secondary schooling, improving productivity, and correspondingly resulting in higher graduate earnings. Vocational and technical secondary education can establish a closer relationship between school and work.
- Vocational education is also seen as an equity measure. As an antidote to urban-biased elite education, vocational education will promote equity with a rural bias and serve the needs of relatively poor people. Also as Grubb (1985, p. 527) states, vocational education has been seen as the answer to an enrolment problem: the tendency of some students (especially lower class students) to

drop out of schools without occupational skills—a problem that vocational education promises to resolve by providing a more interesting and job-relevant curriculum. More specifically, it is believed to be an effective answer to rural problems, "to alleviate unemployment; to reorient student attitudes towards rural society," to halt urban migration; to transmit skills and attitudes useful in employment (Lillis and Hogan 1983), and as an important measure of development for disadvantaged youth in rural and urban areas.

• Further, vocational education is considered helpful in developing what can be termed as 'skill-culture' and attitude towards manual work, in contrast to pure academic culture and preference for white collar jobs; and to serve simultaneously the "hand' and the 'mind', the practical and the abstract, the vocational and the academic." (Grubb 1985, p. 548).

Vocational and technical education is not necessarily favoured by all. There are strong opponents as well. In a seminal oft-quoted work, Philip Foster (1965) exploded the vocational school myth and called it "vocational school fallacy." Foster and later Mark Blaug (1973) clearly argued that vocationalisation cannot be a remedy for educated unemployment: it cannot prepare students for specific occupations and reduce mismatches between education and the labour market; academic streams promise higher wages than vocational streams; accordingly demand for vocational education might not exist, and Say's law that supply creates its own demand might not work. Furthermore, vocational schooling may create "a sense of second class citizenship among both teachers and taught which militates against effective learning" (Blaug 1973, p. 22).

With the succinct, clear and powerful arguments of Foster, Blaug and others, it was hoped that the issue was buried. But it refuses to stay buried. Few countries have given up their efforts in developing elaborate systems of VET. After all, it has inherently a powerful appeal. Many countries have set ambitious targets as well. For example, China had a goal of expanding vocational education so that at least 50% of the enrolments in secondary education would be in vocational education in near future; India has a similar target of reaching 25%; and Bangladesh 20%. As Psacharopoulos (1987, p. 203) aptly stated, "because of the inherently logical and simplistic appeal, vocationalism will be with us for years to come, and more countries will attempt (...) to tune their formal educational systems to the world of work."

Organisations such as UNESCO and the World Bank have played a leading role in reviving and furthering the cause of vocational or diversified secondary education. UNESCO adopted in 1974 an important detailed recommendation concerning technical and vocational education, and argued for provision of technical and vocational education as "an integral part of general education," as "a means of preparing for an occupational field," and as an instrument to reduce the mismatches between education and employment and between school and society at large. The World Bank's sector policy paper on education (World Bank 1974) attacked school curricula as excessively theoretical and abstract, insufficiently oriented to local conditions, and insufficiently concerned with attitudes and with manual, social and leadership skills; and accordingly the Bank also suggested increasing vocationalisation of the curricula of academic schools.

5.3 Achievements and Failures

To vocationalise or not to vocationalise? (Psacharopoulos 1987). This is no more a dilemma. The question is how much of the education system should be vocational and how much should be general in character. To strike a balance between the two is indeed a challenge. Several developing countries, including countries in the Asian region have a long history of vocational and technical education and training; and they have vocational or diversified secondary education systems. India has had a diversified secondary education system for a long time. Even in the nineteenth century India, there was a reasonably good vocational and technical system (see Crane 1965). However, after its slow demise during the colonial period, India has had to start afresh on vocationalisation since independence. It is more or less the same situation in the other developing countries of the region, many of them having had a long colonial and/or feudal rule; only after independence, and particularly since the 1950s, has increasing attention been given to vocational education. Initial efforts at vocationalisation in Sri Lanka date back to the 1930s and in Philippines to 1920s. A Vocational Education Act was passed in 1927 in Philippines stating that the "controlling purpose of vocational education is to fit pupils (persons) for useful employment" (UNESCO 1984, Philippines, p. 11). Malaysia established its first technical college in 1906. South Korea and Taiwan placed high priority on special vocational education

at an early stage of industrialisation process in the respective countries. The very first educational development plan of Pakistan envisaged technical and commercial education as an integral part of general education, with diversification of the secondary education curriculum. The National Education Commission in Bangladesh, appointed immediately after independence, recommended in 1972 the diversification of secondary education from Grade IX onwards. China had long emphasised vocational education in its school curriculum. After 1978, quite a number of government senior secondary schools were converted into vocational schools. Polytechnic institutions, vocational schools, institutes of technical education, and technical colleges figure prominently in the educational systems in Japan, Korea, Taiwan, Singapore and India. Vocational and technical schools received serious attention in Japan even during the nineteenth century (Yamamoto 1995). The "Taiwan miracle" owes to its system of VET (Boyd and Lee 1995, p. 195). In several countries of the region many academic secondary schools that concentrated for a long period on preparing students for university entry, tried to become multipurpose institutions to serve a broad spectrum of students and needs, including specific types of occupational training. In addition, various types and models of specialised secondary training institutions have been created in several countries to meet different middle level manpower needs.

All countries in the Asian region have, however, not accorded equal degree of attention to VET. As a result, they are at various levels of development of vocational education. As the Asian Development Bank (1991, pp. 53–55) categorised the several Asian countries, and described, Korea stands as "a leading example" of how governments can promote an extensive school-based VET; Singapore had developed a "comprehensive vocational training infrastructure," forging strong linkages between education institutions and training agencies; Indonesia, Malaysia, Philippines, Thailand and Sri Lanka have "fairly developed" vocational and technical education systems—both in public and private schools; the agrarian economies of Bangladesh, Nepal, Pakistan and Myanmar have "patchy" systems of vocational and technical education; and India and China, the two big countries on the globe, suffer from "prejudice against manual work" and hence have "lopsided" education development structures including for VET. On the other extreme, Japan has the most developed and well-established infrastructure providing school based as well as enterprise-based VET.

The nature of VET also differs between several countries. Vocational education in many countries generally refers to inculcation of vocational and technical skills relevant for specific occupations. In a few countries, vocational education is also general in curriculum. For example, vocational education in Japan and Korea is fairly general in character. General skills, broad attitudes and discipline are more valued than vocational skills per se in labour market. Accordingly schools, even vocational schools emphasise, for example, in Korea, moral education and discipline (Green 1997, p. 50).

The current status with respect of VET in several Asian countries as it developed over the last three decades is presented in Table 5.1.

In general, more than 70% of the enrollments in secondary education are in general education and in some counties, vocational education accounts for less than 1%. Some countries have expanded their vocational education systems fast, and many could not. Israel, Jordan, Korea and Turkey have expanded their vocational educational systems considerably, the enrolments in vocational education forming more than 20% of the enrolments in secondary education. Countries in East Asia like Thailand, Japan, China and Indonesia have also high enrolments in vocational education. But on the other side, countries in South Asia like Bangladesh, India, and Pakistan have very tiny vocational secondary educational systems (Table 5.2).

Some countries have placed emphasis on vocational education for fairly a long period. For example, as shown in Table 5.3, Indonesia, Israel, Japan, South Korea, Papua New Guinea, Thailand, and Turkey had maintained the enrolments in secondary education at above 10% level during the last three decades. In Israel the enrolments formed more than 50% in upper secondary level for a long time. On the other side, countries like Bangladesh, India, Myanmar, Pakistan, Malaysia, Kuwait and Saudi Arabia have never accorded a high place to vocational education. Negative attitudes to manual work on one side, and the less diversified economic structure on the other, are the demand side factors responsible for the low level of enrolment in vocational education in South Asian countries. Only a few countries, for example, China, Iraq, Jordan and Syria, have made special efforts to expand vocational education rapidly. China stands as a special case that had made significant improvement in vocational education since 1970-71; it is also note worthy to note that it also experienced very rapid economic growth during this period.

Table 5.1 Enrolment in vocational education as a proportion of total enrolments in secondary education in Asia (%)

	1970-71 1980-81		Latest year (LY)	Change		
				1980–81– 1970–71	LY - 1980-81	LY – 1970–71
Bangladesh	_	1.0	0.7	_	-0.3	_
Brunei	1.1	3.6	5.7	2.5	2.1	4.6
Cambodia	3.5	_	1.6	_	_	-1.9
China	0.1	2.1	15.0	2.0	12.9	14.9
Cyprus	10.5	12.2	7.5	1.7	-4.7	-3.0
Hong Kong	6.1	6.6	2.9	0.5	-3.7	-3.2
India	1.0	1.2	1.1	0.3	-0.1	0.2
Indonesia	22.1	10.7	12.6	-11.4	1.9	-9.6
Iran	2.9	7.4	4.5	4.5	-2.9	1.6
Iraq	3.1	5.5	8.6	2.4	3.1	5.5
Israel	44.0	41.2	22.6	-2.8	-18.6	-21.4
Japan	18.7	14.8	14.5	-3.9	-0.3	-4.1
Jordan	3.0	5.2	25.6	2.2	20.4	22.6
Korea, South	14.3	20.6	20.4	6.3	-0.2	6.1
Kuwait	2.9	0.2	1.0	-2.7	0.8	-1.9
Lao	13.9	2.2	3.3	-11.7	1.1	-10.5
Malaysia	2.9	1.7	2.6	-1.2	0.9	-0.2
Mongolia	11.0	7.6	5.8	-3.4	-1.8	-5.2
Myanmar	0.0	1.4	0.3	1.3	-1.0	0.3
Oman	_	5.9	0.7	_	-5.2	_
Pakistan	1.5	1.5	1.1	0.0	-0.4	-0.4
Papua New Guinea	19.4	16.2	10.1	-3.2	-6.1	-9.2
Qatar	5.1	1.2	1.7	-3.9	0.5	-3.4
Saudi Arabia	1.9	1.5	1.7	-0.4	0.2	-0.2
Singapore	8.3	7.4	3.8	-0.9	-3.6	-4.5
Syria	3.4	4.3	9.7	0.9	5.4	6.3
Thailand	22.3	15.5	18.0	-6.8	2.5	-4.2
Turkey	13.7	23.5	28.0	9.8	4.5	14.3
United Arab Emirates	10.0	1.3	1.1	-8.7	-0.2	-8.9
Vietnam	_	5.7	3.2	_	-2.5	_

Not available; LY: latest year
 Latest year: data available in UNESCO (1999) mostly relating to mid/late 1990s

Source Calculated by the author, based on UNESCO (1999)

Table 5.2 Countries classified by level of enrolment in vocational education (Enrolment in vocational education as % of total enrolment in secondary education) (Latest year)

<2%	2-5%	5-10%	10–15%	>15%
Myanmar	Malaysia	Brunei	Papua New Guinea	Thailand
Bangladesh	Hong Kong	Mongolia	Indonesia	Korea, South
Oman	Vietnam	Cyprus	Japan	Israel
Kuwait	Lao	Iraq	China	Jordan
UAE	Singapore	Syria		Turkey
India	Iran	•		•
Pakistan				
Cambodia				
Saudi Arabia				
Qatar				

Source Based on Table 5.1

Table 5.3 'Performance' of the Asian countries in vocational education (1970–1990s)

(Based on enrolment in vocational education as % of total enrolments in secondary education)

Ignored vocational education throughout	Maintained reasonably high levels of
(Less than 3%)	enrolment throughout (Above 10%)
Bangladesh	Indonesia
India	Israel
Myanmar	Japan
Pakistan	South Korea
Saudi Arabia	Papua New Guinea
Malaysia	Thailand
Kuwait	Turkey
Progressed significantly ^a	Fared badly ^b
China	Hong Kong
Iraq	Lao
Jordan	United Arab Emirates
Syria	Qatar
	Oman
	Saudi Arabia

^aIncrease by at least 5% points

^bBase/current levels are less than 3% and experienced decline over the years; countries with high enrolments, but experienced decline over the years are not included here

Source Based on Table 5.1

All the countries, which progressed well in vocational education, could not maintain consistently high levels of enrolment in vocational education. For example, in Korea the enrolments in vocational education as a proportion of total enrolments in secondary education declined from 44% in 1955 to 20% in 1996–97; in Indonesia it declined from 22% in 1970–71 to 13% in 1996–97, in Mongolia from eleven to 6%, in Hong Kong from 6 to 3%, in Lao from fourteen to 3%, in the United Arab Emirates (UAE) from ten to 1%, and so on during this period. On the whole, of the 28 countries considered in Table 5.1, eighteen countries have experienced decline in the relative size of vocational education over the years, and only ten countries registered improvement.

The data on enrolments in Tables 5.1–5.3 drawn from UNESCO, refer to enrolments in vocational education as a proportion of total enrolments in secondary education. But in quite a few countries, vocational education is an important segment, not at secondary, but at senior/upper secondary level. It may, in fact, be non-existent at lower secondary level in many countries. The enrolments in vocational education as a proportion of enrolments in senior secondary level are indeed high in quite a few countries of the region on which data are available. Such proportions are around 40% in Indonesia, Thailand, Korea and Israel. Corresponding ratios, however, exceed 70% in Czech Republic and Austria, 60% in Belgium, Germanys, Italy, Netherlands, Switzerland, and 50% in France, Denmark, Finland, etc. (OECD 2000, p. 146). Thus on the whole, vocational education in the Asian region is less developed than in Europe and other countries of the Organisation for Economic Co-operation and Development (OECD).

5.4 Why Uneven Progress?

While thus some countries in Asia have been successful, though not to the extent of the European and other OECD countries, in many Asian countries the performance record of these schools at secondary level "was burdened by disappointments and by shortfalls in earlier expectations" (Coombs 1985, p. 115). Why several countries have made remarkable progress in vocational education and many others could not? This depends upon social, economic and political factors, which also mutually interact with each other.

First, the social factors. Social attitudes to vocational education are not encouraging in many Asian countries. Negative attitudes to manual work severely dampen the demand for vocational education. Further, VET is conceived as a system of education for the poor, and for the educationally backward sections that are not eligible for admission into higher education. This is viewed as one that perpetuates inequalities in the system. For example, the experiment of providing a rural curriculum in Tamil Nadu in India, familiarly known as the Rajaji experiment, and the Handessa Rural Education Scheme in the 1930s in Sri Lanka. were abandoned not only because there was no demand for such education, but also because they came to be viewed as a Brahminical conspiracy and as "a ruse designed to keep the under-privileged away from the prestigious academic curriculum" (Wijemanne 1978). In rural areas it is mostly considered as the second-class education against the expectations of pupils and parents. Low prestige attached to vocational education and its inherent inequities are somewhat a common phenomenon in many countries including, India, Indonesia, Philippines and Sri Lanka and to some extent in Korea and Taiwan. This suspicion that vocational curricula provide "a second-class education and track some individuals—lower class or lower caste, racial minorities and women away from academic education and access to jobs of the highest pay and status" (Grubb 1985, p. 529) became quite strong over the years and some public polices of ill-treatment of vocational education in educational planning and resource allocation contributed to strengthening this belief. As a result, vocational education in countries like India did not take off on a sound footing.

Secondly, enrolments in vocational education and level of economic development are related. Demand for vocational education seemed to exist in industrially developing societies, with growth and diversification of industrial structure. As Psacharopoulos and Loxley (1985, p. 228) observed, the lower the overall level of a country's development, the weaker is the case for introducing vocational curriculum and diversify it. But it is in these countries the need for

vocational education is felt. Emphasis on diversified industrial production emphasises the need for labour force with vocational skills. Much growth in vocational education took place in countries like Korea during early industrialisation processes, when employment opportunities could increase. So vocational education becomes more popular in regions where jobs can be guaranteed. The other way can also be augured: unemployment rates may diminish, if people have vocational skills. For instance, Haq and Haq (1998, p. 96) observed, unemployment rates in

the East Asian economies remained low essentially because the population possessed employable vocational and technical skills. However, the relationship between demand for vocational education and economic development may not be linear. When the economies move away from reliance on its agricultural and manufacturing sectors and in favour of service sector, the demand for VET may indeed decline. A review of the experience of the East Asian countries led Mundle (1998, p. 664) just to conclude the same: enrolments in vocational education in the region has been substantial until a threshold level of gross national product (GNP) per capita (say about \$8000) was reached; thereafter the share of vocational education in senior secondary education seemed to have declined.

While the importance of VET in economic development was recognised, and detailed plans of providing VET were preceded by manpower analyses in some of the countries, in many developing countries in South Asia few planning exercises were preceded by manpower analysis, a necessary step to understanding the nature and quantum of demand for vocational skills, their employment potential, productivity and likely earnings, besides the existing mismatches between the skills of graduates and the requirements of the labour market. As a result, many programmes were bound to fail.

Growth in VET in Asian countries is also influenced by the role of the state versus the role of the private sector. Governments have a dominant role in provision of school-based VET in most Asian economies. Even in Korea, most enterprises rely on government for trained manpower. The role of the state in provision of VET has been similar in Korea and Taiwan (Bennell and Segerstrom 1998, p. 275). In Hong Kong too, the provision of public sector training has been strategic. In the South Asian countries, government is the main provider of VET both at school level and also outside the school system. It is only in Japan enterprise-based training is the dominant mode of training; in most other countries public education institutions have been the leaders. Though private sector does play some role in VET in the East Asian countries and also to a meagre extent in South Asian countries, the quality of private institutions in providing VET has been found to be generally poor compared to public institutions in many countries, except in Japan. Taiwan and Korea also find that it is difficult to ensure reasonable standards and quality in private institutions.

An important aspect of vocational education refers to its financing. Vocational education is by definition costlier than general education.

It was estimated that in South Korea secondary technical education costs more than ten times the general secondary education, per student (Middleton and Demsky 1989, p. 65); in China the unit costs were 50–100% higher in vocational and technical schools than in general secondary schools (Dougherty 1990); and according to the estimates referring to 1980s and earlier period, vocational education in South Asian countries was found to be 2–60 times higher than general education (Tilak 1988c). But mechanisms of allocation of resources in education do not seem to favour vocational education in many countries. Public expenditure on vocational education has been remarkably low, compared to general secondary education.

Vocational education programmes are costly and the meagre, dwindling educational budgets in several developing countries do not allow provision of sufficient resources for vocational education. Several developing countries, more particularly countries in South Asia have invested very little on vocational education. In the mid-1990s, Bangladesh invested 8.4% of the total public expenditure on education in vocational and technical education, India and Nepal 4.4% and Pakistan 2.6% (Haq and Haq 1998, p. 170). The current levels of public expenditures on vocational education are not particularly high even in East Asian countries. Only 5.7% of the total education (current) budget goes to vocational education in Korea, 4.5% in Singapore, and about 3% in China and Hong Kong. In Taiwan, however, it is somewhat high, 8.2% in 1995 (Tilak 2001). On the whole, these figures are very low compared to the figures in developed countries. Many OECD countries spend 11-18% of the total educational expenditures on vocational education. After all, "poor and inadequate investments cannot produce higher returns" (Tilak 1988a).

It appears that public expenditures on VET are not particularly high in East Asian countries, but private sector expenditures on training could be high, on which unfortunately no detailed and comprehensive data at macro level are readily available. For example, training is provided by enterprise in Singapore through the operation of the Skill Development Fund established in 1979 and financed through a levy on employers amounting to 2% of salaries of all employees earning less than \$\$750 per month (Haq and Haq 1998, p. 102). It is obligatory for the companies in Korea to finance public vocational and training programmes (Lijima and Tachiki 1994). Enterprise-based training is the most important form of VET in Japan.

Besides the scarcity of public resources, governments also face confusion on the efficacy of VET programmes, which deter them from making required investments in VET. Available evidence on rates of return to education in countries does not indicate any advantage vocational education will provide compared to general education. For example, Chung (1995, p. 177) reported 12 studies showing higher returns to vocational education than to general secondary education and ten studies otherwise; and five studies that yielded no clear results. Though there are certain well-known problems with the estimates of rates of return to education, and a few other problems highlighted specifically in the context of returns to vocational education (e.g., Bennell 1995; Bennell and Segerstrom 1998), nevertheless, no conclusive evidence exists on the economic superiority of vocational education over general education (see also Tilak 1988a, b).

Table 5.4 presents estimates of rates of return on this problem in seven Asian countries. Though they are somewhat dated, it can be noted that except in Taiwan where the difference is small, in general, vocational education does not pay as much as general secondary education. After all, costs of vocational education are extremely high, but the labour market benefits are not so high as to compensate for the huge costs. However, if productivity is measured not in earnings, but in

Table 5.4 Social rates of return to vocational *versus* general secondary education

Country	Year	General	Vocational/ Technical
Cyprus	1975	10.5	7.4
	1979	6.8	5.5
Taiwan	1970	26.0	27.4
South Korea	1981	9.0	8.1
Thailand	1970	10.0	8.0
	1990	11.4	6.7
Philippines	1960s	21.0	11.0
Indonesia	1978	19.0	23.6
	1978	32.0	18.0
	1982	23.0	19.0
	1986	19.0	6.0
	1986	12.0	14.0
	1986	11.0	9.0
Jordan	1960s	6.7	1.6

Source Psacharopoulos (1994), Tilak (1994, 2001), Bennell (1995, 1998)

physical terms, and not in relation to costs, some times it is found that workers with VET may be more productive than those with general academic education (e.g., Min and Tsang 1990).

Another aspect of confusion for the governments in developing countries is changing policies of international organisations like the World Bank. World Bank supported VET in many countries in Asia for a long time. For example, in 1984-85 of the total World Bank lending for education, one-fourth was meant for VET projects. As stated earlier, World Bank and UNESCO have strongly argued in favour of investing in VET and its rapid expansion for economic growth. But by the late 1980s, the Bank policies took a ∩-turn on vocational education and strongly favoured investing away from VET (World Bank 1995). World Bank's investment in VET came down to a meagre 3% of the total education lending by 1996 (Bennell and Segerstrom 1998, p. 271). The frequent ∩-turns of organisations like the World Bank in case of vocational education (and also manpower planning, rates of return to education and higher education) have caused considerable confusion among the governments of the developing countries on the wisdom of investing in VET. Countries that did not rely on World Bank assistance might not have suffered much.

5.5 Where Do We Go from Here?

From the review of Asian experience, a few important lessons can be drawn for the development of VET in developing countries.

• VET is important for economic growth. But the relationship is not linear. So each country has to decide the extent of VET that has to be developed, depending upon the level of development and demand for skills. As Foster (1965, p. 153) observed, "in the initial stages technical and vocational instruction is the cart rather than the horse in economic growth, and its development depends upon real and perceived opportunities in the economy. The provision of vocational education must be directly related to those points at which some development is already apparent and where demand for skills is beginning to be manifested." Plans for VET should be preceded by detailed manpower analyses and forecasts. Though the importance of manpower planning and forecasting per se, has declined, few doubt the importance of detailed manpower analysis.

- Since both general and specific human capital contribute to economic growth, a balance has to be struck between size of general education and vocational education. Further, vocational education need not necessarily be purely vocational and technical. It should also include, like in Japan and Korea, general skills and attributes that are useful across a wide variety of occupations. This is particularly important in the rapidly changing economic systems.
- As specific human capital development can take place both in formal schools and also in the firm-based institutions, it may be important to examine which vocational and technical skills are to be provided in schools and which in the training institutions and enterprise-based organisations.
- As vocational education is necessarily expensive, the government should make adequate allocation of resources for vocational education. Poor investments cannot yield attractive returns.
- Vocational education should not promote inequalities within the educational system. This requires provision of good quality vocational education and training, comparable, if not superior to, general secondary education that would avoid suspicions on the part of the people on the intentions of the government in providing VET. It also requires effectively linking of vocational education with higher education, so that vocational education is not perceived as dead-end, with no opportunities to go for higher education.
- Given the experience of many countries in Asia, except Japan, the government has to take a dominant role in promoting VET. Private sector may not be able to provide good quality VET.
- Lastly, issues relating to VET are not just curriculum questions, nor are they just economic. They are intricately linked with social, cultural, historical, economic, technical, and political parameters. Hence formulation of sound and effective policies and plans of VET requires an interdisciplinary development approach, treating VET as an integral part of overall educational planning.

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CHAPTER 6

Inclusive Growth and Education

The Indian economy is experiencing a high rate of growth of above 8% per annum, and it is anticipated to grow at a higher rate in the near future. It is already being considered as a "transforming" economy, as one of the best performing economies in the world, and not a developing economy any more. The impressive economic growth and the economic reform policies being vigorously followed also lead many to fear that the high growth might be exclusionary in nature and be characterised by jobless growth, ruthless growth, voiceless growth, rootless growth and the futureless growth that the United Nations Development Programme (UNDP) (1996) warned against. That the growth of the Indian economy has been exclusive and that there is a need to make it inclusive is, in fact, long felt (e.g., K. N. Raj in Mody 2006; Kannan 2007). Clearly now India is recognised as an economy with a "stunning" but "jobless growth" (UNDP-ILO 2007), and a "booming economy with growing gaps" where the spectacular successes made have not been shared by all equally (World Bank 2006). The Planning Commission has also realised that economic growth has failed to be sufficiently inclusive, particularly after the mid-1990s. It noted in the approach to the Eleventh five-year plan, "While the performance reflects the strength of the economy in many areas, it is also true that large parts of our

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population are still to experience a decisive improvement in their standard of living.... Far too many people still lack access to basic services such as health, education, clean drinking water and sanitation facilities without which they cannot be empowered to claim their share in the benefits of growth. These problems are more severe in some states than in others, and in general they are especially severe in rural areas" (Planning Commission 2006, p. 1). Further, given the experience of most other countries which saw a high rate of growth in a decade followed by a big fall in the subsequent decade, it is feared that the growth in India may not be sustainable, unless it is made inclusive. Thus, inclusive growth has become the new mantra of development. After pursuing a policy of vigorous growth ever since the introduction of economic reform policies in the country, as it was believed that "there cannot be inclusive growth without growth itself" (Ministry of Finance 2007, p. 15), India has adopted, as recommended by the World Bank (2006), a development strategy of inclusive growth and set "faster and more inclusive growth" as the focus of the Eleventh five-year plan (2007–12).

As the World Bank (2006) described it, inclusive growth is "the only sure means for correcting the deeply ingrained regional imbalances, inequities and for consolidating economic gains", as inclusive growth is the growth "with emphasis not only on the distribution of economic gains but also on the security, vulnerability, empowerment, and sense of full participation that people may enjoy in social life". Inclusive growth is, however, not new, though it seems to be a new concept. The Oxford Dictionary defines inclusive growth as growth that "does not exclude any section of society". It is akin to the development strategies such as "growth with justice", "growth with equity", "growth with distribution", "growth with a human face", "pro-poor growth", etc., suggested by many starting with Dadabhai Naoroji in the beginning of the twentieth century, and attempted at one point of time or the other by many countries during the last 50 years. The new mantra is now at the heart of mainstream development economics (Ali 2007). Inclusive growth is expected, like the above-mentioned earlier development strategies to focus on the poor, the marginalised, the neglected, the disadvantaged and deprived sections of the society, and the backward regions of the country. An added dimension of the new development strategy also includes linking growth to the quality of basic services like education and healthcare.

Inclusive growth presupposes inclusive education—good quality education that is accessible to all. The role of education in ensuring inclusive growth is very critical. As noted in the *Economic Survey 2006–07*, "the inclusive nature of the growth itself will be conditioned by the progress that is made in the areas of education" (Ministry of Finance 2007, p. 16). Hence education needs special attention as an instrument of achieving as well as a constituent of inclusive growth. The Planning Commission recognises this and notes, "a strategy of inclusiveness and broad based participation in the development process calls for *new emphasis on education*, health and other basic public facilities" (p. 45, emphasis added).

What is the new emphasis that the Planning Commission proposes to place on education, and how does it plan for empowerment through education? The approach paper stated, "the provision of good quality education is the most important equaliser in society ... We must go beyond primary education, to tackle the looming problems in secondary education and also in higher education" (p. 75). The approach paper does refer to quite a few important aspects relating to education. But many programmes and policies it does refer to are not necessarily new, and one hardly finds any newly added emphasis given to any of the policies and programmes. The new strategies that have been proposed do not seem to be sound and their likely effect also seems doubtful. Equally importantly, many faulty assumptions and approaches seem to have been allowed to continue. This short paper critically looks at the approach to the development of education outlined in the approach paper, some of the new and not-so-new strategies proposed, a few controversial proposals, the assumptions that underlie them, and the issues conveniently ignored, and highlights the weaknesses of the approach of the Planning Commission and the continuation of the big policy vacuum.

6.1 Elementary Education

Universalisation of elementary education has been the most important goal of educational planning in independent India and was to be reached by 1960 as per the Directive Principles of the Constitution. But this continues to remain an important unfinished business, as described by Naik (1966) long ago. Almost every five-year plan reiterated the goal and even promised to reach it by the end of that respective plan. What is the approach of the Planning Commission in the Eleventh five-year plan to elementary education? The gross enrolment ratio in primary education is above 100% and the corresponding ratio in upper primary education is only 70% in 2004–05, the latest year for which such official statistics are available. According to some crude and quick estimates, the out-of-school children could number 30-40 million, if not more. The commission does not note any of these statistics and instead, it believes that "near 100% enrolment of 6-14 year olds is likely to be achieved by the end of the Tenth Plan" (i.e., by 2007), suggesting that one need not bother any more about universal enrolment of children. This is contrary to not only the findings of several research studies and survey reports, but also to what the Ministry of Finance (2007, p. 17) observed only a few months ago in the Economic Survey: "a large number of school-age children still remain to be enrolled in primary schools" (emphasis added).² Thus, to start with, the approach to elementary education seems to be based on a questionable premise.

The only major strategy identified by the Planning Commision for elementary education, which is not new, is the Sarva Shiksha Abhiyan (SSA).3 It was launched in 2000 as an umbrella scheme and a timebound programme of universalisation of elementary education. It set the following goals and targets (MHRD 2003):

- Enrolment of all children in the age group 6–14 in schools/education guarantee scheme (EGS) centres/bridge courses by 2003.
- All children in the 6–14 age group to complete five years of primary education by 2007.
- All children in the 6-14 age group to complete eight years of schooling by 2010.
- Focus on elementary education of satisfactory quality with emphasis on education for life.
- Bridging of all gender and social category gaps at primary stage by 2007 and at elementary education by 2010.
- Universal retention of children in schools by 2010.

The approach paper recognises the importance of the SSA and the goals of the SSA relating to universal enrolment by 2010, reduction of rates of dropouts and improvement of rates of retention. It also notes the importance of the midday meals programme and recommends involvement of mothers' cooperatives to improve the quality of meals and its provision and the merger of the programme with the SSA. The approach paper is aware of the importance of SSA, as the SSA "aims to bridge all social, gender, and regional gaps with the active participation of the community in the management of schools" (p. 45), but refuses to recognise the weaknesses of some of its provisions and instead, argues for continuation of the SSA. The SSA, inter alia, formalised and nationalised the poor and ineffective EGS and the para-teacher system and aims at universalisation of elementary education through formal schools, EGS centres and bridge course centres. Thus all alternative poor forms of providing education are accorded status equal to formal schooling, thereby making formal school not a basic necessity; an EGS centre or a centre for bridge courses is good enough. Moreover, the EGS is a demand-driven model of setting up centres for primary education in response to a formally expressed demand for a school, which is, in fact, expected to be provided by the government as an entitlement or a right of the people. Universalisation of elementary education through such questionable methods does not yield sustainable positive outcomes. They may give rise to serious problems not only in the long run but also in the medium and even short run. But the Planning Commission does not seem to be bothering about these aspects. Further, the provisions in SSA relating to sharing of responsibilities of financing of elementary education by the centre and the states are already under strain.

The commission does propose quite a few new strategies in elementary education. It proposes a long-term goal to have all schools equipped with physical infrastructure and quality and level of teaching equivalent to that of the Kendriya Vidyalayas. This is a positive recommendation of the commission on improving school education. It goes beyond the Operation Blackboard programme and if implemented well, should minimise differences between schools across the nation, in terms of infrastructure and the overall learning environment. It would, of course, require huge resources; but then quality education does not come cheap. The government should be prepared to invest sizeable resources in it. Even though it is regarded as a long-term goal, significant efforts need to be initiated in the Eleventh Plan itself.

But equally, if not more, important challenges remain. Such as, how to attract the children into schools, reduce dropout rates and improve retention rates—the three most important problems of elementary education. According to official statistics, 50% of the children enrolled in standard I drop out before reaching standard VIII and 62% before reaching standard X. The approach paper assumes that the EGS along with the midday meal scheme will mitigate the most often found reason for non-enrolment and children dropping out of schools, viz, poverty and other economic factors of poor households. But several research studies based on National Sample Survey data (Tilak 2002) have found that school-related costs such as fees, expenditure on books, stationery, uniforms and transport are also important in this regard and hence there is an urgent need to provide truly free education, besides improving the school infrastructure. The draft Right to Education Bill (earlier known as the Free and Compulsory Education Bill) (MHRD 2005) which is still pending even after five years of the 86th amendment to the Constitution, refers to these aspects, but the approach paper is silent on these aspects and on the bill itself.

The commission is concerned with poor levels of learning in primary schools and the need to set national testing standards, reduce teacherabsenteeism, and improve teacher-training. But it refuses to note the critical role that the teacher plays, the need for well qualified and trained teachers and the need to do away with the large number of underqualified, un/undertrained and underpaid para-teachers being recruited everywhere. Adoption of the para-teacher system also presupposes that we do not require qualified and trained teachers any more, and that anyone can teach. As a part of the economic reforms, downsizing of public sector has been attempted in all sectors, including in education. As a result, for several years, recruitment of regular teachers has been discouraged and appointment of para-teachers favoured. State governments also find it helpful as it reduces the problems of teacher-management, besides helping in reducing the financial burden—the current salaries, pension and the like. The approach paper is totally silent on this issue.

One of the most controversial proposals that the commission makes refers to the need to recognise and respond to the principle of parental choice in choosing schools for their children. The approach paper favours enabling of parents to have a choice in elementary education—to choose between public and private schools, thus creating competition between schools. The principle of "ability to pay" and "individual/parental choice" are generally regarded as most irrelevant in case of universal elementary education, as they go against the concept and

philosophy of free and compulsory education. These principles also go against any move towards developing a common school system and a neighbourhood school system that the Education Commission (1966) has strongly pleaded for. Of course, the approach paper does not refer to the neighbourhood school or common school system, which could, in fact, be the best mechanisms of creating an inclusive society. Basically, the principle of parental choice and reimbursement of expenses to the private schools strengthen the forces of privatisation in elementary education, while privatisation of education in general and of elementary education in particular, is not favoured by many in developed as well as developing countries. Few advanced countries are found either in the past or in the present, relying on private sector specifically in case of school-level education. The approach paper also promises to provide more support to the non-governmental organisations (NGOs) and voluntary sector to improve the status of elementary education.⁴ Further, it also advocates public-private partnership in information and communication technology (ICT) for disadvantaged children, though the rationale is not clear for public-private partnership in case of ICT education that too for disadvantaged children.⁵ Thus, the approach of the commission strongly favours privatisation of even elementary education.

The approach paper also favours decentralisation of educational planning and management, and recommends active participation of the community in education, and their accountability to local self-government. In general, decentralisation has become a fashionable approach in education and other areas in recent years. Decentralisation per se is desirable; it is also particularly advocated in large size developing countries like India, where central governments may not be able to effectively plan, provide, manage and supervise the education systems in all parts of the country. While few doubt the importance of decentralised approaches to educational planning and administration, it is also important to note that some governments find it convenient to use decentralisation as a mechanism of abdication of its own responsibilities of educating the people. The methods of decentralisation we have adopted in the recent years aimed at mobilising more and more non-governmental resources for free elementary education on the one hand, and to dilute, if not completely to abdicate the responsibilities of the state—central and state governments—in education. For example, the village education committees and the like are seen as a substitute to the school inspectorate system of the government, which is made to disappear. The dangers involved in

decentralisation are too serious to ignore (Tilak 2006a). But neither are these weaknesses taken note of nor are any new methods of decentralisation suggested in the approach paper.

The approach paper considers the introduction of education cess of 2% in 2004-05 as "a major step ... to ensure effective funding of elementary education". Education cess was introduced as a separate, dedicated non-relapsable fund for elementary education and the revenues from the cess are allocated to elementary education—SSA and the midday meal programme. The union government is able to increase its plan allocation to elementary education largely because of the education cess. In fact, the government admits in the Economic Survey (2006–07) that the increase in budget outlay for elementary and adult education was possible with the imposition of the education cess. The predominance of education cess in the union government's budgetary allocations to education, also suggests the reluctance or inability of the union government to increase the allocations from the common pool of revenues to elementary education. 6 It also appears that the education cess has come to stay, though one expects that special earmarked taxes/cesses of this kind would be used only for a short-term, and in the long run education is funded generously out of general tax and non-tax revenues of the government. But it appears that most of the budgetary allocations for elementary education would be made out of revenues received from the cess only (Tilak 2006b).

Basically, elementary education has to be provided free and compulsorily to all without relying on the private sector, NGOs and the voluntary sector. It is an important responsibility of the state in most civilised societies and is financed normally out of general tax and non-tax revenues. Even after elementary education was made a fundamental right in the Constitution with the 86th amendment, one does not notice any difference in the approach of the government in providing it as a fundamental right. In fact, the approach paper makes no reference to the constitutional amendment or to education as a fundamental right.

6.2 SECONDARY EDUCATION

Probably for the first time the government has recognised that universal education of eight years is not enough for a country that aims at 8–9%, if not a higher rate of economic growth. The approach paper states, "As we ready ourselves to the knowledge economy, we cannot be satisfied

with universalisation of primary education. A person with a mere eight years of schooling will be as disadvantaged in the knowledge economy dominated by ICT as an illiterate person is in modern industry and services." It also notes the rising pressures on the demand for secondary education, given the improvement in elementary level of education, attributed to the SSA. The current gross enrolment ratios in secondary education are far quite low: 52% in secondary education and 28% in senior secondary education (2004–05). These ratios need to be enhanced considerably. Though the government has been thinking of universal secondary education in recent years (CABE 2005a), the approach paper does not refer to any such proposal.

The approach paper, however, recognises the need to expand secondary education and to raise the minimum level of education to standard X. But how is it to be expanded? It proposes to extend the SSA model to secondary education (i.e., up to standard X) and improve the quality of education. Though there has been zero growth of public and private aided schools at secondary level of education, as the commission notes, instead of opening schools on a wider scale in rural areas, it proposes schools for clusters of villages. It also proposes integration of upper primary level with secondary level.

The commission notes that state governments have "nearly stopped increasing funding of public secondary schools and aided schools". Instead of arguing for reversal of these trends, it proposes expansion of secondary education with public and private efforts—"primacy of public responsibility" that also allows increase in the scope of the private schools to expand. It also proposes vouchers to promote equity and quality in secondary education. It also expects, quite contrary to the general knowledge, private schools to give freeships to the students. The private schools are outnumbering public schools and the proportion is actually increasing at a fast rate, as the commission rightly notes. But surprisingly the commission is silent on expansion of public schools. If at all public schools are to be set up, they should be set up, according to the commission, "to provide competition to private schools" and in areas unserved and undeserved by private schools (p. 48).

But for the overall goal relating to expansion of secondary education and to raise the minimum level of education to secondary (not senior secondary) level, many of the strategies proposed in secondary education sector are questionable. First, it favours adoption of the SSA mode in secondary education. Unfortunately the SSA model has formalised some questionable and undesirable practices in elementary education and if allowed, they will seep into secondary education. While these mechanisms help in saving financial resources in the short run, in the long run they may have serious adverse effects on the quality of education, and reduce demand for secondary education. Second, for effective universalisation of elementary education, a constitutional goal, recent efforts have been towards integrating upper primary level with primary level of education, and not upper primary level with secondary education. The transition rates between the standards V (end of primary level) and VI (first year of upper primary level) are expected to increase if the upper primary level is integrated with primary level. Separation of upper primary level from elementary education and its integration into secondary level may help secondary education, but this will affect elementary education. Further, it is only recently that upper primary level is being considered as an integral part of elementary education; otherwise the upper primary level was and continues in many places as a part of the secondary school system. Thirdly, voucher schemes are rarely designed to promote equity and quality in education; instead, they are the best mechanism to promote private schools (Gauri and Vawda 2004). Fourthly, it has to be recognised that any expansion of education that relies on the private sector cannot be inclusive.

6.3 Vocational and Technical Education

The approach paper recommends an increase in enrolment in technical and vocational education from 2–3 million to 15 million by the end of the Eleventh Plan. It is also proposed to expand the number of industrial training institutes (ITIs) and to increase the range of skills to be imparted in these institutions from about 40–400; the new areas to include banking, insurance, tourism, retail trade, etc., to build the knowledge economy.

Vocational and technical education did not take off in the country in the past, essentially because it was planned as a poor substitute to higher education, in fact, to reduce demand for higher education; and for the same reason no linkages between vocational/technical secondary education and higher education were forged. The poor rightly felt it as a conspiracy against them to keep them away from higher education and to confine them to manual jobs, and hence the demand for vocational and technical education has been very poor. Secondly, vocational and technical education requires more resources than general education, as it is

more capital-intensive. But allocations to vocational and technical education have never been satisfactory (Tilak 1988, 2003). Instead of seriously attempting at improving vocational and technical education at the secondary level, the government has introduced in recent years vocational and technical courses at undergraduate level in higher education. Now the Planning Commission proposes to concentrate on ITIs to build a knowledge economy.

One may wonder at the very idea of building a knowledge economy with the help of ITIs (not IITs). This is conceptually a weak proposal. Building of a knowledge economy requires high quality manpower produced by institutions of higher education, institutions of science and technology, and other higher level institutions that produce "specialised" human capital. The assumption behind creating a knowledge economy with the help of ITIs is flawed: it implies that knowledge is equal to skills. ITIs may help in building a skill-based economy, but it may not be right to expect them to help in creating a knowledge economy. Further, it may also be argued that service-oriented areas like banking, insurance, and tourism require not vocational skills but general skills and knowledge that general secondary and higher education can impart.

6.4 Higher Education

The Planning Commission realises the need to expand higher education, as the current enrolment ratio is very small, compared to those in many other countries. Though it does not set a target, it notes that the ratio in many developing countries is between 20 and 25%. The UGC (2006) in its draft proposals for the Eleventh five-year plan proposed a target of reaching 15% enrolment ratio. The Planning Commission proposes to set up new colleges and universities and upgrading of at least 20 universities with the potential of excellence. At the same time, it recognises the problems of quality and standards in higher education and the difficulties faced by higher education institutions in attracting good faculty.

While the need to expand higher education is being increasingly felt, it is important to note that increase in enrolments in higher education requires strengthening elementary and secondary education. The current enrolment ratios in secondary education and the transition rates between secondary and higher education are very low. Unless these are improved significantly, significant increase in enrolment of quality students in higher education may not be possible.

Expansion of higher education requires resources. The commission argues for rising levels of budgetary support, which, it says, "must be accompanied by internal resource generation by duly and realistically raising fees." The commission does not care to note that the current levels of fees in not only private institutions, but also in public institutions are already high, rates of cost recovery have reached very high saturation levels in several universities, higher than the levels recommended by some committees in the recent past (such as, CABE 2005b) and that any further increase in fee levels will go against the goals relating to inclusiveness. There is absolutely no effective mechanism of regulating the fee structure in public and private institutions. Universities also find it convenient to raise more and more resources by introducing self-financing course of all kinds, some of which may even go against the very purpose of these universities. All these create hurdles in improving equity in the system.

The commission proposes "a wider merit-cum-means based loan and scholarship programme through the banking system and other agencies". The scholarship programmes of the governments that aim at helping the weaker sections have been based largely on the principle of merit-cum-means. Now loans might replace these scholarship programmes. Obviously few scholarships are offered by the banking system and "other agencies." It is also important to note that the loan programmes operated by the commercial banks in India largely cater to the demand of non-weaker sections of the society, besides their overall numbers being very small (Tilak 2007b). The approach paper notes, "Access to high quality institutions is extremely important for equity since they provide opportunities for the poor and socially disadvantaged to advance themselves". Normally this is ensured through liberal public funding, including a large programme of scholarships, and rarely through increase in fees, loans, etc. But the commission seems to believe that it is possible through fees and loans. The scholarship programme needs to be viewed and planned independently of the loan schemes. There is a need to strengthen and expand the scholarships to promote equity and also to promote excellence in higher education. Loans cannot be expected to serve either function.

There is a strong need for large-scale recruitment of quality faculty in most institutions of higher education in the country, necessitated by long-term de jure and de facto banning of recruitment, as many universities are severely starved of faculty, and are run with the help of those who can at best be described as para-teachers, even though the term of "para-teachers" is normally confined to school education (APSCHE 2005; Tilak 2006c). While the approach paper recognises this problem, it does not favour recruitment of faculty; instead, it argues for relying on the open university system, where faculty does not form a limiting factor, and where of course, the quality is questionable, completion rates are low and rates of cost recovery are high.

6.5 Conclusion

The approach paper states, "Education is the most critical element in empowering people with skills and knowledge and giving them access to productive employment in the future. The Eleventh Plan should pay special attention to this area" (p. 45). This short chapter critically examined the attention paid to education, the goals set for it, if any, and the strategies it proposed.

But for recognising the need to expand secondary education and to improve all schools to the level of Kendriya Vidyalayas in terms of infrastructure and quality of education, there is nothing significantly new in the approach of the Planning Commission to the Eleventh Plan, and the overall vision of the approach seems to be very much limited, skewed and faulty. Skills are equated to knowledge; knowledge is dominated by ICT; and knowledge economy is to be created by vocational and technical education. There is no reference to the role of higher education in building a knowledge society. The approach to funding education is confined to education cess and internal resource generation through fees and loans and a few general statements that the central government—should assist the states and state governments should provide adequate non-plan expenditure (p. 75). There is no reference to the Free and Compulsory Education Bill, still pending after five years of the constitutional amendment. There is no reference—to internationalisation of higher education, which is also related to the growth of the private sector, and on which government has already initiated several efforts even to the extent of making a commitment to the WTO under GATS. The very silence of the commission on many of these important issues itself may speak volumes about its approach.

There is an overall preference towards promoting privatisation of education at all levels, through various mechanisms such as public-private partnership, enabling parental choice to choose between public

and private schools, introduction of school vouchers, student loans, raising of fee levels, etc. One doubts how these measures will help in ensuring inclusive growth. Instead of having a critical review of the private school system that has produced dualism in education, social inequities and even imbalanced development of education, the commission strongly opines that the private sector has a "critical role to play in achieving the objective of faster and more inclusive growth" (p. 2). Public-private partnerships in most cases lead to reduced role of the state and tend to tilt the balance in favour of privatisation. Even the earlier models of public—private partnerships such as of private aided schools (not to speak of the new private institutions which are given land at concessional prices and several "appropriate" tax concessions, in addition to direct development grants for research, etc., in case of higher education), end up promoting private interests with public money. That these institutions evolve effective mechanisms of preventing the poor from coming to them is well known. There is a much bigger problem with the publicprivate partnerships and the private schools. By arguing that government should concentrate on unserved and undeserved areas, one is actually arguing for vacation of space by the government for the private sector to increase their activities. Once the private sector becomes dominant, there remains actually no space for the government to come in even for promoting social equity. This is already happening in higher professional education in many states. Particularly when one is concerned about inclusive growth, one would expect to have a critical look at the role of the private sector in education development.

The approach paper is indeed found to be full of contradictions, lack of vision for development of education, and absence of a critical outlook of the strategies required. Very few new strategies are proposed, or existing strategies are emphasised to tackle some of the persistent problems and many important issues are conveniently ignored. Recommendations made by the commission regarding accountability, monitoring, decentralisation, role of NGOs, private sector, etc., broadly correspond to the suggestions made by the World Bank (2006).

Our approach to educational policy and planning has been fragmented, looking at elementary education or secondary education or higher education, but not adopting a holistic approach of looking at all levels of education as an integrated system. The approach paper also adopts a fragmented and disjointed approach to education. It is important to recognise that there are close linkages between the three levels of education, and that the three levels are also inter-dependent on each other. Due attention needs to be paid to all levels of education and to education as a whole. Most importantly, but for the piecemeal measures of reforms here and there, there has been a big policy vacuum in Indian education in the recent years. Any attempt to fill it is yet to be seen.

One would be seriously disappointed at the approach paper, if he/she expects it to focus on inclusive growth, to be concerned about glaring and even widening inequalities in education—social, economic, gender and regional, and to propose clear strategies of developing an equitable system of education. There is no reference to any of these aspects, except a minor reference to Other Backward Classes (OBCs), which is also necessitated by recent developments. In fact equity is not the main concern of the approach paper; it is quality that occupies the attention of the Planning Commission and the commission assumes that quality would automatically promote equity. It states, "The provision of good quality education is the most important equaliser in society and its time we launched a major effort in this area" (p. 75). But few of the strategies and initiatives proposed in the approach paper aim at equity or quality. In brief, many of the proposals, including the ones in practice that the commission endorses, go against building any inclusive education system necessary to promote inclusive growth of an inclusive Indian society.

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Notes

- 1. The Times of India, New Delhi, July 25, 2007.
- Many documents including the Economic Survey(s), the present approach paper, etc., do not maintain a clear distinction between primary and elementary education.
- 3. However for the Planning Commission, SSA seems to be a new one and a starting point, and according to it, the nation made a good start on primary education only through SSA (p. 75).
- 4. In fact, the Planning Commission promises to prepare a draft National Policy for the Voluntary Sector, so that a broader involvement of NGOs in many sectors is encouraged (p. 76).

- 5. A sub-group of the Planning Commission (2004) has proposed public–private partnership in all sectors including in education.
- 6. State governments are also becoming reluctant to allocate resources for education from the common pool of resources and hence they also think of an additional education cess (and a cess for health). *Sunday Times* (*Times of India*), New Delhi, July 23, 2007, p. 11.
- 7. The ratio in many developing countries, excluding some of the Latin American countries, is much below 20%; only in many advanced countries it is above 20%.
- 8. The National Knowledge Commission (2007) also proposed a similar ratio. See Tilak (2007a) for a comment on the commission's report.
- 9. There is a fresh proposal from the Planning Commission to set up 30 mega-campus world class universities during the Eleventh Plan period, *Indian Express*, July 26, 2007.

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CHAPTER 7

Equitable Access to Education and Privatisation of Higher Education

It is widely recognised that higher education is essential for social and economic development of a nation. Substantial research has shown that higher education is the key to individual prosperity, economic security, social progress and the enduring strength of democracy. Wide access, equity and diversity in higher education are regarded as essential for higher education to effectively contribute to development of the societies in economic, technological, social, political and cultural spheres—both at national and global levels. Equitable access to higher education is considered fundamental not only for reducing socioeconomic inequalities in the societies but also for strengthening wider participation and democracy, and social cohesion and harmony. Besides producing a huge set of externalities, as a public (or at least as a quasi-public) good, higher education is considered as one of the most important instruments to break poverty-related constraints and other structural issues of deprivation and inequality by offering fast upward mobility in occupational, economic and social ladder to everyone in society. Further, it is not considered appropriate to view that equity in higher education would be at the cost of efficiency or quality in higher education. The overall gains, even

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narrowly defined economic pay-offs from equitable education are generally found to be outweighing the losses in efficiency, if any.

Higher education in India has expanded very fast during the post-independence period—from an extremely small base consisting of 32 universities, 700 colleges and 0.4 million students at the inception of planning in the country in 1950–51, to more than 800 universities, 39,000 colleges and about 30 million students in 2014–15 (*All-India Survey of Higher Education 2014–15*).¹ There are also more than 1.4 million teachers in the system. In terms of the current size, the higher education system in India is the second largest one in the world, next only to China. The US system now comes only after India. These numbers make some to observe that the higher education system is about to enter the phase of 'massification' or mass higher education, though the gross enrolment ratio is only 23%, and it is generally felt that only if the ratio crosses 40%, a country can be regarded as moving into the phase of massification.

The phenomenal expansion of higher education during the postindependence period has contributed a lot to many spheres of socioeconomic development of the country. First, with massive expansion of higher education, the country could achieve self reliance in manpower needs, in the sense that no sector of the society—whether it is manufacturing sector or service sector, or public administration and governance including policy formulation, planning, defense, science and technology, or high technology intensive sector, critically depends upon foreign or expatriate manpower. The country can even boast of exporting manpower and making substantial earnings in terms of foreign exchange remittances from Indian graduates settled abroad. For example, it is proudly stated that the Silicon Valley in the USA critically depends upon information & technology (IT) manpower produced by the higher education system in India. Brain drain has become no more a matter of concern. It is now viewed as 'brain gain' or 'brain bank.' Second, with such an expansion, the higher education system itself could get democratised: achieving a fair degree of gender parity—46% of the enrolments in higher education being women in 2014-15; the enrolment ratio among women is 22.7%, which is only marginally less than that for men (24.5%), showing remarkable progress in gender equity. Higher education in India also made good progress in social equity—about one-third

of students coming from socially backward strata of the society—the Scheduled Castes and Scheduled Tribes. If 'other backward castes' are included, the proportion would be higher. Not only in higher education as a whole, even in professional education the participation of the backward strata is improving. In Tamil Nadu, 30% of the new engineering students in 2014 were first generation learners (The Week, December 2015). Third, in terms of quality and excellence, a few institutions of higher education, such as the Indian Institutes of Technology, Indian Institute of Science, and even some central/state universities, and some centres of advanced studies could stand as exceptional ones in the country, which are recognised all over the world. Fourth, higher education played a significant part in socioeconomic development of the country, including economic growth, reduction in poverty, improvement in inequalities, and human development, contributing towards transforming the agrarian economy into a knowledge economy, based on the immense growth in the modern service sector—nationally and internationally. Contribution of higher education to strengthening democracy, amity among diverse social, cultural, ethnic and economic strata and political stability has also been quite important.

However, at the same time, it should be recognised that the higher education system suffers from severe inadequacies, if not failures: first, though in terms of absolute numbers, the higher education system is the second largest one in the world, with about 23% gross enrolment ratio, India still ranks poorly even among the developing countries, not to speak advanced countries where the ratio crossed 70-80% (in countries like USA and Canada). Higher education in India with such a low enrolment ratio is argued to be not at all adequate to meet the growing socioeconomic needs of the country, particularly to transform the country in a sustainable way into a knowledge society, to sustain high rates of economic growth, and to come out of the group of 'developing' countries. It is generally argued that a gross enrolment ratio of 30-40% is the threshold level for a country to aim at becoming a fast-growing economy. Second, in terms of quality of higher education, it is widely felt that though there are a few institutions of high quality, they are only pockets of excellence and hardly any Indian institution figures among the top 200 in any of the global rankings of universities. The system as a whole

is characterised by mediocre quality and moreover, the standards are found to be rapidly deteriorating in recent years. It was observed that the engineering colleges were producing only "IT coolies" and there has not been a single invention from India in the last 60 years that could become a household name globally, nor any idea that could led to "earth shaking" invention to "delight global citizens".2 Further, very small proportions of graduates are reported to be sufficiently skilled and knowledgeable for good employment. Third, while there has been somewhat impressive improvement in gender equity and also to a lesser extent in access of the socially backward sections to higher education, regional rural and urban, interstate and intra-state—inequalities are still very high in higher education. For example, there are 58 colleges per every one lakh population on average in Puducherry, compared to seven in Bihar. Gross enrolment ratio in higher education varies among the major states between 45% in Tamil Nadu (and Puducherry) (56% in Chandigarh) and about 13% in Bihar, and Jharkhand (17% in West Bengal) in 2014-15. According to the NSSO reports,³ the corresponding ratio at all-India level in rural areas was 16.5% in 2009-10, and 38.5% in urban areas. Of all, inequalities between the rich and the poor in participation rates in higher education are found to be the highest. For example, the rate of participation among the poorest quintile of the population was barely 5%, compared to 62% among the richest expenditure quintile in 2009-10. Inequalities between the rich and the poor in participation higher education are found to be increasing over the years.⁴

Thus, the system of higher education is characterised by a few major strengths and a few equally, if not more, important shortcomings. Recognising the need for expansion and overall improvement in higher education, the Government of India had set a target of 30% gross enrolment ratio in higher education by 2030, and launched a massive expansion programme. A good number of new central universities and other institutions of higher education were set up during the eleventh five-year plan period. Second, to improve the quality of higher education 'India Excellence Initiative' has been launched which includes special support for research- and quality-related aspects in higher education and more specifically to improve the employability of the youth in general and graduates in particular. The government has also launched a massive skill development programme to improve the quality of our graduates and improve their productivity and thereby employability. The year 2015 has been declared to be the year of Skill India Initiative.

Third, to improve equitable access to higher education, inclusive growth in higher education has been reasserted as an important objective of educational development, as described in the eleventh and twelfth five-year plans. To realise the three interrelated objectives i.e., to improve access, quality and equity in higher education, the motto should be expansion of equitable access to quality higher education, not just expansion, not just to be inclusive and not just excellence. An *integrated* and sustained approach is required to address the three E's—expansion, equity and excellence in higher education simultaneously.

One of the most important strategies of promoting higher education adopted in the recent years has been promotion of private sector participation in higher education. It is argued by some that private higher education would improve equity, access and quality in higher education. With rapidly increasing competition for public budgetary resources from all sectors, it is almost concluded that state cannot finance higher education adequately and that the required high growth in higher education will not be possible without active participation of private sector. Private system of education which is financially supported by the state, commonly known as government-aided private college (and school) system is considered no more a viable option, as these institutions seem to be relying on public resources for nearly 90-95% of their budgetary requirements. So the only available option is viewed to be privatisation of higher education, which will work, not necessarily based on philanthropic considerations, but on market-based principles and commercial considerations, with no direct state support. This is a form of privatisation which is not common in many countries of the world until recently.

As a result of all this, setting up of private self-financing institutions—colleges and universities—has been encouraged and it has become the order of the day. In fact, a very high proportion of growth experienced in higher education during the last quarter century has been in the private sector only. There has been virtually no noticeable growth in public higher education. According to the latest available reports, 267 universities, i.e., 35% of our university and university level institutions and 23,000 colleges (61% of all the colleges) belong to such category, and they are rapidly growing in numbers. And another 15% of the colleges are government supported privately managed colleges which remained stagnant in numbers and declined in relative shares. Two-thirds to three-fourths of the enrolment in higher education in the country is accounted by the private self-financing institutions. These numbers relating to

private institutions suggest an alarming level of privatisation of higher education in the country and these levels are not comparable with other countries—advanced and developing, where the share of private sector is much smaller. In a sense, Indian higher education system is more privatised than most other systems of higher education in advanced as well as emerging economies.

Heavy reliance on the private sector in the development of higher education is found to have created a variety of serious problems. It is being realised by many that it is the rapid growth in private higher education that created problems with respect to quality and equitable access in higher education, in addition to problems of corruption and creating corrupt values among the youth. The self-financing institutions in India are subject to a minimum set of state rules and regulations, the most prominent among them being prohibition on making profits and regulation of student fees. Both, however, remained only de jure. De facto, many of these institutions are found to be charging excess fees above the government approved fee levels, and to be making unacceptable level of profits, though both are considered as punishable offences or malpractices. Though these private universities and colleges are described as self-financing, they also corner, in addition to land at concessionary prices and tax benefits on a variety of items, huge funds from public bodies in terms of research grants and support for seminars/conferences, etc., depriving the public institutions of the same. In the Approach to the twelfth five-year plan, it was proposed that the restriction on making profits would be deleted, to encourage profit-seeking private sector to come into education in a big way-directly and also through different modes of public-private partnership (PPP). Ironically, the malpractices adopted by many private institutions and the problems these institutions are creating for the entire society, received the attention of the same government at the same time, which proposed a series of bills in the national Parliament, many of them aiming mainly at regulating the growth of the private institutions. None of the bills could, however go through successfully the Parliament.

Though skill development seems to be a new programme launched by the government, it is not altogether new. Skill development, provision of vocational and technical education, vocationalisation (or introduction of vocational courses) have had been on government agenda for the last several decades, rather since inception of planning in the country. Skill development programmes are conceived at two levels: in and after

secondary/senior secondary levels of education, but before higher level of education and second in higher education. Provision of vocational/ technical skills including modern information technology-related skills in secondary/senior secondary education is to see that graduates from secondary education are employable and secondary education becomes for many a sound and effective terminal level of education. This had been the approach with the programme of vocationalisation of secondary education for a long period. This was criticised for many reasons. It was criticised as if vocational education was relevant and meant only for those who cannot go for higher education. This was described by critics as 'Brahminical conspiracy against the poor,' of not allowing the poor to go to higher education and sealing their academic future at secondary level itself. Since it was perceived by the state as well as people at large that vocational/technical education was meant for the poor and was meant for them only, it did not receive as much as attention as it should have. As a result of both supply-and demand-side factors, though goals and targets for vocationalisation of secondary education were often mentioned clearly by several official committees, the programme did not ever take off effectively. When skills were provided at post-secondary and pre-higher educational level with no linkage to higher education, similar criticism was made of treating such training programmes as terminal level of education and training. Hence, linkage with higher education was subsequently introduced in the post-secondary technical and vocational skill development studies. Graduates from polytechnics are admitted into engineering colleges (in the second year of studies). As vocationalisation at secondary and post-secondary levels did not progress much, more recently vocational and skill development courses were also introduced in higher education, all aiming at increasing the employability of graduates. But as stated earlier, none of the programmes seemed to have made any noticeable progress. It may be noted that the skills aspired by the students nowadays are not the traditional skills of vocational and technical types which are still in demand in the manufacturing sector, but skills that get them white collar jobs in service sector, the IT sector and the like.

Realising that without skilling huge youth population of the country sufficiently for productive employment, the much acclaimed demographic dividend can turn out to be demographic disaster, and also realising (a) the increasing needs for middle level skilled manpower for the rapidly growing economy with increasingly diversified economic

activities (b) to improve employability of the youth, and though not explicitly stated (c) to reduce demographic pressures on higher education and thereby improve quality in higher education, the government of India has launched a revitalised programme of skills development and National Skill Development Corporation (NSDC) was formed in 2008 under PPP mode. The goal of the skill development is to skill 500 million youth by 2022. To accomplish this, it is envisaged to set up 150 new Industrial Training Institutes and 5000 new skill development centres. The programme of the NSDC is to be funded by a newly created body for this purpose, namely the National Skill Development Fund (NSDF). The NSDF was meant to provide finances to private sector partners, who set up infrastructure and run skill-based training programmes. The Fund was meant to be a repository of funds pooled from the government's budgetary grants, international agencies and quite importantly the private sector. But the private sector which welcomed the formation of the Fund as a unique model of PPP, has contributed practically nothing to the Fund, despite having much control over the NSDC. According to recent reports of the Comptroller of Audit General (CAG), as high as 99.78% of the funds of the Fund are reported to have come from the taxpayer. As high as 83% of the partners—the private ones, have defaulted on loan repayment.⁵ The NSDC, which was originally constituted as a public limited company under section 25 of the Company Act 1956, has been changed to a private limited company in 2011. Moreover, though the Government was the single largest shareholder in NSDC and was the sole contributor to NSDC's finances, its role in decision-making had been limited due to minority representation on the board of directors of NSDC. A typical PPP which is financed by the state, but the state has no say at all, and which benefits exclusively or disproportionately the private partners! Given the experience of the last seven years, it is doubtful whether the PPP model works in the area of skill development though private manufacturing sector has very high stakes in the production of skilled manpower. PPP may also not work in the area of school or higher education.

Thus, both in case of higher education and skill development, the strategies adopted include a basket of measures, prominent among them being promotion of private sector directly and through a variety of PPP models.

The question is will growth in private higher education and skill development programmes promote equity in higher education? We have

no strong evidence to give an affirmative answer. While the participation of philanthropic private sector in education has been found to be serving national interests, participation of self-financing private sector is not. But today's issue is not about philanthropic private sector, but actually that private sector, which aims at commercialisation of higher education to reap quick and exorbitant profits and in pursuit of which, such institutions do not want the state to come on the way which restricts their business operations. In fact, in private higher education in India, profits replace philanthropy.

Two features that emerge from the All-India Survey of Higher Education (2014-2015) are worth noting: (a) in state universities and university level institutions, postgraduate and research students account for a larger proportion than in private universities, meaning that private universities tend to be predominantly under graduate teaching institutions with no research and not even much postgraduate studies; and (b) women account for larger proportions of total enrolments in state (and central) universities than in private universities. The later may suggest discrimination against women in private universities. Those private universities are expensive, and parents prefer to send their sons to expensive private universities and daughters to less expensive public universities may explain this to some extent. But it is also possible that environment in private universities does not encourage more and more women to join them. Similar data on enrolments by social and economic background of students, though not collected in the Survey, might provide similar results, suggesting discrimination against weaker sections in private universities.

Even the proponents and champions of private higher education system admit, while arguing strongly that private education would improve access and quality that equity would be at stake. Equity in higher education is one aspect that will be seriously compromised. Rather private education widens inequalities in not only education but also in economic and social spheres. After all, no private institution in India will be ready to promote equity on a satisfactory level, grant access to the weaker sections, provide liberal scholarships, etc.

The one important feature of the private higher education institutions in India and also of those in other developing countries is: they rely exclusively on students' fees. Student fee accounts for one hundred percent, if not higher, of the total costs of providing higher education in these institutions in India. These institutions hardly invest any

resources from their own sources; and even if they invest a little bit in the initial years, it is recovered (with interest) soon in a couple of years from students. Also, the private institutions do not make any attempt to generate resources from any additional source. All this is in contrast to some major private universities in western countries like in the United States, where, according to available statistics, students' fee accounts for only a small fraction of total costs of higher education even in the private institutions. In the United States, for example, in private universities which do not get support from federal/state, the fees contributed by the students constitute less than 40%, the remaining 60% is met by non-State and non-student sources. In Japan, the fees in private universities forms 59%—one of the highest figures among the countries of the world, of the total expenditures of the private universities, the remaining 41% comes from non-state sources and a little bit from state. But in India, higher education is either financed by the state and to some extent by students (in case of public higher education institutions) or by the students only (as in case of private universities). There is no other non-student, non-state—source of funds for higher education in India. The private management or the rest of the society does not contribute any financial resources to education, except for that part of initial capital investment which is often reaped back with profits.

In the same context, it may be underlined that the fee in the private universities in India is much higher than the fees in the public institutions, ranging between fifty to eighty times. In contrast, in the private universities in the countries where there is a sizeable private sector, like Japan or Korea, or USA, the fee is eight to ten times higher than the fees in public institutions. In India, if in a government college the fee is, say, Rs. 10,000, the officially approved fees in private college is Rs. 500,000-800,000. As charging excess fee is normal in many of these institutions, the actual fees could be many more times higher. In short, there is a very significant difference between the private education in India and private education in other parts of the world. We often refer to the Harvard University and the Stanford University in the USA. It is important to note that they are founded essentially based on the philanthropic considerations, educational considerations, and on considerations of providing good quality education, and are not profit-motivated. It is widely known that about one-third of the Harvard University budget goes to scholarships, compared to almost nil in many private universities in India. More than 60% of Harvard college students annually receive need-based scholarship toward the cost of tuition, room and board. As a result, approximately 20% of families pay nothing and many college students graduate debt-free. The private universities in the USA use the autonomy that they enjoy to attract the best talent—students and faculty from anywhere in the world, even heavily subsidising the costs of those students, and paying extra to those faculty members, while autonomy is used by private institutions in India mostly to breach state rules and regulations.

The private sector in the Western countries grew historically with a consideration to provide education to the people, and to complement the public efforts. But in India private sector is growing essentially because the public sector is not doing its job adequately; public sector disinvestment programme is going on, and state withdrawal from higher education is becoming a strong phenomenon. Private sector is taking advantage of this inability of the government. In other words, private institutions are set up to complement public institutions in the West, but in India, it is not to complement public institutions but to capitalise on public sector's inability, and substitute and eventually totally displace the public sector in higher education. That makes a big difference on the nature of the private sector in India and the West.

When private institutions are allowed to charge very high levels of fees, government's interventions in this regard such as fee reimbursement schemes (which are similar to vouchers), access to loans, interest subsidy on loans, or even quotas in admissions for weaker sections in private institutions, would not help much; in fact, these misaligned initiatives would contribute more to strengthening private sector than to reducing inequalities in higher education and in the society. Similarly, scholarships and fee concessions offered by these private institutions have no special effect on access to the weaker sections, as they form an insignificant proportion of total actual fees these institutions charge directly and indirectly.

Stat-supported private sector, i.e., the aided institutions have had to follow the state policies of affirmative policies. Private self-financing institutions are also found to be promoting participation of socially backward sections of the society in higher education, when their costs are reimbursed by the state though fee-reimbursement schemes (in states like Andhra Pradesh and Maharashtra). The latter category of institutions finds it economically rational to admit more and more students from socially backward strata. As a result, one finds astonishingly high

proportions of students coming from socially backward sections in some of these private colleges. Can this be viewed as if private sector contributing to enhanced equitable access to higher education? When the fee reimbursed by the state is not equal to the fees normally charged by the concerned college, but is equal to fees in government college, which is obviously several times less, the approach of the college to the students belonging to the backward strata seem to be different from the approach the college adopts to other students, creating different other kinds of inequalities and discrimination in higher education. Even if the fee reimbursed is equal to the fees charged to the students (equal to costs) in the given college, the colleges might still prefer fee-paying students rather than students whose fees would be reimbursed much later by the state. In both cases, students from weaker sections are admitted if seats are not filled up otherwise, and only if fee reimbursement scheme is found to be economically remunerative to the colleges.

Along with fees, one major way the private sector is flourishing in higher education in India, is through educational loans, offered by commercial banks. The availability of loans encouraged private sector to charge high levels of fees and periodically increase them. But it is widely noted that loans are not easily accessible to the economically and socially backward sections of the society, causing widening of inequalities in participation in higher education. It is well acknowledged that students from backward sections may even feel hesitant to opt for loans, even if they are available without collateral/guarantee, etc.

Moreover, graduates, who come out of the private institutions paying heavy levels of fees often higher than the actual costs of providing higher education, cannot be expected to have concerns for social equity, and welfare in the society. They would be pre-occupied with recovering the investment they have made in expensive private education, sometimes through loans. Thus, private institutions might produce a devastating effect on equity in higher education and in equity in society at large.

International experience shows that the systems of higher education that predominantly depend upon private sector for development of higher education could not 'massify' higher education in terms of access, quality and excellence. Exceptions are few: Japan and South Korea, where also problems of inequalities are arising. To sum up available large international evidence, and allowing for exceptions, it can be observed that private sector in higher education *may* provide higher education of

'quality and excellence'; it *may* increase overall access to higher education with increased numbers of total enrolment in higher education, but it is doubtful that it will definitely improve access of the weaker sections of the society to higher education, and improve equity in higher education attainment. This may be true with respect to skill development programmes as well. The experience clearly shows that equity would be a serious issue that cannot be taken care by the private sector.

In this context, some people may argue that let the private sector serve the interests of the rich, and the state sector can save those resources which otherwise would be spent on the rich, and concentrate on serving the needy, producing overall equity in the system. While such a proposal may look attractive from a narrow perspective of efficiency in resource allocation, this, producing a dual system of higher education, might result in a more inegalitarian system of education, which causes irreparable damage to the inclusive and equitable fabric of the society. In case of school education, such a model has already evolved—private school system for the rich and public (state) schools for the poor, resulting in grave neglect of public schools, as they are meant for the poor. Government's apathy and social disrespect for the public schools have ruined the public school system, and today it requires herculean efforts to check the total collapse of state school system, which is otherwise considered all over the world as laying the basic foundation for national progress.

To conclude, it is evident from Indian and global experience that (a) public higher education has the greatest potential to address the issue of equity in higher education; (b) charity-and philanthropy-based private sector may also have high potential in addressing this issue; (c) state-supported and effectively regulated private sector can address the issue to some extent; and (d) the private higher education sector based on the market principles can actually work against the principles and goals of equity.

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Notes

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- 2. N.R. Narayana Murthy at the Indian Institute of Science, Bangalore (July 15, 2015) http://economictimes.indiatimes.com/news/science/no-invention-earth-shaking-idea-from-india-in-60-years-nr-narayana-murthy/ articleshow/48085732.cms.
- 3. National Sample Survey Organisation. Employment and Unemployment, July 2009-June 2010, 66th Round. New Delhi.
- 4. See Tilak, 'How inclusive is higher education in India,' Social Change, 45 (2) (June 2015): 185–223.
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Financing Education



CHAPTER 8

The Kothari Commission and Financing of Education

[W]e should strive to allocate the largest proportion of GNP^l possible to educational development.

Education Commission (1966, p. 889)

The contribution of the Education Commission (1966), popularly known as the Kothari Commission, to the issue of financing of education is very significant. From the monumental work of the commission that is regarded as a "turning point in India's educational life" (Adiseshiah 1979),² one can dig out a mine of relevant recommendations on financing of education in India. There are (a) a few clear recommendations, (b) a set of norms which may also be considered as valuable recommendations, and (c) several general intuitive normative observations which would suggest the need for a change in the approach of the policymakers and planners. Many of these recommendations and the premises on which they are based may be relevant still even after 40 years. Without claiming to be exhaustive, this chapter revisits their premises, implementation and current relevance. It is also focused on issues relating to financing of education, though some aspects that are closely related to financing are also briefly referred to.

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Reviewing the report of the commission, J.P. Naik (1979), who was the member-secretary and who had played an important role in drafting the voluminous report, classified the several recommendations into three categories: (i) recommendations that attracted wide attention, (ii) recommendation that were opposed and rejected and (iii) "other" recommendations. Other recommendations include (a) those that did not excite any major controversy and were accepted but implemented indifferently³; (b) those that were simply ignored; and (c) other recommendations. There is yet another category of recommendations, viz, (iv) recommendations agreed and approved, but not implemented. Some of the major recommendations on financing of education made by the commission belong to this last category; some belong to the first category that received wide attention, but were followed by little action; many to the second category that were opposed and rejected; and a few to the category which were either simply ignored and/or are of no significance.

At the very outset it is important to note that the commission perhaps for the first time in India had emphasised the critical role of education in social and economic development. It was clearly recognised that "[I]n a science-based world, education and research are critical to the entire developmental process of a country, its welfare, progress and security." It is more emphatically noted that education "determines the level of prosperity, welfare and security of the people" (p. 3, emphasis added).

The commission seemed to have been influenced by the "human investment revolution in economic thought" created by Schultz (1961), according to which investment in education leads to human capital formation which in turn contributes to economic growth. The whole approach to educational development in general and financing of education in particular was strongly influenced by its strong conviction on the role of education in development. Not only spatial disparities, the commission also realised the need to ensure equity between several socioeconomic classes in India. Accordingly, it argued, "we should accord the highest priority to education and allocate the largest proportion of GNP possible to it" (p. 873). It also warned, "In an age of science, there can be no greater risk than a policy of drift and niggardliness in education" (p. 892). Second, it was very much concerned with the wide gap between India and the advanced countries, and the need to reduce it in

education and through education in development between educationally and economically advanced countries and India on the one hand, and between several states and regions within India.⁵ It resolved, "the gap between India and other rich countries needs to be reduced" (p. 873). Third, an important aspect is that it was the first commission that was required to and did carefully look into the entire spectrum of education and adopted a comprehensive and holistic approach, rather than looking at education in a segmented and fragmented way at different levels of education.

The whole approach of the commission assumes particular importance, as it worked in the backdrop of a politically fluid situation with the demise of a popular prime minister, a major war with a neighbouring country, agricultural drought and the accompanying severe economic problems including high rates of inflation and unemployment—all in a developing economy. Given this, the commission was both courageous in arguing for large investment in education and at the same time pragmatic in using austere and modest parameters and pleading for economy in use of resources, and to recommend regulating the expansion of higher education. Action on many of the recommendations was to be decided at a time of political and economic uncertainty, characterised by the defeat of the ruling Congress Party in many states, currency devaluation, powerful inflationary trends and the plan holiday.

An important contribution of the commission is a detailed analysis of financing of education in India. The financial analysis attempted in the report, particularly in chapter XIX, was first of its kind in India. In fact, there were very few studies on economics and financing of education even in other countries at this time.⁶ It made (a) a detailed expenditure analysis—total, by levels and objects, (b) a detailed source-wise analysis of funds, (c) unit cost analysis, and (d) a detailed estimate of resources required for education for the next 20 years in constant prices. Both the detailed framework provided and the insightful analysis made were of great significance and use for the researchers in economics and financing of education and for educational planners as well.⁷ The commission in fact, noted the absence of studies and the critical need for such studies, and recommended support to universities for research in these areas.⁸

8.1 Allocation to Education: Six Percent of GNP

Of all, the most important recommendation made by the commission on financing of education refers to allocation of 6% of national income to education.⁹ The commission made a detailed analysis of the past trends in financing education in the post-independence period, estimated the financial requirements of the educational system in India up to 1985-86, and recommended that "if education is to develop adequately, ...the proportion of GNP allocated to education will rise ... to 6.0 percent in 1985-86" (p. 893). Of the several recommendations made by the commission, this 6% of GNP is one that was accepted and resolved by the government of India (1968) in the National Policy on Education (NPE) 1968 "to increase the investment in education so as to reach a level of expenditure of 6 per cent of the national income as early as possible" (p. 9). Since the goal could not be reached, the government of India reiterated in 1986 its commitment to reach the target and stated in the National Policy on Education 1968: "It will be ensured that from the Eighth Five-Year Plan onwards it (the outlay on education) will uniformly exceed to 6 per cent of the national income" (Government of India 1986, p. 29). Given the inadequate performance, the goal was to be reiterated again in the National Policy on Education (revised) 1992. The review committee on the National Policy on Education (also familiarly known as the Acharya Ramamurti Committee 1990) made it clear that 6% of national income should be devoted to education. The long under accomplishment of the goal led the government to repeatedly reiterate the promise in subsequent years in every five-year plan, in every policy statement, economic survey(s), reports of the ministry of education/human resource development, reports of several committees/commissions on education, and even in the Independence Day speeches of the Prime Minister from the ramparts of the Red Fort. Almost all political party manifestos and other agendas also endorsed this recommendation. All this shows some kind of a consensus among all in India towards fulfilling the recommendation of the commission.

However, the most often-cited recommendation is also subject to some controversies. Attempts were made to provide subverted definition and scope to the terms such as national income, educational expenditure, and 6% and to misinterpret the letter and the spirit of the recommendation of the commission, the resolution of National Policy on Education 1968 and the National Policy on Education 1986, and finally to argue that India already spends about or more than 6% of GNP on education, and we need not worry any more about this target. Significant attempts of this kind include, among

others, a paper circulated by the Planning Commission (Kolhatkar 1988),¹⁰ the national agenda of the Bharatiya Janata Party and alliance partners (1988),¹¹ the draft Ninth five-year plan of the Planning Commission (1999, p. 101) and the *Economic Survey* of the ministry of finance (1999).¹² They tried to argue that the 6% of national income, as recommended by the commission, consisted of not just government expenditure, but also all private expenditure including family expenditure on education and private sector expenditure, and even to show that as the goal is already overachieved, it becomes redundant, and that it does not deserve attention any more.

As Tilak (1990, 1999, 2006; also Tapas Majumdar Committee 2005) has shown, all these were attempts to misinterpret the facts, to quantitatively under-define the goals, to cover our dismal failures and to boast at our (pseudo) achievements. Tilak has further shown that these attempts have deliberately ignored the fact that the commission had referred mainly to public expenditure, and that the UNESCO and other international statistics that the commission used as a yardstick for comparison also refer to government expenditure only, and the recommendations made by the UNESCO, UNDP, the Delors Commission, etc., in subsequent years refer to government expenditure alone. Anand Sarup, former education secretary, who was involved in the preparation of the critical review of education in India, titled 'Challenge of Education' (Government of India 1985), and in the formulation of the National Policy on Education 1986 made the point clear. In a paper, circulated in a meeting at the Planning Commission, and later published elsewhere, Sarup (1988) stated, "Since it is public policy on education that is the crucial determinant of available educational places and opportunities in our country, it (6 per cent) is the Centre and State expenditure on education that is used for policy planning and implementation. This includes both plan and non-plan outlays" (p. 253, emphasis added). Thus, it is clear that the attempts to redefine and reinterpret the commission's recommendation were to divert public attention from the very need to substantially increase the public allocations to education. Finally, the controversy seems to have been buried recently with the common minimum programme of the United Progressive Alliance (UPA) government (2004) pledging "to raise public spending in education to at least 6 per cent of the GDP". 13

The second criticism of this recommendation is that this was not based on any sound basis and hence no sanctity needs to be attached to this recommendation. A careful look at the report shows that such a criticism is not tenable. The commission carefully reviewed in detail the trends in the expenditure on education in the past and based on certain reasonable assumptions regarding economic growth (6%) and population growth

(2.1% per annum) during the next 20-year period, it estimated the magnitude of the resources that should be available for educational development in India in the next 20 years. It is a detailed analysis of estimating the requirements of the system. It noted, "the proportion of national income devoted to education in India is small in comparison with that in educationally advanced countries of the world" (p. 860). It compared the estimate of requirement with the corresponding figures of some specific countries, available in the UNESCO statistics: "Japan and the USA and the USSR are spending considerably more than 6 per cent of GNP on education" (p. 860); and they spent no more than a small fraction of their GNP on education at the beginning of the century. The commission also felt that these countries might be spending about 10% of GNP by 1986, and in fact more than 10%, if comprehensive disarmament takes place. It further noted that "the absolute amount per capita spent by us on education is about one-hundred of that spent by a highly industrialised country like the USA". Methodological, including conceptual and definitional aspects of educational expenditure and the details of the analysis and the targets of the commission are unambiguously clear. The rationale provided for its recommendation was also sound and it also gave enough time to the government for reaching the goal, providing a 20-year period.

Some also found that the target of the 6% of GNP was an ambitious one. But the commission felt that normally expenditure on education should grow at a rate of growth double to the rate of economic growth in the early stages of educational development.

However, in a sense, the commission's recommendation does not have much sanctity on its own, as the estimate was made long ago and the requirement of the education system, based on somewhat austere estimates of growth in enrolments, per student expenditure and other parameters. Nevertheless, it assumes importance mainly as the goal has remained unaccomplished so far. The commission observed that taking into consideration changing circumstances, "the estimates will have to be continually revised" (p. 892).

The only valid criticism of the recommendation could be that the estimate was based on somewhat austere parameters, such as high pupil–teacher ratio at primary level, a smaller proportion of total expenditure on school education for construction of buildings and other items of capital expenditure, no provision of free uniforms, free stationery, free school meals, and health services in free and compulsory education, and so on. In case of higher education, the 1965–66 unit costs were used

in estimating resource requirements and it recommended less expensive part-time and correspondence courses for about 30% of the students. Essentially due to resource scarcity, it recommended carefully planned expansion of higher education on the basis of manpower needs, which meant lower rate of expansion of higher education and even reduction in the total enrolment in higher education and cut in the number of places to be provided in full-time education, and to economise the expenditure in terms of physical and financial investments without affecting standards. Therefore, any fresh estimate of the resources requirements may put the figure much above 6% of GNP. 15

The main recommendation on allocating 6% of GNP to education has been endorsed later by several other international organisations. The Delors Commission (1996) has clearly argued: "Increasing public spending on education, in place of expenditure under other budget heads, should be regarded as a necessity everywhere, and especially in developing countries, since it is a vital investment for the future. As a rule of thumb, not less than 6 per cent of GNP should be devoted to education" (p. 165, emphasis added). UNESCO and UNDP also favoured it, as a desirable level for the developing countries.

Despite the wide acceptance of the recommendation and despite making it a part of the National Policy on Education in 1968 and in 1986, which were approved by Parliament, the implementation has been very tardy, as Fig. 8.1 indicates. ¹⁶ The proportion of GNP spent on education was nearly trebled from 0.6% in 1951–52 to 1.7% in 1967–68. The slope of the line of increase was relatively reduced during the post-1968 period: the

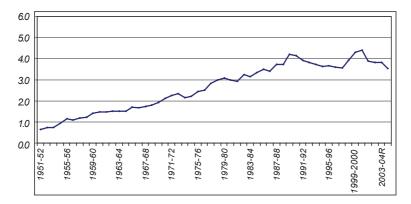


Fig. 8.1 Share of public expenditure on education in GNP (%) *Source Analysis of Budgeted Expenditure on Education.* New Delhi: Ministry of Human Resource Development (various years)

proportion was nearly doubled from 1.7% in 1968–69 to 3.5% in 1985–86; it was further flattened, as the corresponding proportion increased from 3.4% in 1986–87 to 3.8% in 2004–05. Though one does not expect a steep increase in this ratio for a long period, the fact is, the rate of increase has been reduced during the post-commission period, and was further reduced during the post-1986 period.

As Shah (2006) commented in this regard, "the more unfortunate and disturbing long-term trend in this regard is the slacken ing of government effort to mobilise required resources during the period of high economic growth (1986–87 to 2001–02) compared to that of low economic growth (1966–67 to 1985–86)".¹⁷ An analysis of such trends in India and in other countries led Tilak (1984, 1986a) to conclude that the percentage of national income a nation allocates to education is not determined by the level of economic development, but by other factors, the most important being political will.

The proportion of national income allocated to education in India crossed 4% in the early 1990s, but the level could not be maintained. Thus the major recommendation is one that belongs to the category of "Recommendations approved and received wide attention, but not implemented". After all, no detailed financial plan of reaching the goal was ever thought of Tilak (2006) has shown that if the past trends continue and no significant efforts are made in this direction, the situation might worsen and the goal remains elusive for a long period to come.

Interestingly, one may also note that the relative importance given to education in the five-year plans has also declined during the post-commission period, as shown in Fig. 8.2.¹⁹ While during the first three five-year plans, on average about 7% of the total five-year plan expenditure was spent on education, the corresponding proportion declined to 5% in the Fourth five-year plan, the very First Plan after the report was submitted and the National Policy on Education 1968 was formulated. It further declined to 3.3% in the Fifth five-year plan and again down to 2.7% in the Sixth five-year plan.

While there may be several factors, such as the war, drought and inflation that led to this trend, it is clear that the commission's strong recommendation that "the efforts to increase allocations to education should be intensified" (p. 872) could not be given serious attention. It is only after the National Policy on Education 1986 was approved by Parliament, that this trend was reversed. The allocation in the Ninth, and probably in the Tenth Plan is still much below the allocation made in the very First five-year plan!

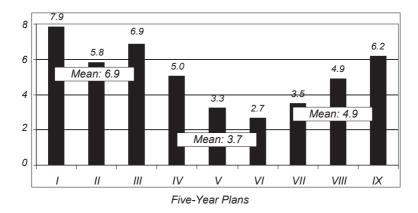


Fig. 8.2 Expenditure on education in five-year plans (percent of total) (Source Tilak 2003)

8.2 Allocation to Different Levels of Education

The commission not only estimated the requirements of resources for the education sector as a whole, it also recommended "the best" pattern of intra-sectoral allocation of resources in education, i.e., allocation of resources between different levels of education. At the outset, it should be noted that the commission has acknowledged the interdependence of various levels of education and had adopted a balanced and holistic approach to educational development.

By referring to the Japanese experience (pp. 863–865), the commission has indirectly advocated some kind of sequencing in the pattern of allocation of resources between different levels of education—first primary education, then secondary and then higher education. Looking at the historical trends in India as they developed over the years, particularly during the post-independence period and given the then existing levels of development of education at various levels, and the path of development for the next 20 years, the commission felt that from 1965 to 1975, the relative emphasis should be on a larger expenditure at the school stage; during the decade of 1975–1985, emphasis will be on universal elementary education, vocationalisation of secondary stage, etc., "After 1985, there will be increased emphasis on the development of higher education and research" (p. 893). It further added, "As societies

become industrialised, the total expenditure on education begins to grow and an increasingly larger part of it comes to be devoted to higher education and research" (p. 861).

But it appears that the pattern of intra-sectoral allocation followed was exactly the opposite: during the immediate post-commission period, the importance given to elementary education in the total five-year plan expenditure on education either remained stable at around 30%, or declined marginally, and the share of higher education increased from 15% in the Third Plan to 25% in the Fourth Plan (and 22% in the Fifth Plan), as shown in Fig. 8.3.²⁰ When the pressures on secondary and higher education were increasing in terms of increased demand, the allocation to higher education was drastically reduced from the Seventh five-year plan onwards.

Further, while the recommendation seems to be logical and hence appealing, it is nowadays being increasingly realised that the traditional sequencing of first primary education, then secondary education and then higher education may not work any more; higher education cannot wait until primary and secondary education becomes completely universal or well expanded (Tilak 2001). In a sense, the commission recognised this when it emphasised the importance of universal primary education²¹ along with laying special stress on improvement of quality in higher education and research, and recommended allocation of resources for various aspects of higher education and research, as described later. In the long run, it favoured equal distribution of resources, as in 1965–66, approximately one-third to the first level of education, one-third to secondary and the remaining one-third to higher education (p. 868).

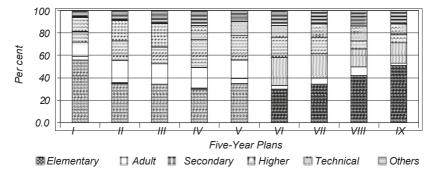


Fig. 8.3 Intra-sectoral allocation of resources in education in five-year plans

An important point worth noting is, that the commission recognised the importance of all levels of education, particularly primary education on the one side and the higher education and research on the other end, and did not pose one level of education against another in recommending allocation of resources. Clearly it did not favour increase in expenditure on primary education by cutting down expenditure on higher education and vice versa. It stated, "We realise the need for the development of higher education and the allocation of more resources to it. But it would not be proper to cut down for this purpose the expenditure on primary education" (p. 876). It repeatedly stressed that "the provision of universal primary education is vital on grounds of social justice and to help the process of transformation of the national economy. Again, development of higher education and research is central to the entire developmental programme; and without an adequate provision for higher education there will be no adequate supply of competent teachers for primary and secondary education. What we want is a balanced growth of education" (p. 876, emphasis added). This is exactly what Surendranath Banerjee, stated in his presidential address to the Congress in Poona in 1895, "We are not in favour of higher education versus primary education. We are in favour of all education, high and low. They act and react upon each other. They are part and parcel of a common and indissoluble system."22

Again, the government seemed to have ignored this wise dictum altogether and often juxtaposed one level against another in the allocation of resources in the five-year plans, saying that the government can finance either elementary education, or higher education, but not both, and thereby adopted different and even contradictory, approaches to development of different levels of education and their financing. Basically instead of having a holistic and integrated approach, the government has adopted a fragmented approach, looking at the different levels of education as if they compete with each other for resources.

8.3 Inter-Functional Allocation: Items of Priority

The commission recommended a significant raise in teachers' salaries, and also "non-teacher" items and their costs. The small proportion of "non-teacher" costs was regarded as the main reason "why our primary schools are so dull and drab" (p. 878). The commission recommended

that these costs should be 20% of the "teacher" costs at primary (lower and upper primary) level; and one-third at the secondary level. It recommended that at least 2.5% of the total expenditure on education should be devoted to buildings and other items of capital nature including major equipment in school education and 20–25% in case of higher education. It also recommended providing at least 4% of the total expenditure on school education for direction and inspection.

It placed great faith in teachers in educational reform and in the transformation of the society through them and emphasised the need to raise the economic status of the teachers. It felt that salary of the primary schoolteacher should be comparable to that of a public servant; it should be three-four times the per capita GNP. In case of teachers in higher education, it recommended a national salary structure. University teachers should receive the equivalent of what senior Indian Administrative Service officers in government service get. The government acted upon this recommendation rather promptly for various reasons. Teacher's salaries have been upgraded, though not to the extent suggested by the commission.

Important items of expenditure in education include teachers' salaries, recurring expenditure on "non-teacher" salary items, and capital expenditure for construction of buildings and purchase of major equipment. In case of school education, the commission considered the need to provide schools within reach of the children and evolved reasonable criteria like maximum distance a child can travel to reach a school. Though the commission recommended that an amount equivalent to 20% of the teachers' salaries should be allocated to non-teacher costs, it did not seem to have paid sufficient attention to the provision of facilities within the schools, though it recognised that children drop out of schools as the schools are not able to attract them enough. In fact, the commission felt poverty of the parents was as a major reason for children dropping out of schools. Therefore, it recommended continuation and setting up of new single-teacher schools, part-time primary education, etc., and did not feel the need to improve the school environment substantially. If at all this was recognised, it was left to district boards and municipalities to provide for infrastructure facilities; or they were simply taken as understood. As a result, many single-teacher schools and schools with poor infrastructure facilities continued to grow even during the post-commission period. Consequently, the deficit in expenditure

on these items went on increasing, necessitating the countrywide launch of the massively expensive operation blackboard programme, as recommended in the National Policy on Education 1986.

Among the several items, the commission focused on two major items, one is scholarships for students and the other, improvement of quality in higher education and research.

8.3.1 Scholarships

One of the important items of expenditure that the commission paid serious attention to was scholarships for students—as a mechanism of searching and nurturing talent, and as a mechanism of equalisation of educational opportunities. The commission favoured expansion of scholarship programme—specifically expansion of the programme of national scholarships and expansion of the programmes of scholarships for the backward classes (pp. 206-221 and pp. 918-919). It has recommended clear quantitative norms on the percentage of students to receive scholarships and the amounts as well. It felt that 2.5% of the students at primary level should get scholarships (at the rate of Rs. 60 per annum). Scholarships should be provided to at least 5% of the students at secondary level (at the rate of Rs. 150 per annum), and 30% of the students enrolled in vocational education (at the rate of Rs. 300–400 per annum). In higher education, the commission recommended that 25% of the students in undergraduate courses in arts and commerce (at the rate of Rs. 75 per month), 50% of the students in undergraduate courses in science and professional courses (at the rate of Rs. 125 per month), and 50% of the students enrolled in postgraduate courses (at the rate of Rs. 300 per month) should be provided with scholarships. In addition, the commission recommended increase in the number of national (merit) scholarships to about 10% of the students, and a wider coverage of university scholarships.

Though the amounts may have to vary, given the change in the value of money, the proportion of students to receive scholarships, suggested by the commission seem to be still relevant. Presently only an insignificantly small fraction of students receive scholarships. The purpose of the scholarship programme, as envisaged by the commission was to search and nurture talent and also to promote equity in the system. On both counts there is need to expand the present scholarship programme.²³

In higher education, though the commission did not find any advantage of loan scholarships over that of outright scholarships, it recommended a liberal programme of loan scholarships to supplement the national and university scholarships (p. 218). But it is important to note that "since an exclusive programme of loan scholarships is non-egalitarian", it recommended loan scholarship programme to supplement a massively expanded programme of outright scholarships. A national loan scholarship scheme was launched in the subsequent years on the lines suggested. The commission was aware of the innumerable problems loan scholarships might create in recoveries and also the hardships they cause students. The problem of recovery was later found to be so severe that the programme was to be abandoned in the late 1980s and was to be replaced by a normal student loan programme in the early 1990s, operated by the commercial banks.²⁴

8.3.2 Higher Education and Research

The commission has laid special emphasis on higher education and research, as it strongly believed that it is higher education and research that will contribute to economic development, and to bridge the gap between the rich countries and India. Specifically, it suggested larger allocations to the UGC for a few special programmes that will promote quality and excellence in higher education and research. For example, it recommended (p. 905) creation of new centres/schools in universities, and extra financial support to some specific activities. The important ones that received its attention include (a) creation of centres of advanced study and major universities, (b) creation of schools of education in a few selected universities, (c) promotion of postgraduate education and research, (d) provision of maintenance grant to state universities, (e) establishment of central testing organisation, (f) development of literature in modern Indian languages, (g) development of agricultural, engineering and medical education, and (h) promotion of educational research on all sectors of education. The commission also recommended that UGC and state governments share the responsibility of providing development grants to universities (p. 634).

Some of these recommendations were followed up, though there might yet be a lot to do. The commission's recommendations that UGC provide maintenance grants to state universities, and that both UGC and state governments provide development grants to state universities did

not receive any attention. UGC continues to provide only development grants to state universities and state governments tend to limit their grants to maintenance purposes.

8.4 ROLE OF THE STATE AND OTHER SOURCES OF FUNDS

The commission was emphatic that most of the responsibility for the support of education should be on government funds (p. 870) and not on the private sector. It rightly predicted and favoured, a big fall in the total revenue from fees. This was because it rightly stressed the need to provide free and compulsory education—free education up to grade X and provision of free studentships in higher secondary and higher education, and expansion of scholarships at all levels of education. It also predicted that income from other sources (donations, etc.), would not rise much and that local bodies would not be able to provide more than a very small percentage of the total expenditure, even after they have made the best effort to raise their contribution. As a result, "the funds of the central and state governments would have to bear about 90% (or even more) of the total educational expenditure" (p. 870).

Over the years we do notice that these predictions came true as far as the decline in the relative share of fees and other sources is concerned. The relative shares of fees, local bodies and "other" sources declined and the relative share of the government has increased in total expenditure on education. However, the latter has not reached the level of 90% as recommended by the commission. Though in case of school education the share of the government seems to be around or above 90%, this is not the case in higher education, as the trends shown in Fig. 8.4 indicate. In recent years, it appears, the trends are getting further disturbed, with the decline in the relative share of the government and a steep increase in the share of student fees, particularly in higher education (Tilak and Rani 2003).

The commission went further and pleaded for a larger role for the union government in financing education. While the centre and states should meet 90% of the total expenditure on education, the central government should assume primary responsibility and the states were to have the "residual responsibility to finance education" (p. 904). Though elementary education was in the state list, the commission favoured larger role of the central government in funding elementary education. As Naik (1975, p. 92) reiterated, drawing from the report, "it will not be

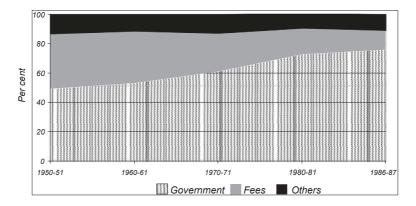


Fig. 8.4 Sources of funds for higher education in India Source Education in India. New Delhi: Government of India (various years)

possible for any state government to raise all the resources required for a programme of universal elementary education. It is, therefore, necessary to introduce a central grant earmarked for elementary education on the basis of equalisation."

Though the commission argued for a larger responsibility of the central government in financing education, it was not in favour of changing the constitutional provisions regarding the role of centre and states in education. It clearly favoured continuation of education in the state list in the Constitution and felt that "there is plenty of scope, within the present constitutional arrangement, to evolve a workable centre–state partnership in education and this has not been exploited to the full" (p. 830). As has been mentioned earlier, the commission took a holistic view on every aspect of education, rather than looking at different levels of education in different compartments. It stated this clearly in the context of centre–state relations in education, "We are not in favour of fragmenting education and putting one part in the concurrent and the other in the state list; education should, under any circumstances, be treated as a whole" (p. 829).

Contrary to what the commission suggested, education was made a concurrent subject with the 42nd amendment to the Constitution of India in 1976, though one fails to note any significant increase in the role of the centre in financing education in the following years (Tilak 1989). It was only since 1986 after the formulation of the National Policy on Education,

the centre began assuming increasing role in financing of elementary education and contrary to the constitutional provisions there has been a diminution in the relative role of the centre in higher education in the areas of policy formulation, planning and financing! (Tilak 2004).

8.4.1 Centrally Sponsored Sector

The larger responsibility of the central government should take, according to the commission, the form of expansion of the central and centrally sponsored sectors (pp. 894-895). The commission advocated that for any programme to be included in the central and in the centrally sponsored sectors (pp. 908-909), it should be of crucial importance and national in character. Programmes which need the adoption of a common policy in all parts of the country should preferably be included in the centrally sponsored sector. The commission also advocated dividing the total funds available in the centrally sponsored sector into two parts: about half of them being allocated to national programmes, and the other half should be made available to the states on some principle of equality. The states should be free to use the later kind of funds, with the approval of the union government, for any scheme which is significant and urgent in their local situations. It made yet another important recommendation: central assistance for centrally sponsored schemes should be non-relapsable and should be available to the states on a five-year basis rather than on the basis of a plan period and for some important schemes in the centrally sponsored sector, the assistance may even be continued for a longer period, say 10 years.

8.4.2 Grants-in-Aid to Local Bodies

In a supplementary note, the commission has suggested a detailed mechanism of grants-in-aid to local bodies—district level bodies and municipalities (pp. 902–909), in such a way that grants in-aid to local authorities would stimulate local contributions to education. It recommended that "the assistance of the local communities should be fully harnessed for improving the physical facilities in schools" (p. 872). The state government should provide for 100% teacher grants, block grants per child to meet non-teacher costs, and separate grants for non-recurring expenditure. The commission nevertheless realised that the local bodies may not be able to generate more than a very small

amount on their own, despite their best efforts. The objective of the grants to the local bodies should be to ensure equality in expenditure per student and thereby to equalise educational opportunities. It also suggested that every school should continue to receive the maintenance grant (with a provision for cut if the institution fails to perform), on some egalitarian basis, so that all schools come up to a minimum level of performance, and those schools that do good work should receive additionally a special "jam" grant (Naik 1979, p. 143).

Experience shows that the state grants to local bodies have not been able to stimulate generation of resources by the local bodies. The commission was right in predicting that local bodies would not be able to mobilise any significant amount of resources on their own, given the limited resource base, and competing needs of various sectors. Thirdly, there are wide disparities in educational development in general and educational expenditure per capita or per student between several districts and blocks.26

8.5 FEES AND COST RECOVERY

The commission had a clear and progressive understanding of the role of fees in education and its implications. It stated, "It is undesirable to regard [fees] as a source of revenue. They are the most regressive form of taxation, fall more heavily on the poorer classes of society and act as an anti-egalitarian force" (p. 202). It also dismissed a "progressive" or a discriminatory fee system based on economic levels of the students/their families as it "would not be administratively feasible and, ... their yield would be almost negligible" (p. 202).

Recognising the constitutional provisions, the commission reaffirmed the importance of providing free and compulsory education of a common school system. There was no case of levy of any fees at primary stage, though the commission was confronted with arguments in favour of levying fees. After all, it was a constitutional commitment. The commission was not content simply to note that free education meant only tuition fee-free education and provision of free textbooks, but felt constrained to recommend (a) abolition of all kinds of fees in primary schools and (b) provision of incentives such as free stationery, uniforms, school meals, etc. The then prevailing economic conditions seemed to have prevented the commission from making any such recommendation. These compulsions are clear. It however, recommended free education up to grade X and provision of free studentships in higher secondary and higher education. It also recommended all vocational education to be provided free. With respect to other levels of education also, the commission did not actually favour levy of fees; but it could not recommend against fee. In case of secondary education, though it agreed to the suggestion to levy of fees at higher secondary level as a pragmatic solution to the problem of resource scarcity, it did note very clearly that "the levy of fees in secondary schools prevents several children from the poorer classes of society, and particularly girls, from receiving education" (p. 203). So it argued that in higher secondary and higher education, every attempt should be made to extend free education to cover all needy and deserving students.

With respect to higher education, the commission found that the then existing levels of fee contributions (as a proportion of total revenues) were much higher in India than in the educationally advanced and richer counter such as USA and UK. The commission's forward-looking progressive policies with respect to fees in higher education are worth noting, "We do not advocate the immediate general abolition of fees in higher education, although this should be the ultimate goal of educational policy. ...for the next 10 years, the main effort with regard to fees in higher secondary and university education should be to expand the provision of tuition-free education to cover all the needy and deserving students. To begin with, the proportion of free studentships should be increased to at lest 30% of the total enrolment. We also commend, for general acceptance, policies which have been adopted in some areas to provide tuition-free higher education to underprivileged groups" (p. 204, emphasis added).

Nowadays fees are regarded as one of the most common measures of mobilising finances for education. In fact, student fees are being seen as a major potential source of funds. But confronted with the need to ensure that weaker sections of the society do not get neglected, often a programme consisting of levy of fees along with concessions and exemptions to needy students is proposed. This has been quite common. But the commission did not find merit in such arguments. The commission observed, "such a system does not have much to commend itself and involves several administrative difficulties" (p. 203).

The commission also felt no need for any cost recovery mechanisms. In fact, in the long run education would become self-financing, not of course as being contemplated nowadays. The commission observed,

"in the long run education to some extent is self-financing because the increased incomes generated by a relatively better educated labour force would provide resources for greater allocation to education...additional resource are generated through the process of economic growth" (p. 889). This is what Mishan (1969) also observed in a similar context, "higher education is an investment and will pay for itself; and will increase the earnings of the beneficiary students and the government will recover its costs through consequent higher tax receipts." The commission has clearly recognised the significant economic contribution of education, when it observed, "the fact that education tends to augment the flow of national product, though with some time-lag, [and this] is of crucial importance" (p. 889).

Having noted that parents were required to incur "very heavy expenditure" on education, it suggested quite a few mechanisms of mitigating household costs on education, such as strengthening of the provision of free textbooks at primary stage, launching of a programme of book-banks at secondary stage and provision of book-grants in higher education.

The evidence on the practice of fees in education in the later period is in quite contrast to what the commission recommended. Fee, including tuition fee, besides many other types of fees, were continued to be charged in government, local body, government-aided schools at primary level (Tilak 1996a); fee levels in secondary education have been on the rise; and fees in higher education are going up (Tilak and Rani 2003).

The commission also argued against over dependence on private sector in education development (Naik 1979, p. 30). The commission felt that private sector has a limited and minor role in the national education system. It pleaded for control of private enterprise in education. Again, this suggestion is also not cared for very much by the government and in fact, this was opposed strongly. An unbridled growth of private education at all levels of education has been allowed, with all its ramifications.

8.6 OTHER NORMS AND RECOMMENDATIONS

A few other norms that were adopted by the commission, which have serious financial implications may be noted as follows:

First the pupil–teacher ratios. Though for pragmatic reasons, the commission had adopted higher pupil–teacher ratios in estimating the resource requirements, it desired that to ensure reasonably good quality of education, the pupil–teacher ratio in primary education be 30 and 35 in higher primary schools. In lower secondary education it should be 25 students per every teacher and 20 in higher secondary education. In case of secondary/vocational education the desirable ratio suggested was one teacher per every 11 students. The commission suggested such norms for higher education as well—one teacher for every 15 students on average in undergraduate courses and eight students in postgraduate courses. Many of these norms are still relevant in contemporary educational planning. The present norms and the current actual pupil–teacher ratios are much higher than the norms suggested by the commission.

Secondly, the commission realised the importance of vocational education and also to reduce pressures on higher education. It recommended a high degree of vocationalisation of education: 20% of the total enrolments at secondary level, 50% at higher secondary level and 30% at higher education need to be in vocational streams. Further, it argued that 60% of the students in higher education should be enrolled in professional and sciences courses.

Though the government often expressed in subsequent years its desire to vocationalise secondary education, the progress is not satisfactory. The reason is, fundamentally vocational education has been looked down upon and planned as second rate, cheap education for the poor. As a result, it suffered from both demand and supply side constraints. Vocational courses were introduced in colleges in the recent years. In all, the targets set by the commission still seem to be elusive to reach even in the near future after 40 years, as no serious attempts were made in this direction.

Thirdly, the commission favoured promotion of excellence at all levels of education. Ten percent of the schools at every level were to be provided with additional resources so that they function at optimal level of quality to become "pace-setting" institutions! This was recommended by the commission as "the highest priority programme" (p. 463). Similarly, the commission favoured development of five or six "major" universities where "first class post-graduates work and research [becomes] possible" (pp. 506–507). This seemingly elitist idea was not favoured in case of university education, though the recommendation relating to

school education was followed up in the following decades. The scheme of Navodaya vidyalayas recommended in and set up after the National Policy on Education 1986, can be regarded as close to the proposal of the commission. The proposal on universities was not received favourably by many, as it was felt that "better results would be obtained if minimum standards can be maintained in all institutions and special additional assistance, on the basis of proper criteria, given to institutions which show a high level of performance and promise" than from concentrating the efforts and resources on 10% of the institutions.²⁷ While the proposal of the commission per se was not accepted, some universities did receive support for their excellence in education and research, and centres of excellence and inter-university centres were created and supported with extra funds that offer first class postgraduate education and research, meeting to some extent the very objective that the commission had in mind.

In addition to the above, there are several prescriptive observations made in the report which are of great significance in the present context. To cite a few, three such observations on financing of education may be noted:

The commission rightly noted that "in the early stages of educational development the rate of growth of educational expenditure ought to be approximately twice the rate of growth of national income" (p. 873). It is important to note that this is a desirable practice. For example, Schultz (1989, p. 219) stated, "during the process of economic modernisation the rate of increase in human capital is higher than that of reproducible physical capital". If we follow the dictum and the educational expenditure increases at twice the rate of growth of the economy, reaching the goal of allocating 6% of GDP to education will not be difficult at all; it can be reached very soon, as a committee of the government of India (2005) has shown.

The commission also recommended analysis of education expenditure by converting the figures into the constant prices. Though official documents of the government still do not present expenditure on education in constant prices, researchers have begun attempting analysis of education expenditures in real prices, using national income deflators or price indices.

The commission stressed the need for efficient utilisation of resources. It repeatedly made the plea to eliminate underutilisation and wastage of resources in education and to introduce measures of economisation.

8.7 Concluding Observations

The report was considered a landmark in the history of Indian education. The commission made several important suggestions, which even after 40 years, are still relevant for development of education. They are relevant not just because their implementation is over due; they are relevant today for their intrinsic value, essentially because the commission had looked into the distant future, adopted a visionary approach, built its recommendations on strong empirical evidence and knowledge—national and international, with a strong conviction on the role of education in national development, and above all with a strong commitment to national development.

Despite realising the need to be austere due to several reasons, as it worked under the overall atmosphere of austerity, the commission did not compromise on a few vital issues. For instance, it strongly advocated a national system of education; and it pleaded for universal full-time education to all children of common school type, though development of alternative channels of education was also suggested, as full-time universal education was not immediately possible. It has argued for a free common school system of public education up to the end of grade X and the adoption of neighbourhood school concept at the elementary stage (p. 458). It also suggested that all private schools must be brought into the common school system.²⁸ Third, it has recommended a large expansion of scholarship programme. It has also recommended a significant expansion of the centrally sponsored sector in education. Above all, it strongly recommended increase in the allocation of resources to education to the level of 6% of GNP.

Unfortunately, while the commission recommended a package of reforms, the government looked at the recommendations as piecemeal suggestions. As Naik (1979) observed, "It is thus a tragedy that the recommendations of the one commission which was directed to look *comprehensively* at education were considered mostly in a *piecemeal* fashion" (p. 38, emphasis original). While there can be several factors for the inaction of the government, the lack of strong political will seems to be the most important one. As a result, the Indian education system is still characterised with conspicuous failures—in eradicating illiteracy, in universalising elementary education, in vocationalisation of secondary education, in ensuring excellence and high standards in higher education, in allocating adequate resources for education, in improving the

financial efficiency of the system, all these failures, along with of course some spectacular achievements in terms of student numbers, in building one of the largest reservoirs of scientific and technical manpower in the world, in "exporting" manpower, etc. The reason for widespread discontentment with the education sector is obvious. The commission itself warned, "A report which is shelved or does not lead to action is worse than no report because it leads to frustration by arousing hopes that remain unfulfilled" (p. 897).

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NOTES

- 1. Gross national product.
- 2. Malcolm Adiseshiah: 'Foreword' to Naik (1979).
- 3. In the case of such recommendations, there is a wide difference between the commission's recommendations and their actual implementation. See Adiseshiah (1994).
- 4. Letter of Submission of the report by D.S. Kothari, addressed to M.C. Chagla, minister for education (*Report*, p. v).
- 5. The members of the commission included 11 Indians, and one each from France, Japan, UK, USA and the USSR. This enabled it to review Indian situation in a comparative manner.
- 6. Economics of education was formally born only in 1960, with the presidential address of Theodore W. Schultz (1961) to the American Economic Association. Many studies were conducted only later.
- 7. The manpower planning exercise presented in the report, as a Minute of Supplementation (pp. 937-992) was also first of its kind in India and was found to be of great significance. It was separately published Burgess et al. (1968). Chapter XIX and the Minute of Supplementation form two very important contributions of the Commission to Economics and Financing of Education in India.
- 8. Following this recommendation, a series of studies on costs and financing of universities were later sponsored/conducted by the University Grants Commission, the Indian Council of Social Science Research, the National Council of Educational Research and Training, etc.

- 9. A similar recommendation was made by the Kher Committee (1951) as early as 1950 that the government of India should spend about 10% of its total revenue on education.
- 10. This was also circulated as a paper from the Planning Commission.
- 11. The National Agenda for Governance (BJP and Alliance Partners 1998, p. 5) has promised to "formulate and implement plans to gradually increase the governmental *and non-governmental* spending on education up to 6 per cent of the GDP" (emphasis added).
- 12. The *Economic Survey* (1998–99) stated: "Financing of education increase in government and non-government spending on education, and bringing this up to 6 per cent GDP level" (p. 150).
- 13. For the first time, the terms "national income" and "GNP" were replaced by gross domestic product (GDP) in the statement. This was also mentioned in the *Economic Survey 2004–05*.
- 14. Interestingly, the recommendation to regulate the growth of higher education was opposed by many, but this figured as an important objective of educational planning in the Fourth and Fifth five-year plans, given the rising rates of graduate unemployment, which was also noted by the commission. The concern of the commission on unemployment led to a full-fledged study on the problem (eg., Blaug et al. 1969).
- 15. For example, Tilak (1994) estimated that it would be above 8%.
- 16. Author's calculations based on *Education in India* and *Analysis of Budget Expenditure on Education* (various years) of the ministry of education/human resource development, government of India.
- 17. That the proportion declined during the economic reform period is noted by many. For example, see Tilak (1996b) and Sadgopal (2004).
- 18. Naik (1979) however lists it among the recommendations that attracted *limited* attention (pp. 59–60).
- 19. Based on *five-year plan(s)*, and *Analysis of Annual Plan(s)* of the education division, Planning Commission, government of India.
- 20. Based on *five-year plan*(s) and *Analysis of Annual Plan*(s) of the education division, Planning Commission, government of India.
- 21. Primary education, according to the commission, includes lower primary and higher primary education, ie., up to Grade VII/VIII, which is nowadays being referred to as elementary education.
- 22. Quoted in Desai (1953, p. 57).
- 23. It is only in the most recent months that the UGC has launched a special research fellowship programme for weaker sections.
- 24. For a review of the national loan scholarship scheme, see Tilak (1992).
- 25. Based on *Education in India* (various years), ministry of education/human resource development, New Delhi.
- 26. See several papers in Tilak (1986b).

- 27. Committee of members of Parliament (quoted in Naik 1979, p. 140).
- 28. Unfortunately many of these recommendations, including the strong recommendation of the commission for the adoption of the common school system have been conveniently relegated to the dustbin. See Kamat (1985, p. 133).

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CHAPTER 9

Centre–State Relations in Financing Education in India

Federalism is a political device which is adopted to further ends which are always partly and sometimes predominantly economic. How far it succeeds in furthering these ends will depend partly on the nature of the constitutional arrangements, partly on the policies of the political leaders, and partly on the effectiveness with which those concerned with economic development take advantage of the opportunities presented to them.\frac{1}{2}

In any federal system, the relationship between federal and local governments is significant in the field of education. The assignment of financial responsibilities, particularly, financial assistance from the federal government for education in the provinces is of crucial importance. In both developed and developing federations, the provincial and the federal governments tend to assume an increasingly important role in education. Several characteristic features of education also make federalism viable. First, the spillover effects of education are felt beyond the boundaries of the provinces in a federation. Second, the returns to education are such that they cannot be ploughed back into the system immediately. At the same time, the financial responsibilities of education increase. Provincial governments need more and more resources for

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education, hence, greater reliance on the federal government becomes inevitable. But in a federation, protection of the federal units' autonomy also becomes a complex issue. The question is important when (a) overall federal–provincial and interprovincial relationships are debated; (b) education developments in different regions are unequal; and (c), most important, the levels of economic development of various regions are different. This chapter examines federal–provincial relations in education in India, with particular focus on financial aspects.

India is one of the few federations in the world where federalism is said to be working smoothly. The Indian system is more complex than other federations of the world like the United States, Canada, and Australia.² The degree of complexity in India leads some scholars to term the whole federal–provincial financial system one huge "interdependent economic unit." An understanding of the strengths and weaknesses of federal–state financing mechanisms in such a complex system may be useful not only for improving structures in that country but for doing so in other federations as well.

India is a federation composed of 24 states and 7 union territories, consisting of two layers of government—the union, also termed the federal or central government and the provincial or state government.⁴ The contributions of the non-governmental sector, including fees, donations, endowments, and so on, constitute about 15% of the educational expenditure in India. The third layer of government, namely, local bodies, consisting of *zilla parishads*, municipal corporations, and *panchayats*, plays an insignificant role in financing education in India, contributing not more than 5% of total finances, as shown in Table 9.1. The local bodies not only receive their requirements largely from the state government but also they have an extremely limited role in the case of education. This chapter concentrates on the subject of financing education and the share in that financing of two layers of the governmental sector, the union and the states in it.

There has been continuous controversy regarding centre–state relations in financing education in India since the problem of finances for education has reached "the proportions of a crisis for the Central as well as the state government." Some scholars argue that education is of such great national importance that it cannot be the total responsibility of the states. In contrast, proponents of decentralised political philosophy argue

	1950–51	1960–71	1970-71	1980–81
Government sector				
Central and state governments	57.1	68.0	75.6	80.0
Local governments (zilla parishads, municipalities, and panchayats)	10.9	6.5	5.7	5.0
Nongovernment sector				
Fees	20.4	11.2	12.8	12.0
Endowments, etc.	11.6	8.3	5.9	3.0
Rupees (Rs.) in millions	1144	3444	11,163	46,875

Table 9.1 Sourcewise contribution of resources to education in India (%)

Source Education in India, vol. 1 (New Delhi: Ministry of Education, various years); and Planning Commission for 1980–81

Note Percentages for each year total to 100%

that, in a vast and diverse federal polity like India, the interests of education should be the total responsibility of state governments. These views will be analysed later. The chapter begins with a historical perspective on the problem, moves to an in-depth discussion of the role of the planning and finance commissions through which major transfers of educational resources from the centre to the states take place, and ends with a summary and some tentative observations on the debate mentioned above.

9.1 IN RETROSPECT

The problem of understanding and defining the proper relationships between the centre and the states in India is much older than the country's independence. It figured prominently in the Government of India Act of 1935 and was debated even earlier. Some of the features of the present mechanism can be traced to the pre-independence period.

The centre–state relationship in education presents a varied picture.⁶ The period covering the last two centuries can be divided into two main phases, the pre-independence period and the post-independence period. Centre–state relations during these periods are different. In the earlier stages of the modern pre-independence period, at the beginning of the nineteenth century, there was neither a proper "center" nor a proper state corresponding to the centre. Later, during British rule, there was

no "national policy on education," nor was there a "national system of education." Hence, centre–state relations during the pre-independence and post-independence periods cannot be studied from a single perspective. First, the financial relationships between colonial rulers and the provincial governments in India are described, and then developments of the post-independence period are reviewed.

9.1.1 The Crown and the Provincial Relations

The process of concentration of powers either in the hands of the crown or the representatives of the crown in India under the British is called "centralization"; and when the crown, representatives of the crown, or even native rulers at the central government level did not take interest in education, the term used here is "decentralization."

The pre-independence period can be divided into several phases. During the period beginning with the Regulating Act of 1773–1833, the East India Company grew in strength and tended to accumulate more and more powers of administration. But the period before 1833 was characterised by the total absence of central control as the Court of Directors of Education in London played little role in the development of Indian education, and the directors of the East India Company were unwilling to accept responsibility for the education of the Indians. The provincial governments were autonomous in making their own educational policies and programmes. Even though the directors were compelled to accept some responsibility and incur some expenditure for education by the Charter Act of 1813, no central education machinery was created for this purpose. The general committees of public instruction that existed in the provinces did not have any counterpart at the imperial centre in Calcutta.

The Charter Act of 1833, which transformed the commercial East India Company into a governing corporation, initiated the placement of educational powers into the hands of the Crown.⁸ The central government was granted full control of Indian finances. The act led to the centralisation of administration in all spheres, including education, in such a way that the directors of public instruction needed the sanction of the imperial government at Calcutta for every expenditure on education. Centralisation continued rigidly until 1854 and less rigidly until 1870.

The Wood's Dispatch of 1854 paved the way for relaxation of rigid imperial control over education. An important feature of the Wood's Dispatch and the post-1854 period was that "the center of interest in education now shifted from London to Calcutta." This situation continued despite the complete takeover of the Indian Administration by the British crown under the Government of India Act of 1858.

A long phase of decentralisation of powers in education, initiated by Mayo, began in 1870. The British authorities had become aware of "the extra-ordinary and inherent difficulties in devising a system applicable to the whole of India." The act of 1861 provided that, except in matters of all-India concern, provincial governments should have the responsibility to legislate in accordance with local needs. Centralising power was thus put in reverse gear. There was, however, no clear demarcation of powers between the centre and the provinces.

While this decentralisation was confined to executive and legislative powers, and coordination, policy formulation, and financial assistance still rested with the centre, a few departments, including education, medical, police, jails, and so on, were handed over to the provinces. The centre also assigned some revenues to the provinces, in addition to providing for increased provincial taxation under central supervision. In 1882, sharing of revenue and expenditure between the centre and the provinces using what was called "divided heads" was attempted in place of assignments, and the scope of these divided heads was widened in 1897. The Indian Education service, created in 1897 to facilitate central recruitment of personnel in England, who were more responsible to the imperial government had no serious adverse effects on the powers of the provinces.

In 1898, Curzon came to India, and his arrival marks the high watermark of "over centralization." He inaugurated a brief period during which the education system was almost entirely controlled by the centre.

Curzon's policies were neither pursued vigorously nor abandoned altogether after his exit. However, the Montagu-Chelmsford reforms, which later became the Constitutional Reforms Act of 1919, clearly broke the legacy of Curzon. While all earlier devolution of resources was from one level of executive to another, the act of 1919 brought about the statutory distribution of powers and responsibility between the centre and the provinces. The provincial governments began to exercise

dominant authority over education. As there were stable financial relations between central and provincial governments, "education had the good fortune to receive much larger finances than it did in the earlier period." The grants-in-aid system, which still exists today, is in a sense a product of this period. The central government made generous grants to education which were unknown in the history of Indian education either before or after.

The Government of India Act of 1919 introduced diarchy in the provinces, placing education under the Indian ministers. With this act, centre–state relations began to clarify. Before 1919, the layers for decision-making in education were varied, resulting in unclear centre–state relations. The crown in England represented one level of central authority, the representative of the crown, the viceroy in India, another, and when education was transferred to Indian ministers, the ministers in Delhi represented yet another. At the provincial level, Indian officials and the representatives of the Viceroy in the provinces represented two additional layers of authority. Hence an analysis of the financial relationships in education in India between the "center" and "states" is clear and more meaningful only from 1919 onward, when education was handed over to the Indian rulers under diarchy.

Further, until 1919, no attempts were made to demarcate the spheres of jurisdiction of central and provincial governments as in a true federation. As one scholar notes, "The Government of India Act of 1919 obviously laid the foundation for Constitutional development in the country resulting eventually in the federal form of government."

Under diarchy, education was not only "provincial" but also a "transferred" subject, and constitutionally the centre was not to exercise any control over transferred subjects. The finances of the provinces were crippled by contributions payable to the central government under what was called the "joint purse" system. Education received less financial support from the centre and from the provincial governments as well. By 1921, education became totally a state responsibility. The control of the federal government on education was reduced to such an extent that it led the Hartog Committee to comment that education received an "unfortunate divorce" from the Government of India. It was unfortunate because the Government of India ceased to take any interest in educational matters and saved a lot of expenditure in that arena. Special grants to education were discontinued. The finance departments acted as "spies" on transferred subjects like education,

either vetoing or rejecting proposals made by the ministers. ¹⁵ Thus, the education sector suffered considerably under diarchy.

The Government of India Act of 1935 further increased provincial power to organise educational services. The Central Advisory Board of Education (CABE) and the education departments at the centre were closed. The control the centre had exercised over details of administration came to an end. The provincial governments enjoyed greater freedom to plan programmes of education expansion and improvement. New schemes were undertaken, enrollments of students increased rapidly, and increased grants to education were made. However, the total finances available remained too meagre to meet educational needs.

As the education sector suffered under inadequate funding, the need for central intervention became evident. The CABE was revived in 1935 but did not improve the situation significantly. With the Government of India Act of 1935, the distinction between "re-served" and "transferred" subjects disappeared. Education was classified into two categories—federal and provincial. This scheme of provincial autonomy envisaged a large measure of fiscal independence from the centre and was, no doubt, an improvement over diarchy. However, the special powers enjoyed by the governor-general or the governor greatly restricted the freedom of the provinces in financial matters, and legislative financial control was also crippled. The negative role of the finance departments was not conducive to popular administration. Decentralisation, initiated in 1919 and widened in 1935, was not accompanied by adequate delegation of financial powers.

The act of 1935 marks the beginning of the efforts of the central government to take an interest in education, and concrete provisions for education appeared in the constitution of independent India in 1950. The Government of India Act of 1935 divided the responsibilities of education more clearly between the centre and the states. While the act of 1919 made education a subject that was "partly all India, partly reserved, partly transferred with limitations, and partly transferred without limitations," the act of 1935 improved this anomalous position "considerably" by making a few areas of the education sector federal subjects and retaining major areas of education as state subjects. The constitution of India made a clearer classification, retaining, however, the basic features of the federal structure introduced in 1935. It also included elaborate provisions for devolution of financial powers to the states.

9.1.2 Development During the Post-independence Period

With the adoption of the constitution, the place accorded to education in the federal framework drastically changed. As far as centre-state relationships are concerned, the constitution made three lists: (1) union functions, (2) state functions, and (3) concurrent functions. Education was placed in list 2, except for a few minor segments that were placed in list 1. Central universities, institutions of national importance, union agencies, and institutions for professional, vocational and technical training and coordination and determination of standards in institutions for higher education were listed as functions of the union, and vocational and technical training of labour as a concurrent function. Though education was explicitly listed as a state subject, the constitution delegated more educational responsibilities to the central government. Clearly a significant part of higher education, for example, was largely the responsibility of the centre. As V.K.R.V. Rao stated, from the constitution "the Government of India obtained a larger authority over education than under the Government of India Acts of 1919 or 1935."17

The increased role for the centre in education has been justified on a variety of grounds. Rao rightly notes three factors: (a) the adoption of planning as the technique of development and the formulation of five-year plans by the planning commission, covering both central and state development activities; (b) the institution of large central grants earmarked for specific education schemes; and (c) the political accident of the same party being in power at the centre and in the states. 18 The role of the centre has been further justified on the ground that there are regional imbalances in education development, and the states themselves, constrained by their own inadequate financial resources, cannot reduce the disparities. Hence the role of the centre to check imbalances becomes unavoidable. Similarly, to maintain uniformity, high standards, and quality in education and for national integration, the central government must extend its jurisdiction to education. The centre is also encouraged to act as a clearing house and coordinating agency in every sector of education, and it can develop programmes of significant and fundamental research. 19 Central intervention is further justified on the ground that the constitution makes provision for education facilities as a right to all, particularly elementary education, and a protection of the educational interests of weaker sections. They are a part of the directive principles of the constitution. Hence, financial responsibilities should also be distributed consistently with the physical responsibilities assigned to the two levels of the governments under the constitution. As shown later, however, these principles are not actually practised.

The centre intervenes in education in three ways: the central government has its own central sector for education, which includes besides the sectors listed in Union List (List 1), the central schools, the regional colleges of education, national scholarships, and the programmes of the University Grants Commission (UGC), such as the creation of centres for advanced study, and so on. Administrative as well as financial functions of this sector are the responsibility of the centre. These activities are planned, implemented and financed exclusively by the centre. Second, there is the centrally sponsored sector, the responsibility of which the states do not accept on their own. The centre could, however, persuade the state governments to accept the responsibility of their implementation. This sector is part of the central plan for which the states act as executive agencies. The activities in this sector, designed and developed by the centre, include promotion of Sanskrit, Hindi in non-Hindi-speaking states, promotion of students' tours, and so on. The central government provides the funding for these activities. Finally, there is the centrally assisted sector, which includes programmes in which the centre is actively interested though they are embodied in state plans. The states accept the financial responsibility for this sector only partially. Enrollment of handicapped students in the integrated schools is one such activity. The financial contribution of the centre to such activities is 25–100% of the total cost.²⁰

While the constitution has placed a significant part of higher education under the control of the central government, substantial amounts of financial resources from the centre flow into the school education sector that are under the exclusive jurisdiction of the states, resulting in erosion of the autonomy of the states. Although education has been a state subject de jure, it has been de facto a concurrent subject.²¹ However, there has been no real financial concurrency.²² The constitutional amendment made in 1976, which brought education to the concurrent list, can be understood as nothing more than legalisation of what has been in existence since 1935. As Singh puts it, "What was felt vaguely and realized indirectly has now been verbalized and put in black and white."²³ While it is too early to comment on the full implication of this amendment,

the experience of the last few years does not promise improvement with respect to financial concurrency in education.

Education receives a miniscule proportion of the central budget, but about one-fifth of the states' budgets are allocated for education (see Table 9.2).²⁴ More important, the share of education in the central budget declined consistently from 2.3% in 1976-77, when the constitutional amendment was made, to 1.5% in 1985-86. One may feel that, since the total central budget is large, the percentage allocated for education may be small, but its absolute level would be high. But that is also not true (see Table 9.3). The following section examines in more detail the process of flow of finances from the centre to the states for education as envisaged by the constitution vis-a-vis the actual pattern of flow during the post-independence period.

Table 9.2 Share of education in the total budget, revenue account (department of education only)

Year	State	Center	Total
1967–68	19.8	1.6	11.9
1968-69	20.2	2.0	12.5
1969-70	20.5	2.3	13.0
1970-71	21.4	2.8	14.1
1971-72	20.3	2.5	13.4
1972-73	19.8	2.4	12.6
1973-74	20.6	2.0	13.0
1975-76	23.2	2.1	14.1
1975-76	22.9	2.0	13.7
1976-77	22.7	2.3	13.8
1977-78	21.4	2.1	12.7
1978-79	21.8	2.2	13.1
1979-80	21.6	2.0	13.1
1980-81	20.9	2.0	12.8
1981-82	20.8	1.9	12.5
1982-83	21.3	1.3	10.8
1983-84	20.8	1.5	11.4
$1984 - 85^a$	20.5	1.6	11.2
1985-86 ^b	20.1	1.5	10.8

^aRevised estimate

Source From 1967-68 to 1981-82: Handbook of Education and Allied Statistics (New Delhi: Ministry of Education, 1983), p. 130; and 1982-83 to 1985-86: Analysis of Budgeted Expenditure on Education, 1983-84 to 1985-86 (New Delhi: Ministry of Education, 1985)

^bBudget estimate

Table 9.3 Budget expenditure on education 1983–84 (education and other departments)

	Expenditure (Rs. 10 millions)	% of total budget
Center		
Revenue	622.7	2.7
Capital	0.1	0.0
Loans and advances	5.1	0.0
Total	627.9	1.7
States and Union Territories		
Revenue	5891.9	24.0
Capital	49.6	1.0
Loans and advances	8.2	0.2
Total	5949.7	17.7
Total		
Revenue	6514.6	13.6
Capital	49.7	0.5
Loans and advances	13.3	0.1
Total	6777.6	9.2

Source Analysis of Budgeted Expenditure on Education, 1983-84 to 1985-86 (New Delhi: Ministry of Education, 1985), p. 4

9.2 The Present Federal Structure and Devolution of Resources

9.2.1 The Complex System: An Introduction

In a good federal economy, both the federal government and the provincial units have adequate resources. This has not been the case in India, as the states have very few elastic revenue sources except for the sales tax and excise duties. Hence, the constitution envisaged devolution of resources to the states from the centre. The system in India makes a sharp distinction between plan (development) and non-plan (maintenance) expenditure. The process of sharing the resources by the centre and states takes place through the planning commission, a permanent non-statutory and quasi-judiciary body, and the finance commission, a statutory body appointed once every *five* years. The former takes care of the plan expenditure and the latter, the maintenance expenditure. The planning commission gets its authority of assessment of requirements of the centre and the states only by convention, and its recommendations

are not strictly binding on the centre or the states but are normally complied with, in view of its commanding influence on both the governments. The planning commission makes its recommendations largely under article 282 of the constitution, providing for discretionary transfers.²⁶ On the other hand, the Finance Commission assesses states' claims on maintenance or non-plan expenditure and makes recommendations on the distribution of resources under article 275 of the constitution. The recommendations, when adopted by the parliament and approved by the president, are binding on the centre and the states. In making recommendations, the Finance Commission is expected to consider such issues as (a) the requirements of the state governments under the revenue account to meet expenditures on administration and nonplan commitments or liabilities, (b) provisions for wages and salaries for government employees, (c) commitments on interest charges on debts, (d) transfers of resources to local organisations, (e) maintenance of capital assets, (f) maintenance of plan schemes completed in the earlier plan, and (g) requirements of the backward states for upgrading standards in general education.²⁷

The distribution of resources under the development category in any sector, including education, is in accordance with five-year plans finalised by the planning commission. The plans specify the policies, goals, targets, and programmes to be pursued during each five-year period. However, at the end of each plan, the programmes and activities initiated in the plan must be maintained, and this maintenance expenditure does not come under the purview of the planning commission but becomes a responsibility of the finance commission. In this sense, the role of the Finance Commission begins where that of the planning commission ends.²⁸

The constitution details mechanisms of sharing resources by the centre and the states through the finance commission. Tax revenue received by the central government is classified into five types: (a) taxes levied and collected by the central government whose receipts are not shared with the states (e.g., customs duties, corporate taxes, etc.); (b) taxes levied and collected by the centre whose receipts are necessarily shared between the centre and the states (e.g., income tax); (c) taxes levied and collected by the centre whose receipts may be shared with the states (e.g., excise on tobacco and other goods); (d) taxes levied and collected by the centre whose receipts are wholly transferable to the states (e.g., estate duty, tax on sale/purchase of newspapers, etc.); and (e) taxes levied by the centre but collected and used by the states (e.g., excise taxes on medicine,

toiletries, etc.). Besides distributing these tax receipts, the Finance Commission makes two other types of transfers to the states—grants and loans. Thus, there are three channels through which the Finance Commission makes all statutory transfers: tax receipts, grants, and loans.

The Finance Commission is so significant in the framework of the constitution that many have commented that the constitution assumed all transfers of resources to be statutory in nature, made primarily through the Finance Commission as a matter of right, rather than of grace. But with the advent of the planning commission, discretionary transfers overshadowed statutory transfers. "Planning had changed the economic, fiscal and also political control of the country." Even without constitutional status, the planning commission has been playing a powerful role in centre–state economic relations. 30

Thus, the distribution of education expenditure between the centre and the states is determined by the planning commission and the finance commission.³¹ The role of the Finance Commission has become increasingly important as the expenditure that comes under its purview—the non-plan expenditure—increases continuously since it is cumulative over the years. The finance commission's concern with only non-plan expenditure does not mean that it has no vital role to play in development.³² The Finance Commission works on the basis of accomplished facts of the past, and flexibility is restricted. In case of the planning commission, there is broader flexibility as it can have a fresh look at additional programmes and innovations. Nevertheless, as far as magnitudes are concerned, the role of the Finance Commission is definitely the larger of the two.

Educational planning in India is subject to decision-making at two levels, central and state, and the two should complement each other. Lack of coordination between them results in several problems. For instance, the freedom of state government to adjust education to the preferences of its own citizens "may be seriously jeopardized by schemes of assistance that give undue weightage to resource allocation dependent solely on the basis of national concerns and priorities."³³

The whole mechanism of centre-state distribution of finances should be based on rational criteria. Resources may be allocated on the basis either of equity considerations or on grounds of efficiency. The equity criterion implies equal distribution of resources between several states. However, it is now clear that equality does not necessarily result in equity. Equity in allocation of resources among different states should mean allocation of resources in such a way that all states develop their education systems equally, even if that implies unequal distribution of resources among different states. In this framework, the centre should consider the levels of economic ability of different states measured by state domestic product (SDP) per capita or a state's own education expenditure. Accordingly, the centre should allocate funds in such a way that regional imbalances in education development and education expenditures are minimised. In India, this approach sometimes fails, particularly in the case of the matching grants made by the planning commission. The larger the state's own education budget, the larger the resources it receives from the centre, due to the matching nature of the grants. Poor states with smaller outlays for education receive less from the centre, and inequalities are aggravated. The allocations by the finance commission, which aim at maintenance of the education system, are probably guided by a "rewarding" motive. The larger the education system in a state, the larger the resources received from the finance commission.

An alternate principle to guide the distribution of education resources could be the efficiency of the education system, taking both costs and output of the system into account. This criterion may suggest that more resources be given to those states where efficiency is high. Efficiency might be measured in simple ways such as broader coverage of the school-going population, fewer dropouts and failures, higher literacy rate, and so on, or in more sophisticated ways such as higher benefit—cost ratios, greater cost-effectiveness, and so on. The criterion of efficiency may or may not agree with the equity criterion. If the education system in a backward state is efficient, the pattern of allocation of resources favours equity considerations. While it may be possible in principle to evolve a criterion that integrates equity and efficiency, few criteria actually stimulate both equity and efficiency at the same time.³⁴

In India, just as in other modern welfare states, equity is an important stated objective of educational planning. Hence, one expects that the pattern of allocation of resources to education would be guided by equity considerations, with more resources distributed to economically and educationally backward states.

Regional equity has indeed been a part of the credo of the Indian planning mechanism. Both the planning commission and the Finance Commission aim at promoting balanced regional development through their transfer of resources to the states. Special assistance to hill and tribal areas, the criteria for advance plan assistance, and the consideration

given to the poor and populous (both are highly correlated) states via the Gadgil formula, including the revised Gadgil formula, are only a few provisions that guide transfers of resources from the planning commission and have implications for regional equity.³⁵ Similarly, the finance commission's awards give consideration to poverty and the inverse of per capita income in addition to the deficits in the revenue budgets of the states. In addition, there are "equalization grants" recommended by the finance commission.³⁶

It would be logical to evaluate the transfers of resources from the centre to the states in the framework of balanced regional educational development. The question of equity is, however, much more complex than simply giving preferential treatment to economically and educationally backward states. It is suggested, for instance, that the centre should shoulder the entire responsibility for providing the basic minimum educational levels in financially weak states.

One may critically evaluate the pattern of allocation of resources to education by the centre between different states through the planning and finance commissions. As stated earlier, the total finances for any sector in India, including education, consist of plan and non-plan expenditure. Due to the very nature of non-plan expenditure, and more to the labour-intensive character of the education sector, non-plan expenditure is much higher than plan expenditure, and the difference widens over time. Table 9.4 shows that non-plan expenditure was about two times plan expenditure at the beginning of the planning era in the country, whereas by 1980–81 it was six times higher. Further, the rate of growth of non-plan expenditure has been much higher than the growth of plan expenditure: 14.8 and 11.5%, respectively.³⁷ Plan and non-plan expenditures are examined separately in the following section.

9.2.2 The Planning Commission and Equity

The distribution of plan outlays in various five-year plans between the centre and the states is given in Table 9.5. During the first three five-year plans, the share of the central government in the total plan outlay for education was around 25%. During the fourth and fifth plan periods, this figure increased to more than 30%. In the sixth plan, ³⁸ the proposed central share was also 30%, but the actual expenditure was as low as 22%. After the education sector was brought into the concurrent list from the state list, contrary to expectations, there was a steep decline in the central

1980-81

	Plan expenditure	Non-plan expenditure	Total in Rs.*
1950–51	28	72	71
1960-61	38	62	234
1965-66	41	59	437
1970-71	14	86	846
1973-74	17	83	1311
1977-78	14	86	2315
1978-79	16	84	2658

Table 9.4 Plan and non-plan expenditure on education in India (%)

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Source Trends in Expenditure on Education 1968–69 to 1978–79 (New Delhi: Ministry of Education, 1980); Ministry of Education, Annual Reports (New Delhi, various years)

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Table 9.5 Contribution of centre and the states to educational finances (plan expenditure) (%)

Five-year plan (period)	Central government	State governments	Total in Rs.*
First five-year plan	25	75	304
(1950–51 to 1954–55)			
Second five-year plan	25	75	526
(1955–56 to 1959–60)			
Third five-year plan	26	74	966
(1960–61 to 1964–65)			
Fourth five-year plan	33	67	764
(1968–69 to 1973–74)			
Fifth five-year plan	30	70	585
(1974–75 to 1977–78)			
Sixth five-year plan	22	78	1047
(1980–81 to 1984–85) ^a			
Seventh five-year plan	37	63	1894
(1985–86 to 1989–90) ^b			

^{*}Figures are Rs. in 10 millions at 1970-71 prices

Source Ministry of Education, Education and Allied Statistics (New Delhi: Ministry of Education, 1983), figures at constant prices; and J. B. G. Tilak, "Educational Finances in India," Journal of Educational Planning and Administration 1, nos. 3 and 4 (July–October 1987): 153

^{*}Figures are Rs. in 10 millions at current prices

^aLikely expenditure

^bProposed outlay

	Fourth five-y	ear Plan	Sixth five yea	r Plan*	Seventh five ye	ar Plan
	Centre	Statesa	Centre	Statesa	Centre	Statesa
Elementary	2.4	97.6	6.4	93.6	5.5	94.5
Secondary	0.3	99.7	4.2	95.8	N.A.	N.A.
University and	56.7	43.3	41.3	58.7	N.A.	N.A.
higher						
Total generalb	29.3	70.7	18.3	81.6	31.8	68.2
Technical	53.4	46.6	44.3	55.7	32.3	67.7
Grand total	32.9	67.1	22.3	77.7	37.4	62.6

Table 9.6 Centre-state shares in educational finances (plan outlays), by levels of education

Source Fire-Year Plan(s) (New Delhi: Planning Commission, 1969, 1980, 1985); and "Analysis of Seventh Plan and Annual Plan, 1985–86 Proposals" (New Delhi: Ministry of Human Resource Development, 1985)

Note N.A. = not available

share in the sixth five-year plan, which was incidentally the first five-year plan of the congress government after the constitutional amendment. Even though the seventh plan aims at correcting this anomaly by increasing the share of the centre to 37%,³⁹ it may be still valid to argue that there is only physical, and no real, financial concurrency in education. While, in general, there has been a trend toward increased centralisation in total finance,⁴⁰ in the case of education finances the trend has been in the opposite direction.

The central share in plan expenditure has been rapidly increasing recently in areas where the constitution has given a lesser role to the centre to play—that is, in elementary and secondary education—while it has been declining in areas where the centre was accorded a greater role that is, in higher education. The share of the centre in elementary and secondary education has increased from 2.7% during the fourth five-year plan to 10.6% during the sixth plan; in contrast, the central share in higher education declined by 15 percentage points, from 56.7 to 41.3%, during the same period (see Table 9.6). This increase in central expenditure in state subjects leads to the contention that the role of states in the development process is being eclipsed.

^{*}Actual expenditure

^aStates and Union Territories

^bIncludes all other levels of general education

Statewise distribution of plan outlays for education in the sixth and the seventh five-year plans provides some interesting details on the allocation of resources. With respect to the seventh plan, only data for elementary and adult education are available. Table 9.7 shows the state outlays for education *approved* by the planning commission. Interestate distribution of central outlays for education is not available for either plan. This is a major limitation. Though these figures do not represent central transfers, an analysis of these outlays is of interest as it reveals the nature of the criteria (or their absence) for making the approvals. Ex ante, as far as plan outlays are concerned, in the light of equity

Table 9.7 Plan outlays for education approved by the planning commission (Rs. in 10 millions)

	Sixth five-year plan		Seventh five-year plan	n *
	Outlay	%	Outlay	%
Andhra Pradesh	73	4.5	117	6.6
Assam	88	5.4	106	6.0
Bihar	154	9.5	200	11.3
Gujarat	62	3.8	64	3.6
Haryana	63	3.9	71	4.0
Himachal Pradesh	18	1.1	26	1.5
Jammu and Kashmir	38	2.3	39	2.2
Karnataka	58	3.6	58	3.3
Kerala	50	3.1	21	1.2
Madhya Pradesh	105	6.5	130	7.3
Maharashtra	133	8.2	100	5.6
Manipur	18	1.1	16	0.9
Meghalaya	11	0.7	17	1.0
Nagaland	12	0.7	9	0.5
Orissa	55	3.3	100	5.6
Punjab	56	3.4	34	1.9
Rajasthan	101	6.2	117	6.6
Sikkim	9	.5	12	0.7
Tamil Nadu	93	5.7	104	5.9
Tripura	16	1.0	19	1.1
Uttar Pradesh	139	8.5	222	12.5
West Bengal	275	16.9	195	11.0
All states	1627	100.0	1777	100.0

^{*}Elementary and adult education only *Source* Ministry of Education

considerations one expects that educationally underdeveloped states are encouraged to allocate relatively larger outlays, so that interstate inequalities are minimised. This is particularly important as plan outlays aim at further development, involving opening of new schools and colleges and so forth, while non-plan outlays aim at maintaining the already-existing schools and colleges. Further, as the planning commission has to make, to a large extent, only matching grants, it may approve, in general, lower total or lower state budget outlays for education.

The pattern of distribution of plan resources given in Table 9.7 does not indicate any strong rationale behind interstate allocation. The pattern of allocation is related neither to the state's economic conditions, measured by SDP per capita, nor to the education development of the state, measured by the education development index. Some developed states have been approved for higher plan outlays than poor states. For example, the education outlay approved for Maharashtra, one of the educationally and economically advanced states (with the highest per capita SDP next to Punjab) was Rs. 1328 million in the sixth plan, the fourth-highest figure among the 22 states. Conversely, for Orissa, an educationally as well as economically backward state, the education outlay was Rs. 546 million, which is much less than the outlay approved for advanced states like Punjab, Haryana, Tamil Nadu and so forth. The outlays for Jammu and Kashmir, also an educationally backward state, are also small.

By using coefficients of correlation, one can examine whether outlays are related to economic or educational conditions in the states. The coefficient of correlation (Table 9.8) between the percentage distribution of the plan outlay in the sixth five-year plan and the education development index is high, statistically significant, and, more important, negative, -0.4486. This coefficient suggests a "fair" distribution of plan outlays since the higher the level of education development, the less would be the additional resources required for further growth of the system. But the relationship between the plan outlays for education and SDP per capita is not statistically significant at any acceptable level of confidence. In contrast, the seventh-plan allocations for elementary and adult education seem to be more meaningful. Both economically and educationally weaker states were approved for higher outlays compared to the others. The outlay for Uttar Pradesh forms 12.5% of the total outlay for the country, Bihar 11.3%, Madhya Pradesh 7.3%, and so on, compared to 1.9% for Punjab, 1.2% for Kerala, 4.0% for Harvana and so on. The

Plan outlays approved for education for the states	Indicators	r	t-value
Percent distribution			
Sixth five-year plan	SDP per capita	.0678	0.280
Sixth five-year plan	Education development index	4486*	2.070
Seventh five-year plan	SDP per capita	2348	0.996

Education development index

Education development index

Education development index

Seventh five-year plan

Seventh five-year plan

SDP per capita

SDP per capita

-.6390***

-.0659

-.1040

.3520

.9817***

.4436*

.8681***

3.425

7.211

0.272

2.041

0.431

1.551

21.254

Table 9.8 Plan outlays: Coefficients of correlation (r)

Seventh five-year plan

Sixth five-year plan

Sixth five-year plan

Sixth five-year plan

Sixth five-year plan

Seventh five-year plan

Seventh five-year plan

Per capita

Note Two-tailed test is used for testing the level of significance

coefficient of correlation between the seventh-plan outlays and SDP per capita (1981–82) is low, -0.2348, again, statistically not significant; but with the education development index, it is stronger and significant at the 99% level of confidence, -0.6390 (see Table 9.8).

While the interstate distribution of outlays may not necessarily be related to SDP per capita and to the education development index, which is also standardised for population size, the distribution of plan outlays per head of the population may be expected to be related to the economic and educational indicators chosen. But this is not so. The coefficients of correlation between the plan outlays per capita and the SDP per capita are very low and statistically not significant, though negative; and the coefficients between per capita outlays and the education development index are positive and much higher but significant only in the case of the sixth-plan outlays, indicating on the whole that educationally developed states receive higher plan outlays per capita for further development, and educationally backward states receive less.

The pattern of distribution of plan outlays per capita in the seventh plan is more or less similar to that of the sixth plan, the coefficient of correlation between the two being as high as 0.9817, when both are measured in per capita terms, and 0.8681 when measured in terms of

^{*}Significant at 10% level

^{***}Significant at 1% level

(70)			
Plan period	Central government	State government	Total in Rs.
Second five-year plan	14	86	1112
Third five-year plan	16	84	1732
Fourth five-year plan	4	96	4475
Fifth five-year plan*	6	94	6760
Sixth five-year plan	6	94	8331

Table 9.9 Centre–state partnership in financing non plan expenditure on education (%)

Note See Table 9.5 for corresponding time periods. Total figures are Rs. in 10 millions at 1970–71 prices

Source Ministry of Education

percentage distribution; and both are significant at the 99% level of confidence. Thus, the patterns of interstate distribution of resources approved by the planning commission for education development are not necessarily based on any accepted and stated criteria such as equity, nor is it known whether any rational and scientific criteria exist to explain these patterns.

9.2.3 The Finance Commission and Equity

Non-plan expenditure constitutes the bulk of expenditure on education. The centre's contribution to non-plan expenditure is limited. In fact, compared to plan expenditure, it is much less. From the fourth five-year-plan period onward, the centre's share declines to an insignificant proportion, as shown in Table 9.9.

The Finance Commission has an important but restricted role to play in improving the mechanism of allocation of resources to the states. This does not mean that the Finance Commission cannot consider equity, even though non-plan expenditure on educationally better states should be higher. Strengthening of the existing infrastructure and facilities, better maintenance of the existing schools and colleges, which are treated as non-plan activities, also contribute significantly to the educational levels of the states. The sixth finance commission, for instance, gave some weightage to backward states, taking into account the unfinished tasks in elementary education. The seventh Finance Commission considered poverty and the inverse of SDP per capita while

^{*4-}year period, that is, up to 1977-78

making its reassessment.⁴⁶ The eighth Finance Commission included the requirements for upgrading the standards of administration in education in its awards and allocated additional resources for clearing backlog in the construction of school buildings and for providing teachers for single-teacher school.⁴⁷ Thus the Finance Commission can play a significant role in pursuing equity.⁴⁸

The Finance Commission has to recommend the allocation of resources to states based on requirements as forecast by the states themselves for already-existing schools and colleges. The Finance Commission receives detailed estimates from the states, in general, "distrusts the state estimates which are based on solid experience," scrutinises them, and "provides their own estimates based on unspecified criteria differentially applied to different states."

The states submit their requirements on the non-plan account for a five-year period, keeping in view their own budgetary positions and the requirements of education in the present context. One would expect an educationally developed state to require more resources for the maintenance of its developed education system. Second, one would expect economically advanced states to ask for less from the center. By the same logic, the finance commissions' awards should be positively related to the level of education development in the state and inversely related to the level of economic development.

How do the actual reassessments of the Finance Commission correspond to the education development of the states? Table 9.10 presents the state forecasts, awards of the finance commissions, and variations between the two relating to the last three finance commissions.⁵⁰ The reassessments of the finance commissions for education cannot be rationally explained. The coefficient of correlation between the awards of the seventh Finance Commission and the SDP per capita is statistically insignificant and low but positive, 0.0631, and, between the awards and the education development index it is slightly higher and negative: -0.2583, but not statistically significant (see Table 9.11). The values of the coefficients changed marginally in the case of the eighth Finance Commission, the respective coefficients being 0.0798 and -0.3724, neither being statistically significant. In both cases, the signs are opposite to those expected, suggesting that neither of the two criteria was the basis for the finance commission's awards.⁵¹

The results are not much better when the state forecasts and the commissions' awards are measured in per capita terms. The simple

Table 9.10 State forecasts, reassessments by the Finance Commission, and cuts by the Finance Commission in relation to education (Rs. in 10 millions)

				F	Finance commissions	issions			
		Sixth			Seventh			Eighth	
	SF	FCR	Var	SF	FCR	Var	SF	FCR	Var
Andhra Pradesh	499.8	426.8	-23.0	6.786	882.3	-105.6	2020.7	1823.0	-197.8
Assam	150.9	154.2	3.3	291.0	274.0	-17.0	646.2	631.8	-14.4
Bihar	414.7	321.6	-93.1	788.4	654.2	-134.2	2166.4	2031.3	-153.2
Gujarat	397.4	297.9	-19.5	774.3	730.2	-44.1	1373.5	1452.0	78.5
Haryana	28.7	107.0	8.3	225.5	216.6	-8.9	521.9	502.5	-19.4
Himachal	81.0	83.6	2.6	147.5	144.6	-2.9	284.8	302.5	17.6
Pradesh									
Jammu and	61.1	59.5	-1.6	139.1	119.7	-19.4	302.7	316.6	13.9
Kashmir									
Karnataka	416.8	344.2	-72.6	869.3	8.889	-180.5	2113.7	1433.7	-680.0
Kerala	510.2	426.1	-84.1	1089.5	879.2	-210.3	1807.9	1499.5	-308.4
Madhya Pradesh	386.3	340.7	-45.6	748.3	637.6	-110.8	1587.4	1333.4	-254.0
Maharashtra	561.9	584.4	22.5	1246.6	1269.9	23.0	2768.1	2813.4	45.4
Manipur	28.5	29.3	8.0	46.6	42.4	-4.2	131.0	134.5	3.5
Meghalaya	11.7	11.3	-0.4	27.8	27.0	-0.8	113.5	61.7	-51.8
Orissa	150.1	161.1	11.0	391.7	403.3	11.6	780.8	748.6	-32.2
Punjab	184.6	193.8	9.2	406.3	372.2	-34.1	888.5	934.5	46.0
Rajasthan	259.0	267.6	18.6	777.9	552.1	-225.8	1261.3	1124.3	-137.0
Tamil Nadu	633.4	560.3	-73.1	1031.1	932.5	9.86-	2182.8	1897.2	-285.6
Tripura	37.4	35.8	-1.6	62.7	8.09	-1.9	175.5	104.0	-71.5
Uttar Pradesh	630.7	588.4	-72.4	1650.7	1254.4	-369.3	3133.9	2587.1	-546.8
West Bengal	499.5	466.4	-33.1	920.1	833.7	-86.4	2497.4	2294.4	-203.0

Source Sixth, seventh, and eighth Report(s) of the Finance Commission (New Delhi: Finance Commission, 1973, 1978, 1983)

Table 9.11 Finance commissions' awards: Coefficients of correlation

	Indicators	r	t-value
Awards of the finance commissions Total			
Seventh Finance Commission Seventh Finance Commission Eighth Finance Commission Eighth Finance Commission Sixth Finance Commission Seventh Finance Commission Per capita	SDP per capita (1976–77) Education development index SDP per capita (1981–82) Education development index Seventh finance commission Eighth finance commission	.0631 2583 .0798 3724 .9843*** .9681***	0.261 1.102 0.330 1.654 22.993 15.930
Sixth Finance Commission Sixth Finance Commission Seventh Finance Commission Seventh Finance Commission Eighth Finance Commission Eighth Finance Commission Sixth Finance Commission Seventh Finance Commission Seventh Finance Commission Eighth Finance Commission Awards of the plan outlays approved	SDP per capita (1973–74) Education development index SDP per capita (1976–77) Education development index SDP per capita (1981–82) Education development index Seventh finance commission Eighth finance commission Sixth five year plan Seventh five year plan (% distribution)	.2316 .2457 .1182 .7773*** .0495 .5282** .1685 .8181*** 6011***	0.982 1.045 0.490 5.094 0.204 2.564 0.705 5.866 3.101 2.600
Seventh Finance Commission Eighth Finance Commission State forecasts (per capita)	Sixth five year plan Seventh five year plan	.6218*** .7711***	3.274 4.993
Sixth Finance Commission Sixth Finance Commission Seventh Finance Commission Seventh Finance Commission Eighth Finance Commission Eighth Finance Commission	SDP per capita Education development index SDP per capita Education development index SDP per capita Education development index	.0258 .8743*** .0483 .7174*** .0030 .5369**	0.106 7.427 0.199 4.246 0.012 2.624

^{**}Significant at 5% level

Note Two-tailed test is used for testing the level of significance

coefficients of correlation indicate that education development of the states and the per capita forecasts of the states are positively and significantly related, even though the value of the coefficient of correlation decreases over time, particularly during the period of the three finance commissions under review, from 0.8743 to 0.7174 and to 0.5369 (all being significant at the 95% or above levels of confidence), and suggesting that, on the whole, state forecasts are more logical.

^{***}Significant at 1% level

But no statistically significant relationship exists between state forecasts per capita and SDP per capita (see Table 9.11).

How do the per capita reassessments of the Finance Commission compare with the two economic and education development indicators chosen here? The awards of the sixth Finance Commission per capita are positively but not significantly related to SDP per capita and to the education development index. In the case of the awards of the seventh and the eighth Finance Commissions, the coefficients indicate that educationally developed states received more resources per capita from the Finance Commissions, and that the relationship between SDP per capita and the awards is not significant. Thus the level of economic development of the state measured by SDP per capita rarely formed any basis for the awards of the Finance Commission for education.

The comparison of the two sets of the coefficients of correlation suggests that, while the state forecasts and the commission's awards are positively and significantly related to the level of education development, state forecasts are more meaningfully related to educational conditions than the Finance Commissions' awards, and neither of the two is significantly related to economic condition. ⁵²

Why have educationally advanced states received larger allocations from finance commissions in the past? Panchamukhi argues that it is not because these states have larger education systems to be maintained, as is generally believed, but because of arbitrary discriminatory policies of the commissions. 53 In its reassessment, the seventh Finance Commission assumed the non-plan expenditure on education to grow at a higher rate for states that have a better educational level than for educationally weaker states, an assumption that is unwarranted and that works against under-developed states.⁵⁴ Panchamukhi argues that even in case of nonplan expenditure "the weaker states should spend more in the future." He argues, "If we take all the states together and evaluate their forecasts in relation to the educational level achieved by them then one should expect that the educationally better off states should plan to spend 'relatively' less on non-plan items, assuming away the financial effects of the 'option effects' of lower education for higher education as the fulfillment of these options ought to be a part of plan rather than the non-plan."55

A quick comparison of the final awards of the finance commissions with the forecasts of the states shows that the latter were subject to severe cuts. An analysis of these cuts reveals interesting information. For instance, cuts by the seventh Finance Commission fell most heavily on states with lower educational levels and which are economically less advanced. Backward states like Uttar Pradesh, Rajasthan, and Bihar experienced severe cuts by the seventh and the eighth finance commissions, while advanced states like Maharashtra received more than requested from the sixth, the seventh, and the eighth finance commissions, and states like Gujarat, Punjab, and Haryana experienced either moderate cuts or even increases. The rationale behind these cuts is not known. ⁵⁶ Thus state forecasts are cut in a more or less arbitrary fashion and cannot be explained meaningfully. ⁵⁷ As a practical corollary, some states have tended to react in a "game theoretic" manner by either inflating their requirements or relying on "political muscle power" rather than economic or financial logic. ⁵⁸

The pattern of interstate distribution of the awards of the finance commissions has not changed over the years. Table 9.11 shows the coefficient of correlation between the awards of the sixth and the seventh finance commissions as high as 0.9843, and the coefficient between the awards of the seventh and the eighth finance commissions is also equally significant and high, 0.9681. Thus one reaches the sad conclusion that past finance commissions have proceeded "somewhat mysteriously," and the pattern of devolution of resources by the finance commissions to the states for the education sector cannot be explained by equity or efficiency considerations. Interstate disparities in education are not being reduced. In fact, it is widely noted that the resource transfer by the finance commissions in the past "has been of one of the important causes of the persistent regional imbalances in resource availability and service levels. If the inherited disparities are to be remedied, the most important objective of the new devolution must be to introduce in inter-state allocation a high degree of progressivity."

9.2.4 The Two Commissions: A Comparison

The devolution of resources by the centre to the states is made under two categories: (a) statutory (through the finance commission) and (b) discretionary (through the planning commission). While the constitution envisaged a more important role for the Finance Commission so that states would receive resources as a matter of right rather than of grace, the advent of the planning commission has changed federal financial relations in India. All development expenditure comes under the purview of the planning commission, and maintenance expenditure is under the purview of the finance commission. In other words, the planning commission and the Finance Commission have two distinct functions to perform

in the development of education—the former, to work for the growth of the system, and the latter, for its maintenance. While both institutions have important roles to play in pursuing national objectives such as equity, the role of the Finance Commission is relatively restricted. At the same time, the two commissions are related: the latter's work starts where the former's role ceases. Accordingly, one expects high correlation between plan outlays and Finance Commission awards. But, surprisingly, both are inversely and significantly related. The coefficient of correlation is -0.6011 between the sixth plan outlays per capita and the seventh finance commission's awards per capita, and -0.5334 between the seventh plan outlays and the eighth finance commission's awards.

On the whole, neither the planning commission nor the finance commission has been able to introduce progressivity into transfers of resources to the states for the education sector.⁶² The whole mechanism of federal-fiscal transfers has tended to work to the detriment of the weaker states.⁶³ Accordingly, interstate inequalities in total education expenditures including not only central and state expenditures but also nongovernment expenditures (excluding non-fee student expenditures) have increased. The coefficient of variation, a simple measure of inequality, in the expenditure on education as percent of SDP increased from 0.2103 to 0.3188 between 1960–61 and 1976–77 and from 0.3046 in 1961–62 to 0.3064 in 1975–76 with respect to expenditure on education per capita.⁶⁴ Thus, the allocation of resources to states by the planning commission and the finance commission is incompatible with the spirit of federalism.⁶⁵

The question that remains is: What determines the allocation process? As I have argued elsewhere, "essentially all basic policy decisions in education are political in character. Resource allocation policy is not exempt." No sound economic logic is applied in this context. With respect to both the planning and the finance commissions, more privileged states get a better deal, while needy states do not get just shares. More vocal states and states having a political party in power identical with, or supportive of, the ruling party at the centre are favoured in the process. In short, the model that best explains allocation of resources by the centre to the states for education may be a political model. Political models per se are not undesirable. But the interests of the biased and partisan political pressure groups often conflict with economic choices. Particularly in developing countries like India, political models have little regard for any comprehensible economic logic. 67

9.3 SUMMARY AND CONCLUSIONS

Historically, one finds varied trends in centre-state roles in education development in India. Both concentration of powers in the hands of the centre and concomitant decentralisation of powers to the states since the beginning of the nineteenth century have been noted. Centralisation has been more clearly observed during the post-independence period, culminating in the constitutional amendment of 1976 that placed education on the "concurrent" list.68

Neither the policies of centralisation nor those of decentralisation significantly helped the education sector in India. The Government of India Act of 1919 enriched the central government at the cost of provincial governments and affected the education sector considerably. The provisions of the Government of India Act of 1935 did not significantly improve this situation. In spite of serious debates on the issue, education remained a state subject for two-and-a-half decades after independence. The centre wished to take a more effective role by placing education in the concurrent list in 1976 and promised a "more meaningful relationship."69 But allocation of resources during the recent period has not shown any significant departure from the past. In fact, the share of the centre in total education finances further declined. Both during the pre- and post-independence periods, education was subjected to concurrency that was more of political and administrative nature and less of financial nature. Apparently all educational controversies and decisions have a political bias.

Equity is an important objective of planning in a welfare state like India. In India, as in other federal countries like Canada and Australia, the devolution of federal resources is based on equity criteria such as state income per capita and state's tax effort, and neutral criteria such as population. But the planning commission and the Finance Commission have not helped in reducing interstate disparities. In fact, the whole mechanism of distribution of resources cannot be rationally explained with the help of economic or education-development indicators. It is my hunch that the model that best explains devolution of federal financial resources in India is a political one.

Further, the mechanism of devolution of federal resources may add to the problems. Except in the case of a few sectors of education, federal funds flow to the education system through the states in India. Federal funds for higher education flow through the UGC, a federal agency for higher education, to the states, in contrast to Brazil, where the grants are directly routed to the universities. In India direct federal expenditures are limited. The more the intermediaries—such as the state governments and the UGC—the greater the complexity of the system. Second, the concurrency in education in India may be similar to the overriding of responsibility of federal government for education in Brazil and Nigeria. But in Brazil and Nigeria, it is restricted to higher education, while in India it covers the whole system of education. Conversely, in developed countries, no constitutional role for education is assigned to the federal government. Hence, federal grants to education in developed countries, except in Australia, are limited to categorical grants of specific types. In India, federal grants flow to the school system as well, although schools are largely under the jurisdiction of the states.

For a long period, the weaknesses in the mechanism and the resulting failures of the system have been studied and analysed. Many have argued for a thorough review of the existing relationships. The tenth conference of state education ministers in 1968 recommended, "Education development creates permanent recurring liabilities to the state governments and they are finding it increasingly difficult to meet them. Education is the most significant and costliest of social services to the nation and the Center must accept responsibility to share its growing cost. ... The existing Center-state relationship in the financing of education should be reviewed in its entirety and a new relationship which can meet, on a long term basis, the challenges of the massive programmes of educational reconstruction needed by the country should be devised."71 Unfortunately, this recommendation is as relevant today as it was two decades ago. A recent statement of the Ministry of Education argued for setting up a "high powered joint commission of the Center and the States" in this regard. 72 Centre-state financial relations in India should be thoroughly reviewed and subject to necessary reforms. In this context, there are two alternatives. It is not adequate to have physical concurrency in education. Physical concurrency without adequate financial concurrency will eventually weaken centre-state relationships. An improved situation would be one of less physical concurrency and more financial concurrency in education, that is, there should be devolution of larger resources by the centre to the states, along with less central intervention in policy formulation, planning, and administration, so that the autonomy of the states is well protected. In this context, a wide network of autonomous institutions may play an important role of mediating

between the centre and the states and in avoiding the politics of confrontation.⁷³ Alternatively, the centre should help the states widen their own resource bases, so that they need not depend on the centre for financial resources. However, in view of the fact that education has been brought into the concurrent list only recently (in 1976), the former alternative is preferred to the latter.

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Notes

- 1. A.H. Birch, "Intergovernmental Financial Relations in New Federations," in *Federalism and Economic Growth in Underdeveloped Countries*, ed. Ursula K. Hicks (London: Allen & Unwin, 1961), p. 113.
- 2. See several papers in Hicks, ed. Also see A.H. Birch, Federalism, Finance as Social Legislation in Canada, Australia and the United States (London: Oxford, 1957); J.D. Sherman, "Towards a Federal Role in Financing Inter-state Equalization in U.S. Education," Occasional Paper no. 33 (Centre for Research on Federal Financial Relations, Australian National University, Canberra, 1984); M.L. McMillan, "Local Inter-government Relations in Australia and Canada," Occasional Paper no. 23 (Centre for Research on Federal Financial Relations, Australian National University, Canberra, 1981); and, particularly on education, see Keith Hinchliffe, "Diversified Sources of Educational Finance: Lessons from Federalism," Journal of Educational Planning and Administration 1, nos. 3 and 4 (July-October 1987): 12-32; and David Winkler, "Federation and Education Finance: The Case of Elementary Education in Brazil and the USA" (paper presented at the International Conference on Economics of Education, Institute de Recherche sur l'Economie de l'Education [IREDU], Dijon, 1986, mimeographed).
- 3. M. Abu Baker, *The Union and the States in Education* (New Delhi: Shabd Samachar, 1976), p. 206.
- 4. Both terms, "federal" and "central," are used here synonymously, even though definitionally they are distinguishable. While "federal" means a sisterhood of states, "central" denotes a tendency with accompanying

concentration of power. This distinction often gets blurred, but the seat of federal form of government is the centre and thus both are called, inaccurately of course, "central." About the nature of government, neither central nor federal guarantees democratic form of government. See R.P. Singh, "Education on the Concurrent List—A Historical Analysis," *Education Quarterly* 24, no. 1 (April 1977): 1–4. Further, it may be noted that the constitution of India refers to "union" government and not central government.

- 5. Challenge of Education: A Policy Perspective (New Delhi: Ministry of Education, 1985), p. 88.
- 6. See, for a detailed account, J.P. Naik and Syed Nurullah, A Students' History of Education in India (1600–1973), 6th rev. ed. (New Delhi: Macmillan, 1974); and V.K.R.V. Rao, "Center-State Relations in Education." The Union and the States, ed. S.N. Jain, S C. Kashyap, and N. Srinivas (New Delhi: National Publishing House, 1972), pp. 178–86. See M.J.K. Thavaraj, Financial Management of Government (New Delhi: Sultan Chand, 1978), for a general description of evolution of financial administration during the pre-independence period.
- 7. Naik and Nurullah.
- 8. This forms a turning point in the history of Indian education. "This was the beginning of the state system of education in India under the British rule" (ibid., p. 8).
- 9. Ibid., p. 149.
- 10. Ibid.
- 11. Singh, p. 3.
- 12. A. Mathew, *History of Education of the Government of India: An Organizational History* (New Delhi: National Institute of Educational Planning and Administration, 1989).
- 13. Naik and Nurullah, p. 235.
- 14. Singh, p. 3.
- 15. See Thavaraj, p. 53.
- 16. Naik and Nurullah, p. 365.
- 17. Rao, p. 179.
- 18. Ibid. See also J.P. Naik, "The Role of the Government of India in Education," in *Educational Studies and Investigation* (New Delhi: National Council of Educational Research and Training, 1962), pp. 1–32.
- 19. See also J.P. Naik, "The Role of the Central, State and Local Governments and Voluntary Agencies," in The *Indian Year Book of Education* (New Delhi: National Council of Educational Research and Training, 1964), pp. 433–51.
- 20. Central grants of these three kinds, it is often noted, "lead to the decision making at the state level being replaced by Central decision and to that extent such grants erode state autonomy" (Raja J. Chelliah, P.K.

- Agganval, R. Ghoshal, A. Gupta, and M.G. Rao, Trend and Issues in Indian Federal Finance [New Delhi: Allied, 1981, p. 4]).
- 21. This is what the Kothari Commission (see *Education and Development: Report of the Education Commission*, 1964–66 [New Delhi: Ministry of Education, 1966]) wanted: education "should continue to be a state subject, but it should be looked upon as a national concern" (J.P. Naik, *Education Commission and After* [New Delhi: Allied, 1982, quoted at p. 123]).
- 22. Rao, p. 183.
- 23. Singh (n. 4 above), p. 1. A recent statement of the Ministry of Education also seems to admit the same: Even though education is now a concurrent subject in the Constitution, the implications of this provision are still to be considered and incorporated into the system (Challenge of Education [n. 5 above], p. 79 [emphasis added]). Quite surprisingly, a more recent policy statement promises nothing better: "The Constitutional Amendment of 1976 ... was a far-reaching step ... [but] ... the role and responsibility of the states in regard to education will remain unchanged" National Policy on Education, 1986 (New Delhi: Ministry of Human Resource Development, 1986, p. 5 [emphasis added]).
- 24. These figures refer to the "revenue" account only. The "capital" account in the budget on education is too small to change these proportions significantly (see Table 9.3).
- 25. See D.T. Lakdawala (*Union-State Financial Relations* [Bombay: Lalvani, 1967]) for a discussion on the centre–state financial relations in India.
- 26. In fact, article 282 of the constitution is like a safety valve to meet with unanticipated eventualities.
- 27. See J. Veera Raghavan, "Non-plan Resources for Education: The Role of Finance Commission" (paper presented in the seminar on Mobilization of Additional Resources for Education, National Institute of Educational Planning and Administration, New Delhi, 1982, mimeographed).
- 28. There is room for enough debate, if not confusion, on the scope of the plan and non-plan expenditure on education. For example, opening up a school is treated as plan expenditure, but if all the facilities are not provided in the same plan itself, it can be argued that these facilities, including additional buildings and new teachers, should be treated as committed or non-plan expenditure and should be taken care of by the finance commission. A wider definition of the plan and non-plan expenditure on education may suggest that, while an increase in enrollment due to an increase in the enrollment ratio (as a percent of population) may be included under the plan category, an increase in enrollment due to an increase in the size of the population (the enrollment ratio remaining the same) may come under the non-plan category. See "Memorandum to the Eighth Finance Commission" (National Institute of Educational

Planning and Administration, New Delhi, 1982, mimeographed). Further, one notices that the classification of the government expenditure into plan and non-plan has not only assumed undesirable rigidity but also gathered itself a connotation which is justified neither by facts nor by logic. In the popular mind, an entirely misleading idea has been created that whatever can be regarded as plan expenditure is socially desirable, while the non-plan expenditure is a "dead burden." At the same time, there are some who strongly feel that the distinction is "a sound working division, [that] has worked well and should be continued," e.g., Malcolm S. Adiseshiah, "Center-State-University-College Partnership in Education" (paper presented at the national seminar on Higher Education and the Future, University of Bombay, 1983, mimeographed).

- 29. Baker (n. 3 above), p. 206. Thavaraj also observes, "Hardly more than one-third of the gross central transfers flow at the instance of the Finance Commission. This is shocking because the Finance Commission was the principal agency envisaged by the Constitution for smoothening Center-state imbalances in financial resources. But in practice, more than two-thirds of the fiscal transfers have been outside the purview of the Finance Commission" (Thavaraj [n. 6 above], p. 107). See also S. Gulati, "Financial Relations," *Seminar* 289 (September 1983): 33–38.
- 30. See Thavaraj, p. 125.
- 31. Transfers of resources by the centre to the states that fall outside the purview of the planning and finance commissions have been constantly increasing (see Thavaraj). However, with regard to the education sector, no reliable data are available.
- 32. This argument is taken up for discussion later.
- 33. Chelliah et al. (n. 20 above), p. 2.
- 34. M. Raza and J.B.G. Tilak, "Long Term Educational Planning," in *Educational Planning: A Long term Perspective*, ed. M. Raza (New Delhi: Concept), pp. xvii–xxix, esp. pp. xix–xx. For a general discussion on criteria of resource allocation for efficiency and equity, see Walter W. McMahon. "Efficiency and Equity Criteria for Educational Budgeting and Finance," in *Financing Education: Overcoming Inefficiency and Inequity*, ed. W.W. McMahon and Terry G. Geske (Urbana: University of Illinois Press, 1982), pp. 1–35.
- 35. See C. Wallich, "State Finances in India," Staff Working Paper no. 523 (Washington, DC: World Bank, 1982), for a recent discussion.
- 36. See, e.g., Raj Krishna, "A More Equitable Distribution of Resources," in *Report of the Finance Commission 1978* (New Delhi: Finance Commission, 1978), pp. 108–22.
- 37. These are, however, in current prices. In India, hardly any reliable estimates on expenditure on education are available at constant prices. See J.B.G. Tilak and N.V. Varghese, "Resources for Education in India,"

Occasional Paper no. 2 (National Institute of Educational Planning and Administration, New Delhi, 1983); and J.B.G. Tilak, "Educational Finances in India," *Journal of Educational Planning and Administration*, 1, nos. 3–4 (July–October 1987), for some estimates of expenditure on education at constant prices. In the present chapter also some figures are given in real prices (see Tables 9.5 and 9.6). Since the focus here is largely on the relative (percentage) shares of the centre and state governments in financing education, it does not matter whether the estimates are in current prices or in real terms.

- 38. See Sixth Five Year Plan, 1980–85 (New Delhi: Planning Commission, 1980)
- 39. Seventh Five Year Plan, 1985–90 (New Delhi: Planning Commission, 1985).
- 40. The states' own revenues as a percent of total state expenditure decreased from 81 in 1950–51 to 68 in 1975–76. See Chelliah et al. (n. 20 above), p. 41.
- 41. The very term "approval" is indicative of the degree of centralisation in the planning process in the country. The nature of approval may seem to be in conformity with the general feeling that "the federal government should have the *ultimate* responsibility for expenditure decisions, which if made by the states would have spillover effects beyond state boundaries"; see Russell Mathews, *Fiscal Equalisation* in *Education* (Canberra: Centre for Research on Federal Financial relations, Australian National University, 1983), p. 6 (emphasis added). The approved outlays in Table 9.7 consist of central and state shares. However, here no breakdown is available.
- 42. The education-development index is constructed based on enrollment ratios (enrollments as proportion of relevant age-group population) at different levels and unit-cost proportions. The latter were used as weights. See J.B.G. Tilak, "Inter-state Disparities in Education Development," *Eastern Economist* 73, no. 3 (July 20, 1979): 140–46, reprinted in *Regional Disparities in India*, ed. K.R.G. Nair (New Delhi: Agricole, 1981), pp. 33–47. Table 9.12 in the Appendix shows the states in India ranked by this index as well as by state domestic product (SDP) per capita.
- 43. See also M.C. Purohit, "A Study in Union-State Relations," in *University and College Finances*, ed. Amrik Singh and G.D. Sharma (New Delhi: Association of Indian Universities, 1981), pp. 208–14.
- 44. P.R. Panchamukhi, "Educational Finances in a Federal Framework" (paper presented at the seminar on Mobilization of Additional Resources for Education, National Institute of Educational Planning and Administration, New Delhi, 1982, mimeographed).

- 45. See *Report of the Finance Commission*, 1973 (New Delhi: Finance Commission, 1973).
- 46. See Report of the Finance Commission, 1978.
- 47. See *Report of the Finance Commission*, 1983 (New Delhi: Finance Commission, 1983), p. 242.
- 48. For instance, the seventh Finance Commission clearly states, "Our focus should be specifically on how to place the financially weaker states in a position from where with the guidance of the planning commission, they could get a better start than has been the case in the past, in absolute terms as well as relative to the advanced states. In our view, the role of the finance commission should not be negative, of filling in the revenue gaps only, but positive in that its scheme of devolution gives a better start for developmental outlay" (*Report of the Finance Commission*, 1978, p. 62).
- 49. Tapas Majumdar, "The Role of the Finance Commission: Planning the Non-plan Outlays in Higher Education," *Journal of Educational Planning and Administration* 1, nos. 3–4 (July–October 1987): 1–11, quoted at p. 5.
- 50. The ninth Finance Commission was constituted in June 1987, and only an interim report was submitted recently.
- 51. In a similar exercise, Panchamukhi has used alternative indicators of education development and found a coefficient of correlation of 0.2463 between literacy level (1971) and the awards of the finance commission; between the allocations and enrollment ratios at primary and middle levels of education the coefficients are, in fact, negative, -0.2208 and -0.4202, respectively. If the coefficients are negative, one may view the allocation of the Finance Commission to be favouring the weaker states. With respect to enrollment ratio at the primary level, a level that is of serious concern for both the centre and states, the coefficient of correlation is too low to be statistically significant.
- 52. Panchamukhi also found that states are more rational and they exhibit more competence and greater realism in making their forecasts than the finance commission. Panchamukhi explained the "rationalism" and "competence" with the help of the coefficient of correlation: if the coefficient of correlation between the state forecasts and education development is higher than between the awards of the Finance Commission and education development, the states are more rational and competent.
- 53. It is generally believed that there is a built-in mechanism through which the developed states get larger allocations at the cost of poor ones from the finance commission. See, e.g., Purohit (n. 43 above); and K.R.G. Nair, "Finance Commission and Inter-State Disparities in India," in *Regional Inequalities in India*, ed. L.S. Bhat et al. (New Delhi: Society for the Study of Regional Disparities, 1982), pp. 98–113.

- 54. Panchamukhi.
- 55. Ibid.
- 56. The scrutiny is not a public process. As Majumdar observes, "There appears to have been more privacy accorded to the process of scrutiny than could have been intended when the Finance Commissions were made statutory bodies in contrast to the Planning Commission" (Majumdar, p. 5). The cuts effected by the seventh Finance Commission have no significant correspondence either with the SDP per capita, the coefficient of correlation being -0.03102, or with the education development, the coefficient of correlation with the education-development index being -0.2469. The respective coefficients referring to the eighth finance commission, 0.3561 and 0.2195, are also not significant.
- 57. One may even term these cuts "coefficients of distrust" between the Finance Commission and the state governments. See Panchamukhi (no. 44 above).
- 58. See Majumdar, p. 5.
- 59. Ibid., p. 4.
- 60. However, "it is extremely doubtful as to whether even a deliberate attempt on the part of the Finance Commission to allocate the total amount transferred between the states in such a way as to reduce interstate disparities in levels of living, would have led to reduction in these" significantly (Nair, p. 105). After all, the larger the allocation by the Finance Commission to a state in the current period, the larger the allocation by the planning commission to it in the earlier plan period.
- 61. Raj Krishna (n. 36 above), p. 109.
- 62. See I.S. Gulati and K.K. George, "Inter-state Redistribution through Budgetary Transfers," *Economic and Political Weekly* 13, no. 11 (March 18, 1978): 523–28; and K.K. George, "The Fiscal Transfer Mechanism in India: An Appraisal," in Bhat et al., eds., pp. 74–97.
- 63. Even with respect to overall federal transfers, similar conclusions have been reached by several researchers. For example, Thimmiah found that poverty and federal transfers by planning commission/finance commissions over the last 30 years were negatively and not significantly correlated; these transfers are also negatively but not significantly correlated with physical quality-of-life index and also with per capita state domestic product (in constant prices). G. Thimmiah, *Burning Issues in Center-State Financial Relations* (New Delhi: Ashish, 1985). See also Wallich (n. 35 above). The coefficient of variation is defined as standard deviation as a proportion of the mean.
- 64. See also J.B.G. Tilak ("Costs of Education in India," *International Journal of Educational Development* 8, no. 1 [1988]: 25–42, esp. p. 35), who found that the coefficient of variation has increased stupendously in case of primary and middle levels of education (together they comprise the compulsory elementary level).

- 65. See also Mrinal-Dutta Chaudhuri, "Economic Regulation and Planning," *Seminar* 269 (September 1983): 29–32.
- 66. J.B.G. Tilak, "On Allocating Plan Resources to Education in India," Margin 16, no. 1 (October 1983): 93–102. See also Tilak, "Educational Planning and International Economic Order," Comparative Education 18, no. 2 (July 1982): 107–21, and "Political Economy of Investment in Education in South Asia: A Reply," International Journal of Educational Development 6, no. 3 (1986): 209–14. Pan-chamukhi also concludes, "On the whole, the educational finances of the state governments are a result more of a political process which, most often is not based upon sound economic logic and rigorous calculations." See also A. Chatterji, The Central Financing of State Plans in the Indian Federation (Calcutta: K. L. Mukhopadhyaya, 1971).
- 67. See Gary S. Fields, "Allocation of Resources to Education in Less Developed Countries," *Journal of Public Economics* 3, no. 2 (May 1974): 133–43; and J.B.G. Tilak, "Allocation of Resources to Education in India," *Eastern Economist* 75, no. 9 (August 29, 1980): 536–42, for a description of the dangers involved in the political model. See also Susanne H. Rudolph and Lloyd I. Rudolph, *Education and Politics in India* (New Delhi: Oxford, 1972), p. 30.
- 68. The trend on the financial side can be easily noted. As against a meager Rs. 0.1 million in the first half of the nineteenth century, the center's contribution to education in the sixth 5-year plan alone is above Rs. 6000 million (in current prices). The concentration process is universal: "The responsibilities of education get concentrated in federal government of the country over a period of time" (Alan T. Peacock and J. Wiseman, *Growth of Public Expenditure in the United Kingdom* [Princeton, NJ: National Bureau of Economic Research, Princeton University Press, 1961]).
- 69. National Policy on Education, 1986 (n. 23 above) p. 5.
- 70. For a discussion on the role of the University Grants Commission in financing education in India, see J.B.G. Tilak, "University Finances in India," *Higher Education* 17, no. 6 (1988): 603–35, esp. 619–24.
- 71. Proceedings of the Tenth Conference of the State Education Ministers (New Delhi: Ministry of Education, 1968), p. 54.
- 72. Challenge of Education (n. 5 above), p. 88.
- 73. Dutta-Chaudhuri (n. 65 above), p. 32.

APPENDIX

Table 9.12 States ranked on the basis of education development index and state domestic product per capita, 1974–75

State	Education development index	SDP per capita
1. Andhra Pradesh	17	9
2. Assam	16	17
3. Bihar	21	18
4. Gujarat	12	5
5. Haryana	6	3
6. Himachal Pradesh	4	6
7. Jammu and Kashmir	7	12
8. Karnataka	11	15
9. Kerala	3	11
10. Madhya Pradesh	19	13
11. Maharashtra	8	2
12. Manipur	1	10
13. Meghalaya	10	20
14. Nagaland	2	8
15. Orissa	18	19
16. Punjab	5	1
17. Rajasthan	20	16
18. Tamil Nadu	9	7
19. Tripura	15	21
20. Uttar Pradesh	14	14
21. West Bengal	13	4

Source J. B. G. Tilak, "Inter-state Disparities in Education Development," Eastern Economist 73, no. 3 (July 20, 1979): 146

CHAPTER 10

Inadequate Funding for Elementary Education

10.1 Efficiency and Equity

Elementary education is a public good—a pure public good and a merit good of high order, which produces huge externalities also widely known as benefits—economic, social, political and cultural—that accrue to the whole society. Secondly, education is a basic need, a 'minimum need' in the Indian development planning framework, like food, clothing and shelter. Third, elementary education is a constitutional mandate for the State to provide it to all in the age group of 6-14, free and compulsory. Elementary education is also considered now under the Constitution, a fundamental right, a justiciable right, provision of which cannot be denied on any count. Further, thanks to pioneers like Amartya Sen and Mahabub Ul Haq, now it is realised that education is development in itself rather than merely an instrument for development. The role of education can be constitutive as well as instrumental in enhancing human capability. Also education is both efficient and equitable. In fact, efficiency in education should necessarily be inclusive of equity. Public finance of education helps to make it equitable and at the same time efficient. Market mechanism fails in the efficient operation of education sector due to the presence of positive externalities—public nature, imperfect

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competition, asymmetric information, etc. These features are too important to be ignored while discussing the role of the state of education in India and specifically the Right to Education Bill.

Let me state at the very outset that finances are important, but I also note that finances are not a sufficient condition for educational development. They are a necessary, a critically necessary catalyst for development. I will briefly describe the overall trends in allocation of resources for elementary education.

First, government grants to education in absolute terms and real prices and as a proportion of national income or total budgetary resources have been declining or at best reluctantly increasing during the recent years. Union government's allocation is increasing whereas relative share of state governments is dropping and the role of local bodies is very much negligible. Second, the household expenditure to elementary education is increasing rapidly not because of the parents' willingness to pay, but because of compulsion to pay, as the state does not spend enough. Third, there is no systematic information on community contributions to education and the little and scattered information shows that they are also increasing gradually. Fourth, the private sector's contribution, excluding households, is very negligible both in absolute and relative terms. A few years ago it was estimated that the private sector's non-fee contribution amounted to 6% of the total government expenditure on secondary education in the country. In absolute terms it is very microscopic. Fifth, the contribution of external aid to education sector is insignificant and shows a declining trend. We have taken external foreign aid for education, specifically primary education for over a decade. There has been a significant increase from very small amounts to very big amounts during the period. Even though the overall amounts are small in size, the effects are sizeable but not necessarily desirable. And in fact, there are many which are not desirable. Good or bad, the phase of foreign aid to primary education seems to be coming to a close.

10.2 Budgetary Allocations

Total government expenditure on education in 2007–08 was of the order of Rs. 159,000 crore, which formed 5.7% of the total expenditure on all sectors. Education in the union budget accounted for 5.8% in the budget of the states/union territories (revenue and capital together) 5.7%. In the capital budget, education's share is almost zero while

in the revenue budget it was 7.1% in the union budget and 19% in the states budget.

The trends in government expenditure on education in revenue budget from 1967–68 to 2006–07 show that while the share of education in the union budget is slowly increasing to 7.1% in 2006–07, the share of education in the states' budget is either declining marginally or at best stable around 19%.

Not only the department of education but quite a few other departments also spend on education. The education department is, of course, responsible for a major share in expenditure on education, while other departments also chip in with significant amount of resources. Among the other ministries, department of health and family welfare, agriculture, youth affairs, and culture are important contributors.

The distribution between plan and non-plan expenditure on education is also important. Plan expenditure is meant for new/additional developmental programmes, whereas non-plan expenditure is essentially maintenance expenditure. Most plan expenditure items become non-plan expenditure items by the end of the five-year plan. Plan expenditure on education formed about 30% of the total in 2005–06; the rest was non-plan expenditure.

There are two important national goals on financing education in India: to allocate 6% of national income to education, as suggested by the Education Commission (1966) and to allocate about half of the total to elementary education. For a very long period we have the first goal, viz., that out of the national income, however you measure, whether GNP or GDP, it was agreed that 6% will be spent on education. The second important goal that was also well stated by the government in the recent years repeatedly stated that half of the total on education would go to the elementary education and the remaining half will go to secondary and higher education.

Let us see what has been the performance particularly with respect to the 6% goal. This was a recommendation made by the Kothari Commission long back in 1966, to be realised in the next 20-year period, i.e., by 1986. This is not merely a recommendation from one of the commissions, but it is also a resolution approved by our Parliament in 1968, when it approved the first National Policy on Education 1968. Unfortunately, not much significance was attached nor any seriousness was shown regarding this norm. Since, we did not achieve the goal from 1986 till now, it has been repeatedly reiterated every time in every five-year plan, every annual plan, every policy statement, and every political

party also mentions it in its manifesto, that we will get 6% of the national income for education during our term. Over the years, this has increased: from less than 1% in the beginning in 1951-52 to 3.7% at the current levels. This is a very slow increase, a reluctant increase, occasionally falling down in between. Not only that, had we been serious with respect to the 6% national goal, which was planned in 1966 to be realised by 1986, our growth would have been of a different kind. From the level of below 2% or so in 1965-66, had it reached 6% by 1986, and then continued at the same level, we would have been in a much better position. Taking the 6% norm, one can say that there is a huge deficit in spending on education in the last 30 years. As we continue to spend much below the proposed norm, the backlog in funding is bulging day by day. It is very important to note that the current level is of course, not only much lower than the recommendations made by the commission and the commitment by the government but also much less than the actual needs. If we re-estimate now, and there have been estimates recently made, the requirements would be much above 6% of the national income.

If this percentage of national income is split between the central and the state governments then it is estimated that the states have reduced the expenditure in absolute terms and also in proportions over the years. This has come down in the last eight-nine years from 3.8 to 2.8% of the national income, while it has increased from 0.5 to 0.9% in the central government meaning the centre's contribution is really small. So if the union budget makes a significant increase in their allocation, as it has made, for example, in the 2008-09 budget, it will still be very far away from the target of 6% national goal, unless the state governments also raise their allocations substantially. Both of them put together would be 3.7% presently while it was 4% in 2001. But again, we were not able to maintain that level eight years ago. So, the present level of 3.7% is way below the 6% norm, less than the required requirements and also importantly, is less than what many developing countries spend. Forget about the rich countries, even the poorer countries are spending much more than what we are spending today on education. I will say that this is a goal that has been least discussed critically but widely accepted by every political party and this is also the goal that is least cared for.

If you look at the over all allocation in the annual five-year plans for the total education sector, there has been a very steady fall from 7.9% in the First five-year plan to 2.7% in the Sixth five-year plan. Since then, there have been some increases, thanks to the National Policy on

Education, 1986 and the launching pads like the Operation Blackboard. In the Tenth five-year plan, for the first time, we allocated a proportion higher than what was allocated in the first plan. It formed nearly 10%.

10.3 BALANCING INTRA-SECTORAL ALLOCATION

In the total allocation for education in the Tenth five-year plan, about 70% was spent on elementary education and the remaining was spent on other sectors of education. It is important that we recognise the simple truth that increase in allocation to elementary education, may in relative terms, would result in cuts on other levels of education. As the share of elementary education increased, the relative share of higher education suffered most. In the Tenth plan hardly 8% of the total was allocated to higher education. Well, all this is with respect to the plan expenditure.

Reviewing the figures of the plan and the non-plan expenditures put together, on average, they are more or less static for the last seven-eight years. Elementary education got a little more with 55% of the total educational expenditure, and the remaining 45% goes to the secondary, higher and other layers of education.

10.4 Spending on Elementary Education

Expenditure on elementary education as a proportion of national income has increased from 1.3 to 1.7% and then came down to 1.6% recently. Again you will find that this is a small increase even though this is the period in which we repeatedly reiterated the commitment for universalisation of elementary education.

In the plan expenditure, the share of the central government is increasing on elementary education very rapidly and today, nearly three-fourth of the total plan expenditure on elementary education comes from the central government and the state governments meet one-fourth of the total expense. The allocation of the state governments is obviously seeing a slowdown posing a very serious implication for the Right to Education Bill and the context in which we are discussing it. All the additional expenditures we are referring to in the context of elementary education, the Right to Education Bill in particular, will be put under the plan expenditure and then in this case one has to see as to which level of the government has to share the total financial bill, the centre or the state governments. The picture is different in case of non-plan

expenditure. Nearly 99% of the total non-plan expenditure on elementary education is met by the state governments and the centre spends only on its own schools like the central schools. In all, taking plan and non-plan expenditure together, the share of the union government in elementary education increased from 11% in 2001–02 to 27% in 2007–08 and correspondingly the share of the states declined from 89 to 73% during the same period.

10.5 SSA, MIDDAY MEAL AND OTHERS

The Sarva Shiksha Abhiyan, which was the flagship programme started by the NDA (National Democratic Alliance) regime in 2001, is perhaps the only one that has defined in quantitative terms the centre–state relationships with respect to the financing of education and financing of elementary education in particular. According to SSA, the central government met 85% and the state government 15% of the expenditure on elementary education in the Ninth five-year plan; the respective shares changed to 75 and 25% in the Tenth Plan. The figures settled at 65 and 35% in the Eleventh five-year plan. By the end of this plan, it was expected to be shared equally between the centre and states. This is the issue on which state governments are quite unhappy. Some feel that the 50–50 responsibilities would put serious constraints on the state governments which don't have sufficient funds of their own to spend on elementary education and as a result, the goals may remain unaccomplished.

The central government has in the recent years made a very specific effort to raise resources for elementary education in the form of education cess. But whether this is a supplement or a substitute to the total general budgetary allocation is a question mark. There has been a significant increase in educational cess revenues and whole money is being spent on elementary education and particularly on the Sarva Shiksha Abhiyan and the midday meal programmes. Another scheme called the Prathamika Shiksha Kosh, which is a non-relapsable fund for financing elementary education, is created essentially with the revenues received from education cess. It is important to note that about three-fourth of the total central government expenditure on elementary education comes from the cess (Tilak 2006). The union government's non-cess spending on elementary education is quite marginal. Eventually, if this continues then it is quite possible that the educational cess would take care of the total elementary education expenditure of the central government and there is no need for the government to allocate any amount out of its general pool of resources. We have to examine whether this is acceptable or not. Most education systems are largely financed out of general tax and non-tax revenues and rarely depend on earmarked taxes like the education cess.

There are three components of the elementary education in the budget, the Sarva Shiksha Abhiyan, the midday meal and 'others', the last one of which used to be quite sizeable in the beginning of 2001 or so. More than 50% of expenditure was on others. Now, the others have been trickled down and everything is put under the SSA. So, the SSA and the midday meal accounts for 97% of the total expenditure. Other remaining items include very specific programmes like the Mahila Samakhya, strengthening of the teacher training institutions, and Nehru Bal Bhawan.

An important query arises that out of the total financial plan that is allocated to elementary education, how is it being spent on various activities? The relevant figures are static for the last ten years. Very little money is spent on direction, inspection etc. and sad but the whole inspectorate system has collapsed completely since the mid-1990s, raising questions on quality of education. The expenditure on the government schools account for 40% of the total expenditure on elementary education. The grants to private schools account for more than 20%; grants to local body schools account for one-fourth of the total expenditure and others are very insignificant. However, quality improvement related items like textbooks, teacher training and scholarships get less than 1% of the total elementary expenditure of the state and central governments put together. So, bulk of the expenditure is on the private schools as a sizeable part of the spending goes to the private schools as aid. Now if you look at the private-aided schools for which we have latest statistics, about one-fifth to one-fourth of the total expenditure on elementary education goes to private schools as aid. This can be noted as a big increase. Now, there is one specific clause in the Right to Education Bill, according to which not only the aided schools but also the unaided schools will also be funded by the State. The bill states that private schools will have to admit at least 25% of the students from whom no fees will be charged. They have to be provided free education by the schools but the expenditure will be reimbursed by the State. If private schools admit more than 25%, the government will reimburse the expenditure on those students too. It means that if more students join private schools relatively lesser amount of resources will be available to the government schools including local body schools. The provision is a clear indication of government's intention to encourage private schools even at elementary level.

Elementary education is not free though it is expected to be free according to the Constitution (Tilak 1996). Besides the tuition fee in schools, including the government schools and local body schools, there are a variety of other kinds of fees that are being charged at the primary level. Further, there is other expenditure that families have to meet in terms of purchase of the uniforms, books and transportation, which is quite sizeable. According to the NSS data of 1995–96, household expenditure per student per annum was quite high; even the poorest households spent Rs. 197 on primary and Rs. 426 for middle school education.

Economic analysis would also include opportunity cost of children's education. But even if you ignore the opportunity cost, still we find that the total household cost including the fees that is paid to the school accounts for one-third to the two-fifth of the total cost of elementary education. After all, elementary education is supposed to be free. Gross estimates at the national level show that total family expenditure on education is increasing relative to the government expenditures. So today, nearly 40% of the expenditures come from the families and the remaining 60% comes from the government, which used to be much higher earlier.

10.6 Revolving Myths

Now, let me make a few statement-like observations, which are quite important and relevant in the context of Right to Education Bill. First, as I said in the beginning, if someone argues that money is important and that it will solve all the problems, it is not true. But if somebody says that money is not important at all for education that is also not true. We need money and without money nothing can be done. So we really need to give serious attention to the public funding of education.

Second, it is being often strongly stated by many that we don't need to provide elementary education free to all. There are many people who believe that free education is bad, question the wisdom of the constitutional makers in providing free education, even argue that the constitutional promise of providing free and compulsory education should be ignored. They ask why education should be free at all when the people are willing to pay and have the ability to pay; it is better to tap the ability of the people to pay and increase our resources. This is also based on a wrong assumption that in many of the rich countries governments do not spend much on education and people spend on their own. This is a

wrong assumption in the sense that in most countries that have evolved, not only the elementary education but total school education of 12 years is nearly free and provided compulsorily also, in addition to higher education in a few countries. Further, free education is something that UNESCO/United Nations have stated and what our Constitution has mentioned very clearly. The critics also ignore while arguing in favour of fee in elementary education the huge externalities that elementary education produces, particularly the valuable equity effects it contributes.

Further, some also argue that the government need not necessarily provide free elementary education, the private sectors will be able to do it and that the private sector and NGOs could do the miracles and the state government could significantly reduce its efforts towards elementary education. This again is wrong because at least given the experience, no country could be found to have universalised elementary education relying upon the private sector. Private sector is a very small component, in fact non-existent in quite a few good number of societies with respect to school education. Even in those societies where higher education is highly privatised, school education is completely dominated by the State. Apart from this factor, private sector produces more importantly inequalities of various kinds between the rich and the poor and different sections of the society. Even the very strong proponents of private education admit that inequality is one issue which the private sector will not be able to resolve. Obviously, the interests of the private sector are much different from those of the State.

It is also being said nowadays that we can do with lesser number of teachers and high pupil-teacher ratios because the RTE bill says that there will be no examination and no student will be detained or failed in a class. There is no mechanism of monitoring the teaching and learning outcomes in the draft bill. Some even argue that we can have nonformal education, education guarantee schools, distance education and all kinds of things, and that they could be really good substitutes for public school system. It is further argued that we don't need qualified and trained teachers and can do with para-teachers. Para-teachers and education guarantee scheme have been 'nationalised' and they have become an important phenomenon in the system across the whole country. All these guidelines can be money saving mechanisms in the short run but we should recognise that in the long run, the cost of these practices could be very severe because they affect not only the quality but also the participation of children in the school activities and in raising educational levels of population, thereby taking us farther away from reaching the modest goals that we have set for ourselves in elementary education.

10.7 Use and Abuse of Decentralisation

Another issue is about decentralisation, which is being considered the mantra for development that can do everything. But what is actually happening in the name of decentralisation is the abdication of responsibilities by the central and the state governments. Decentralisation is also being essentially used to raise more and more resources from the people in the community. This is certainly not good for provision of free and compulsory elementary education. While community participation in general could be desirable, reliance on community financing for elementary education is really not desirable. Gradually there is a shift in the responsibilities at different levels of the government under the name of decentralisation from the central government to the state government, state to local bodies to civil societies and finally to the individuals, assuming that education can be treated as an individual or a private good and that individuals are the best judges for themselves. We tend to forget that the individual choice has no place at all in the discussion on public goods and merit goods. It is a compulsory choice on the parents and children and that the government has to provide for it. So principles of the individual choice or the ability to pay have no meaning at all when we are discussing elementary education. As a result of the kind of decentralisation that we are following, we are actually contributing to the loss of public good character of education.

Quite a few perverted views prevail among many people: The governments in developed countries do not spend on education. Private sector and NGOs can take care of education and hence the role of the State should be reduced. Para-teacher system is fine; trained and qualified teachers are not important. Quality education for all is unaffordable for India. All these are myths, unfortunately strongly believed to be true by many. Any careful examination can help in exploding these myths.

Let me return to the specific aspect of financing of elementary education. It is quite often stated the quality education means a hell lot of money. That is the reason why, it is argued, we have to have para-teachers, education guarantee schools and the like or we should not be serious about the universalisation of elementary education at all. It is also stated that India is a developing country and we don't have resources for everything; the government has to spend on many sectors and they are competing sectors. This is taken almost as given that we cannot afford good education at all. But there were quite a few evidences to say that we can afford really very good quality education for all. The most

important finding that the Tapas Majumdar Committee has given us is that good quality education costs, but it is affordable and is worth. Before the Tapas Majumdar Committee, we had a committee of the ministers appointed by the government that estimated that we would need Rs. 40,000 crore for five years. In fact, the committee itself admitted that it was a very crude estimate and that an expert panel might look at it. Hence the Tapas Majumdar Committee (Government of India 1999) came into existence. This committee's figures were very frightening to many. It estimated that we would need Rs. 140,000 crore for the next 10-year period. While this may be a frightening figure, it can be noted that it meant only Rs. 14,000 crore a year on average, and about 0.7 of GNP, if GNP were to increase at a rate of growth of 5% per annum. The latter was affordable. But government agencies thought other way and they made different estimates. The Tenth five-year plan (Planning Commission 2002) estimated that we would need not more than Rs. 55,000-60,000 crore for the next five years. It was further estimated under SSA that we would require Rs. 98,000 crore for the next ten years.

In 2005, the CABE Committee (2005) made a very detailed estimate. According to the committee estimates, we would need at least Rs. 320,000 crore in current prices. The estimate is based upon certain assumptions of pupil–teacher ratio and if you are more concerned with the quality of education and the pupil–teacher ratio, then the figure will rise to Rs. 436,000 crore. This means that something like Rs. 64,000–87,000 crore per year will be required. Now, these figures need to be compared with what is being allocated nowadays. The allocation of Rs. 10,000–13,000 crore for elementary education in the last three budgets including the 2009–10 regular budget of the Union government, are generally hailed as marking big increases. But the allocations have to be contrasted with the requirements that we have. For instance, critics of the 2009–10 budget have remarked that the increase in budgetary allocation for elementary education is less than Rs. 200 crore and that the funds required to implement the right to education are shockingly absent in the budget.

10.8 DILEMMAS IN EDUCATION

Quite often people feel that quantity, quality and equity are three different dimensions and if you want to improve access to education, all the children to be put into schools, you have to sacrifice the quality of education. But quality, quantity and equity are three important dimensions of the same problem. Long ago, J.P. Naik (1975) has referred to

this as an 'elusive triangle' in education. It is important to note that all the three quadrants of the triangle are important and interrelated; there cannot be trade-offs between the three. Universalisation of elementary education means universalisation of quality education, equitable quality education. Another dilemma is which level of education is important. There is a very powerful argument that as we have to spend scarce resources on primary education, secondary education and higher education, and if we spend on primary education we will not be able to spend on higher education and vice versa. When we argue so, we tend to forget that we cannot develop primary education at the cost of higher education or higher education at the cost of primary and secondary education systems. They are closely interdependent upon each other, feeding to each other's development and hence, all the three sectors of education need to be adequately funded, not putting one level against another.

10.9 Final Thoughts

To conclude, what we need is liberal funding of education, recognising that education is very important and public funding has to be made. If we spend 6% of our national income on education then most of our financial problems relating to education could be solved and of the total money to be spent on education, 3% or half the money has to be spent on elementary education. These goals are the same the government has accepted for a long period, but has never been serious at all. Lastly, with respect to the Right to Education Bill it is important that it provides for free, truly free education, the term being comprehensively defined, and also clearly defining good quality formal public education. It should provide for mitigation of household costs of acquiring elementary education by all sections of the society, including the richest. The bill should provide for creation of an attractive teaching and learning environment with trained and qualified teachers, good infrastructure and reasonably low pupil-teacher ratios. There should be no place for non-formal education of any type and kind, and even private education, when it comes to universalisation of elementary education.

Money is not a problem in India because if there is a political will then money can be found easily. After all, our economy is growing at around 7–8% growth rate per annum, it is projected to grow at the same rate, despite the global recession, there is public sector disinvestment taking place at a rapid rate, foreign exchange reserves are bulging, community resources like cess are mobilised and so on. Even marginal fiscal reforms might yield huge resources. So if there is will, resources can be generated.

We should realise that it is education that makes the difference between the rich and the poor, there is no substitute to good public formal education, costs of underinvestment in education could be colossal, and lastly and most importantly, that there is no choice but to invest in education of the children of the nation. Wise nations realised all this and prospered.

Nobel laureate Amartya Sen (1999, p. 30) has said eloquently:

"To say that India does not have the money for education [and health care] is absolute, utter unmitigated nonsense."

This should put a full stop on all doubts on the availability of funds for education in India.

The choice is clear.

Note

1. This is based on keynote lecture delivered in the Judicial Colloquium on the Right to Education. New Delhi: Human Rights Law Network (21–22 February 2009).

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CHAPTER 11

Student Loans in Financing Higher Education in India

11.1 Introduction

The 1980s was a period of increasing financial austerity, and educational budgets began shrinking throughout the world. In most developing countries the share of education in total government expenditure declined compared to the early mid-1970s. In India, as in other developing countries, education faced severe financial constraints. Total expenditure on education declined in real terms, and the decline was even more marked in the case of expenditure per pupil. Economic problems, including graduate unemployment, rising oil prices, global inflation, and the world economic recession partly explain these trends in public spending on education.

Evidence appeared to be mounting that while education has significant effects on economic growth, income distribution, and social development, the rate of return to higher education is significantly lower than to investment in primary and secondary education. It was also suggested that substantial indiscriminate public funding of higher education had serious perverse effects on growth and distribution (see Psacharopoulos and Woodhall 1985; Tilak 1989).

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Thus in the overall context of (a) growing budget constraints in education, and (b) growing evidence in favour of priority for lower levels of education as against higher education, several influential reports argued strongly for reducing public subsidies for higher education (e.g., World Bank 1986). At the same time, the need for more financial resources for higher education is well recognised, as the costs of higher education are rising steadily, and more resources are needed, both for quantitative expansion and qualitative improvement of higher education. Accordingly, attempts to find alternative methods of funding higher education began in several developing countries. Among the various alternatives suggested, a system of financing higher education through student loans has been advocated as an innovative policy that promises reductions in the financial burden of higher education on government funds, and also improvements in equity in higher education, by reducing the regressive effects of public financing of higher education, and improving access to higher education.

A scheme of student loans has been in operation in India since 1963. This short chapter describes the details of the scheme as practised in India, examines its strengths and weaknesses, and suggests some marginal improvements needed for the better functioning of loans as a means of financing higher education. It may be noted at the very outset that it is not assumed here that as a method of financing higher education, student loans are superior to other alternative methods available, for example, reforms in fees (discriminatory fees), and graduate (payroll) taxes. The final section of the paper briefly compares alternative methods of raising additional finance for higher education. Section 11.2 begins with a short introduction on the pattern of funding higher education in India. Section 11.3 describes in detail the student loan scheme as operated in India. Section 11.4 discusses the major problems that threaten the efficient working of the scheme. The paper ends with a few concluding observations on the efficiency and equity of student loans in India.

11.2 Financing Higher Education in India

Higher education is financed in India largely by the government, and the long-term trends in financing show that higher education is increasingly becoming a state-funded activity. There are no private universities in India, but a large number of private colleges, most of which are privately managed but publicly funded, to the extent of 80–90% of their recurrent budgets being provided by the government. From the point of view of finance, and from the point of view of efficiency and equity, the private sector's contribution to educational development is almost negligible (see Tilak 1992).

After independence, when economic and educational planning were first introduced in India, around 1950–51, the government (federal, provincial/state and local), met only about 40% of the total expenditure on higher education (excluding spending by students themselves and their families, on books, uniform etc., and other non-fee expenditure). The government contribution increased to 73% by 1982–83, as shown in Table 11.1. Correspondingly, the share of every other sector declined: the share of student fees, the only contribution from the students and their parents, declined from 37 to 12%, and the share of other sources such as endowments, donations, etc., remained more or less stable at about 14%. The 'other' sources are rarely considered as reliable sources of funds for higher education in India.

The pattern of fees appears to be particularly illogical. Fees are not related in any way to the actual costs of education, nor to the ability of students and their parents to pay for education. Students in arts and science courses (general education) on average meet about one-fifth of the cost of their education in the form of fees (of all kinds), while students in costlier, better-rewarding and more prestigious professional courses like medicine and business management

Table 11.1 Sources of funding higher education in India (%)

	Government	Local bodies	Fees	Others	Total
1950–51	49.1	0.3	36.8	13.8	100
1955-56	47.6	0.3	39.4	12.2	100
1960-61	53.1	0.4	34.8	11.7	100
1965-66	59.0	0.4	28.6	12.0	100
1970-71	60.4	0.5	25.5	13.5	100
1975-76	69.6	_	_	_	100
1980-81	72.0	0.8	17.4	10.8	100
1982-83	73.4	0.7	12.2	13.7	100

Source Education in India (various years), Ministry of Education, Government of India, New Delhi

pay only 5–7% of the costs of their education. Similarly, students in degree-level colleges on average meet 15% of the costs of their education, while students in universities meet 13% and those in research and other higher level institutions pay only 1–4% (Tilak and Varghese 1991; Tilak 1990).

All these trends are indeed alarming for educational planners in the country, particularly in the context of economic shortages in general and in the education sector in particular. There appears to be a consensus in the thinking of Indian planners on the need to halt these trends, and to search for ways to increase the share of non-governmental sources in the financing higher education, without affecting equity and efficiency. It is accepted that relatively poor levels of living, with about 40% of the population living below the poverty line, and attempts to achieve greater democratisation of higher education necessitate a dominant role for the government in financing higher education. At the same time, the need for mobilising additional resources for higher education is widely recognised (see Tilak 1993).

Accordingly, various alternative measures are being discussed, including reforms in fees, introduction of a payroll tax, student loans, earmarked taxes, etc. One proposal, that of a uniform increase in fees, is generally rejected on the grounds that it would result in a decline in the access of the socially and economically weaker sections of society to higher education. Arguments have been put forward in favour of discriminatory fee structures (Tilak and Varghese 1985, 1991), while graduate or payroll taxes are believed to be cumbersome, adding to the complexities of the already complicated tax structure in the country. Experiments with earmarked taxes or special educational levies (e.g., education cess) have not proved encouraging. Few higher education institutions in India generate any sizeable resources on their own, except for a few recently started private institutions that charge high 'capitation' fees, and require hefty donations, while receiving no financial aid from the government. Thus, the main policy choices revolve around one or two measures such as discriminatory fees, and loan financing.

11.3 THE NATIONAL LOAN SCHOLARSHIP SCHEME

Loan financing is not new in India. The National Loan Scholarship Scheme was started in 1963–64, with a view to improving access to higher education without the government bearing the total burden of financing higher education.¹

Student loans are advocated on the ground that they will, in the long run, reduce the burden on the public exchequer of financing higher education, so that scarce public resources can be allocated to sectors like primary education that have higher social rates of return (Tilak 1987). As the consumers of higher education belong to a relatively privileged sector of society, this kind of self-financing is also believed to be equitable in nature and effect. Particularly in India, student loans may also be felt to be more equitable than high levels of public subsidy, as general tax revenue is made up largely of indirect taxes, which account for 85% of tax revenue and these regressive taxes are paid by a vast majority of the poor, whereas higher education subsidies cater largely for the needs of relatively economically advantaged groups. Thus, to finance subsidies that benefit the rich from general tax revenue contributed by the poor can be seen to be highly inequitable. Hence it is argued that student loans would reduce the extent to which higher education transfers resources from the poor to the rich.

On the part of students and their parents, student loans shift the burden of investment in higher education from the present generation to a future generation, i.e., from the parents to the students themselves. Normally the present generation undertakes and finances investment, which benefits future generations, as in the case of education which is financed from taxes paid now but offers benefits in the future. Student loans, on the other hand, require the students to fund their own education. They pay later for the education they receive earlier. At the same time, no poor student desirous of higher education will be prevented, for economic reasons, from pursuing higher education.

It was originally anticipated that student loans would help to establish a revolving fund in 5–10 years, so that the scheme would become self-financing in the long run. It was also advocated on the grounds that such a scheme would prevent wasteful expenditure, as only the needy

students would borrow from the government for their further education. Students would also become more serious in making educational and career choices, because of the need to repay their debts. Moreover, it would increase the value of education in the eyes of the consumers, as anything provided free tends to be less valued than goods or services sold at a price. Finally, advocates of loans argued that students would become more cost-conscious, and know how much society invests in their education, which would increase the internal efficiency of higher education. These arguments have been put forward in India and elsewhere; the next section examines actual experience of student loans in India.

11.3.1 The Operation of the Loan Scheme

The National Loan Scholarship Scheme provides interest-free loans to needy and able students to help them finance full time higher education in India, starting from the post-matriculation level to the completion of higher education; loans are renewable on an annual basis. The value of the loan-scholarship ranges between Rs. 720 per annum (for pre-university and undergraduate courses) and Rs. 1750 per annum (for doctoral or for post-second degree education in professional courses such as medicine, engineering, technology, etc.) depending upon the nature and type of higher education. (The official exchange rate in November 1991 was Rs. 25.70 = US\$1.) The scholarships are awarded on the basis of both merit and financial means. All those who secure marks of 50% or above in qualifying examinations, and whose parental income does not exceed Rs. 25,000 (the limit was Rs. 6000 until 1987–1988), and who do not receive any other scholarship, are eligible for the loans. Parental income is not taken into account in the case of post graduate studies (second degree and above), for which merit forms the sole criterion for final selection among the eligible applicants.

The scheme is funded by the national (central) government, but administered through the provincial (state) governments. The loan is actually paid through higher education institutions. The national government fixes the number of loan scholarships (presently around 20,000), and the regional distribution is based on the distribution of the population. In each state, the distribution is made proportionate to the number of different qualifying examinations, subject to a minimum of one for each category.²

11.3.2 Repayment of Loans

The selected students are required to execute a bond with the government to abide by the terms and conditions of the scheme and to repay the loan. The bond is signed by the students and by their parents, who stand surety for the students, meaning that the parents would pay in case of default by the students.

The students are expected to repay the loan in easy monthly instalments, equal to one-tenth to one-sixth of monthly income, subject to a minimum of Rs. 25 per month. Borrowers who earn no income, including housewives, have to pay the minimum, i.e., Rs. 25 per month. The repayment is expected to start one year after the scholar begins to earn an income (excluding any paid practical training), or three years after termination of scholarship or studies, whichever is earlier. Generally, the loan becomes recoverable about 8-10 years after commencement of the loan award, and full recovery of the loan takes around 10 years. There are certain rebates or repayment concessions given to particular categories of students or graduates. Those who join the teaching profession or armed forces are given a rebate of one-tenth of the loan amount for each year of service. Loans are also written off, in case of death of the student borrower. Emigrants to foreign countries are expected to fully repay the loan or to obtain the consent of the government before leaving, to pay later. In case of delays and defaults in repayment, it was originally planned to charge interest (10% per annum), and recover the whole recoverable loan amount as an arrear of land revenue (from the agricultural landholding families).

On the basis of the recommendation of the Sixth Finance Commission (Finance Commission 1973), the recovered amount has been equally shared between the national and provincial governments since 1974.

11.3.3 A Review of the Indian Experience

The scheme has been in operation in India since 1963. In the very first year, although 18,000 loan scholarships were initially announced, only 9600 were actually given. The number of loan scholarships touched an all-time high level of 26,500 in 1965–66; and immediately declined to 18,000 in the following year (1966–67). The figure stabilised over the years around 20,000, except in 1973–74 when due to 'economy' measures (necessitated by high rates of inflation, etc.) the number was halved to 10,000.

Originally, the scheme started with Rs. 13.3 million in 1963–64, and now the budget for the scheme is of the order of Rs. 30 million (Table 11.2). The budget for the scheme fluctuated significantly, and was around Rs. 40 million during the 1970s.³ As the number of scholarships is fixed, the actual total amount depends upon the distribution of scholarships by levels/types/courses of higher education. Table 11.7 in the Appendix presents such a distribution for the latest year (1990–91). The total amount invested in student loans from their introduction in 1963 until 1987–88 is of the order of Rs. 869 million.

11.3.4 Recovery of the Loans

How much of the investment made in the loan scholarships is being recovered from the graduates? Detailed data on this question are not available, but there is a strong general feeling that the rate of repayment is very poor; it is possible to derive a few estimates from the available data.⁴ In 1977–78 the government invested about Rs. 42 million in the loan scholarship scheme, and in the same years Rs. 4.4 million was

Table 11.2	Public expenditure on student loans in higher education (National
Loan Scholar	rships Scheme) (Rs. in millions)

Year	Budget estimate	Revised estimate	Year	Budget estimate	Revised estimate
1963–64	13.3	13.3	1978–79	40.6	40.6
1964-65	29.5	_	1979-80	40.4	40.0
1965-66	41.9	35.5	1980-81	40.0	40.0
1966-67	41.8	_	1981-82	42.2	42.2
1969-70	52.5	51.3	1982-83	42.4	32.4
1970-71	63.0	57.1	1983-84	42.4	42.4
1971-72	44.4	44.4	1984-85	42.4	_
1972-73	42.7	38.3	1986-86	37.4	32.4
1973-74	40.7	33.4	1986-87	33.2	_
1974-75	36.2	31.2	_	_	_
1975-76	34.4	34.2	1988-89	33.2	33.2
1976-77	42.8	42.8	1989-90	33.7	32.0
1977-78	44.4	42.2	1990-91	30.1	28.5
			1991-92	30.0	_

Not available

Source Annual Report(s) (various years), Department (or Ministry of Education), Government of India, New Delhi

recovered as repayment of loan scholarships. The rate of recovery could be estimated as about 10% in 1977–78, and it is estimated to be about 15% in 1990–91, as shown in Table 11.3. This overall all-India average is not uniform across all the states as shown in Table 11.4, which is based on more detailed data on the loan scholarships given and the amount recovered in each state since the inception of the scheme until 1987–88. These figures show that the rate of recovery varies between less than 1% in Assam to 50% in Tripura, the overall average being only 6%.

It may also be noted that the scheme is administered by the central government through the state governments, and the amount is actually paid through the institution. When it comes to recovery, however, the institution has no responsibility. The central government has to recover loan repayments through the state government.

11.3.5 Write-Offs

As mentioned earlier, loans can be written off by one-tenth of the loan amount for every year of service of graduates in the teaching profession or in the armed services. In fact, one of the stated objectives of this provision in the scheme was to attract academically brilliant graduates to the teaching profession. While data are not available on the number of loanees joining the teaching profession, some scanty information is available on the quantum of write-offs, which includes write-offs for those who

Table 11.3	Recovery of student	loans in higher education	(Rs. in millions)

	Amount recovered	Total amount invested	Percent recovered
1977–78	4.4	42.2	10.4
1981-82	3.2	40.0	8.0
1982-83	3.2	30.0	10.7
1983-84	3.2	40.0	8.0
1984-85	3.2	40.0	8.0
1985-86	3.2	30.0	10.7
1986-87	4.4	30.0	14.7
1988-89	4.4	30.0	14.7
1989–90	4.2	28.5	14.7
1990-91	4.4	28.5	15.4

Note Some figures are budget estimates or 'revised' estimates.

Source Annual Report(s) (various years), Department (Ministry) of Education, Government of India, New Delhi

Table 11.4	Loan	scholarships	in	higher	education	in	India	(National	Loan
Scholarship S	cheme	e) (Rs. in milli	on	s)					

State	Amount sanctioned until 1987–88	Amount recovered until 1987–88	Percent recovered
Andhra Pradesh	87.5	1.8	2.1
Assam	48.4	0.01	0.0
Bihar	67.9	_	_
Gujarat	46.2	8.6	18.6
Haryana	11.3	0.2	1.8
Himachal Pradesh	2.3	0.3	13.0
Jammu and Kashmir	5.5	_	_
Karnataka	57.7	8.2	14.2
Kerala	75.2	9.5	12.6
Madhya Pradesh	24.6	0.7	2.8
Maharashtra	86.1	7.4	8.6
Manipur	0.5	0.06	12.0
Meghalaya	0.1	_	_
Orissa	42.4	0.6	1.4
Punjab	11.4	3.1	27.2
Rajasthan	38.4	4.9	12.8
TamilNadu	80.1	5.7	7.1
Tripura	0.2	0.1	50.0
Uttar Pradesh	124.4	0.2	0.2
West Bengal	59.1	0.2	0.3
Total	869.1	51.5	5.9

⁻ Not available

Source Department of Education, Ministry of Human Resource Development, Government of India, New Delhi

join the teaching profession or armed services. For example, in 1989-90, Rs. 1.5 million was written off, compared to a total of Rs. 30 million spent on loan scholarships. Between 1972-73 and 1990-91, the amount of write-offs varied between Rs. 0.6 million and Rs. 1.5 million a year, as shown in Table 11.5.

The Strengths and Weaknesses of the Scheme

A few striking features of the scheme may be briefly noted that highlight the merits and weaknesses of the current student loans programme in India:

	Amount written off	Total amount	Percent written off
1972–73	0.88	42.7	2.1
1973-74	0.55	40.7	1.4
1975-76	0.60	34.4	1.7
1976-77	0.60	42.2	1.4
1981-82	0.60	40.0	1.5
1982-83	0.80	30.0	2.7
1983-84	0.82	40.0	2.1
1984-85	0.83	40.0	2.1
1985-86	0.80	30.0	2.7
1986-87	1.00	30.0	3.3
1988-89	1.00	30.0	3.3
1989-90	1.42	28.5	5.0
1990-91	1.40	28.5	4.9
1991-92	1.50	30.0	5.0

Table 11.5 Loan funds written off in higher education (Rs. in millions)

Note Some figures are budget estimates or 'revised' estimates

Source Annual Report(s) (various years), Department (or Ministry of) Education Government of India,

New Delhi

- (a) The loan scholarships are meant for 'higher' education. But higher education includes not only various types of degree level courses, such as general, professional, technical, etc., but also includes different levels of higher education, such as below first degree, first degree and above. In fact, a large part of so-called higher education in India is not truly higher education by international standards (see Tilak and Varghese 1991). More than four-fifths of the loan scholarships are meant for below first degree education (including diploma courses, intermediate or pre-university courses). As can be noted from Table 11.6, only 3.75% of the loan scholarships are allocated for first degree, 13.7% for second degree (post graduate) and 0.5% for doctoral (and other post second degree) courses—in all only about 10% for 'higher' education in the strict sense.
- (b) The student population in higher education has increased from 1.3 million in 1963–64 when the scheme was started, to 9.2 million in 1988–89, the latest year for which such data are available. But the number of loan scholarships remained fixed at the initial number, 20,000. Thus there is no correspondence between the size of the student numbers and the number of loan scholarships.

Table 11.6 Number of national loan scholarships in higher education in India 1990–91 (allocation by level)

Level of education	Number	Percent
Post-Matriculation/		
Ten Plus (New Scheme/		
Higher Secy. (Old Scheme) etc.	16,409	82.0
First Degree/University Course/		
Plus 2 (New Scheme)/		
Intermediate Stage	750	3.8
Post Graduate		
(Second Graduate)	2741	13.7
Post Second Graduate	100	0.5
Total	20,000	100.0

Source Department (or Ministry of) Education, Government of India, New Delhi

- (c) The maximum amount of the loan varies between Rs. 720 and Rs. 1750 per student per annum. These limits were fixed in 1963-64, and even today they remain unchanged. During this period the price levels have increased significantly, the consumer price index (1960 = 100) registering an eightfold increase, from 102 (in 1960-61) to 803 in 1988-89 (Ministry of Finance 1990). Thus the real value of the loan amount has declined significantly. That tuition fee levels remained more or less unchanged during this period may provide partial justification for the above. But the loan scholarships cover not only tuition and other fees, including examination fees, but also hostel charges, etc., and other costs.⁵ The charges in hostels for boarding and lodging, though subsidised, have increased. The prices of books and stationery and other items of student living have increased remarkably since 1963. All this suggests the need for revision of the loan scholarships, just as some research fellowships have been recently revised.
- (d) Government expenditure on higher education increased by 45 times between 1963–64 (Rs. 408 million) and 1988–89 (Rs. 18,210 million budget estimate). The expenditure on loan scholarships increased by barely three times. It might be expected that at least the total loan funds should have increased in line with the increase in total public expenditure on higher education so that as a proportion, the share of loan funds in the total government expenditure would remain the same.

- (e) The concept of student loans assumes a strong relationship between education, employment and earnings. Specifically, the scheme, as it operates today, does not give any allowance for unemployment and under-employment. Even if a borrower does not secure employment after completion of studies, he or she has to start repaying the loan three years after completion of the studies. Non-earning graduates, including women who voluntarily or involuntarily do not participate in the labour force, could be exempted from repayment, but at present, there is no such provision in India.
- (f) Lastly, it seems that the loan scholarship programme was planned and is being implemented without any relation to the fee structure. Low levels of fees in general, together with student loans for tuition and other costs, result in not only shortage of finance for higher education institutions, but also produce perverse effects on income distribution, as the rich get public subsidies in the form of low levels of fees, and the poor pay back for their education, in the form of loan repayments.

11.4 PROBLEMS INVOLVED IN STUDENT LOANS IN FINANCING HIGHER EDUCATION IN INDIA

The National Loan Scholarship Programme in India has encountered several major problems.

(a) First, psychologically, loans, in general, are not welcome in the Indian society. Even if the need for loan finance for investment is recognised, people may not mind borrowing for investment in physical capital, or other productive sectors that generate benefits in a short period, and for necessary consumption activities like marriages, but not for 'invisible' human capital formation, whose benefits are not easily identified, nor quantifiable, nor certain, and which in any case only flow after a long period. Graduates do not wish to start their career with a burden of debt, and women graduates, in particular, fear the prospect of a 'negative dowry'. Yet it must be noted that each year the full quota of 20,000 loans is being taken by students, and even though detailed data are unavailable, the likelihood is that demand for loans exceeds the supply, suggesting the need to increase the number of loans.

- (b) When education does not guarantee employment and as repayment of loans becomes compulsory, people from relatively poorer families will be worst affected. This problem is further aggravated in the case of women graduates, among whom the rate of participation in formal (non-household) labour market activities is quite low in India. As a result, the loan amounts add to the 'dowry' burden.
- (c) Thirdly, the credit market in India is not well developed to provide educational loans. The organised credit market in India is in the public sector, and that is not prepared to get involved in educational loans. Given the fact that even in some developed countries, such as the United Kingdom, the banking sector is unwilling to participate in student loan programmes, it is not surprising that the underdeveloped credit market in India is reluctant to shoulder this responsibility.
 - For the banking sector to be interested in this programme, it was felt that the banking sector in India should be (i) given the discretion to choose the borrowers; (ii) adequately compensated for the services it renders; and (iii) fully reimbursed by the Government for the defaults in repayment. But if the banking sector were to be given discretion in the selection of the borrowers, the scheme may be self-defeating, as the scheme is essentially meant for able but poorer sections of the student population. If the commercial banks were to judge by the criterion of the borrower's capacity to repay a loan, a criterion justified in the case of commercial loans, many poorer students would not necessarily benefit from the student loan scheme, and on the other hand, relatively better off sections of society may take advantage of interest-free (or low interest) educational loans, and use them not necessarily for educational purposes. Further, if the banking sector is to be fully compensated by the government both for the services it renders, and for defaults, the net effect on the financial burden of the government may be the same as it is now.6
- (d) Unlike in some developed countries, such as the United States, where student loans are provided by commercial banks, in India student loans involve considerable public funding. By providing student loans, governments in developed countries may save resources which otherwise would have to be spent on social security systems,

unemployment allowances, housing benefits, etc. Therefore, the real burden on public funds of student loan programmes in developed countries is only the difference between the actual amount spent on student loans and the amount which would have otherwise been spent on social security payments. In the absence of social security schemes in India, the burden on the government regarding large-scale programmes of student loans will be extremely high in the short run, and this may be true in the long run too unless the rate of recovery is very high.

- (e) The most important problem faced with respect to student loan programmes in India, as in most other developing countries, relates to non-repayment of the loan. Looking at the poor rates of recovery, it is not surprising if some argue for the abolition of the loan scholarships in India, or merger of this scheme with the other scholarship schemes such as the National Scholarship scheme.
 - Alternatively, it is also argued that the responsibility for the recovery of the student loans should be given either to educational institutions or to the state government, and that the state government will have to be made to repay the loan to the central government, irrespective of its actual recovery from the students. This seems to raise detailed questions regarding the sharing of responsibilities between the central and the state governments, but is not a solution to the main problem.
- (f) Lastly, the loan scholarship scheme is considered inferior to general scholarship schemes by many educational administrators, as the former involves a huge administrative machinery and costs. The administration has to keep track of loanees, their movement and career, and has to devote extra efforts to recover the loan. Given the poor rates of recovery in India, it is felt that the costs of administration of the scheme, including costs of recovery are so high that the amount actually recovered becomes rather insignificant, if not less than the costs incurred.

11.5 Concluding Observations

Confronted with declining public budgets for education on the one hand, and the need for more resources on the other, many developing countries including India, have been in search of alternative methods of generating additional resources for education. Prominent among the several alternatives are revision of fees, graduate tax and student loans. This chapter has described the student loan scheme in India and considered some of its problems. It does not attempt a detailed comparison between loans and other alternative methods of funding higher education in India. Nor does it explicitly subscribe to the view prevalent among some researchers and policymakers that student loans are necessarily more efficient than other methods of financing higher education. Indeed, it has earlier been argued that discriminatory pricing would work better than student loans and graduate taxes in India, both from efficiency and equity points of view (Tilak and Varghese 1991). In a recent study on Botswana, (Colclough 1990) argued that payroll taxes would satisfy equity and efficiency criteria more effectively than student loans. Payroll taxes are not a popular option in India. In the overall context of growing financial requirements of higher education systems in India, the choice is not simply between one or the other. In fact, one may have to experiment with a set of alternatives available, rather than relying on a single method of financing.

To summarise, therefore, student loans are not a new phenomenon in India. The National Loan Scholarship Scheme has been in existence for the last three decades. The scheme is envisaged in India as a potential mechanism for financing educational expansion and improvement of quality in due course, but the relative importance given to the scheme so far seems to be insignificant in terms of the overall education budget. While expenditure on the National Loan Scholarships Scheme forms the single largest proportion of the central government's expenditure on scholarships for education as a whole (nearly one-third in 1990–91), loan scholarships form only 7% of the total (central plus state government) expenditure on student aid.⁸

Basically, educational planners in India avoid answering some important questions on the design of a student loan programme. Woodhall (1987, also 1989) lists such questions as: what are the main objectives of the loan programme? What is the corresponding policy on student fees and other forms of financial assistance? What proportion of students need to be given loans? What should be the size of the loan for each student in relation to costs such as tuition fees, expenditure on hostels, books, stationery, and other living costs? Can loans be used as an incentive mechanism to reward students or motivate them in their studies? How best can loan programmes reduce rates of default? Can the scheme be made flexible to adjust to

changing socio-economic conditions? etc. These questions assume much importance for the success of the programme in India, but have never been satisfactorily resolved, but simply tackled on an ad hoc basis.

Student loans are advocated on the grounds of (a) resource potential; (b) equity in sharing the costs of higher education; and (c) efficiency by making students more serious with respect to their education and careers. On the other hand, critics reject student loans on the grounds of (a) reducing equity by limiting access to higher education; (b) administrative difficulties in general; and (c) problems of recovery. All these arguments are open to empirical verification, but detailed data for a critical analysis of these questions are not available in India. Nevertheless, this chapter has discussed some evidence on these questions in the Indian context. There is not much evidence in support of the arguments made in favour of student loans, while the scanty evidence available suggests that many of the arguments made against student loans appear to be valid in India.

The main conclusion, therefore, is that unless student loans are accompanied by carefully formulated policies regarding fees, loans may aggravate rather than reduce inequities, with the rich getting public subsidies through low levels of fees, and the poor paying back in full for their education through student loans. All this may lead to inequality of access and declining participation in higher education by ethnic minorities, as American critics of student loans suggest (Hansen 1989, p. 62). In all, access to higher education may be seriously reduced by student loan programmes, as critics maintain. Hence student loans must be judged more in terms of generating finances for higher education, rather than as a measure to improve access and equity in higher education, and this chapter suggests that the existing loan programme in India is disappointing in this regard also.

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The statistics presented in the paper are drawn from annual publications, viz., *Annual Report*(s) and *Education in India*, both published by the Department (or Ministry) of Education, Government of India, New Delhi, unless otherwise stated.

Notes

- 1. Purely to improve the access to higher education, the national and state governments offer a variety of scholarships for disadvantaged students, such as financial and merit scholarships for scheduled caste and scheduled tribe students, scholarships for rural talented secondary students, national merit scholarships, research fellowships, scholarships for students in residential schools, scholarships for foreign students, etc. These types of financial assistance are in addition to positive discrimination in favour of disadvantaged students in admission policies, and other non-monetary incentives.
- 2. Statewise distribution of these scholarships is shown for the latest year [1990–1991] in Table 11.7 in the Appendix.
- 3. Data on actual amounts spent on the scheme are not readily available. Table 11.2 gives the original budget proposals and 'revised' estimates of the budget expenditure (estimated towards the close of the budget period, but not after the period). Actual expenditure differs from budget estimates, but is not expected to be very different from the revised estimates.
- 4. Since 1974, the recovered amount is shared equally between the central and state governments. According to the available figures, for example, in 1977–78 Rs. 2.2 million was transferred to the states on this account. This means that the total recovery in that year was Rs. 4.4 million.
- 5. For example, in 1982–83, the latest year for which such data are available, total fees (i.e., including all kinds of fees) averaged Rs. 199 per pupil in colleges and in the whole sector of higher education, the average was Rs. 280.
- 6. It may be noted that a few commercial banks in India offer a limited number of educational loans to students mainly for higher education. These loans are relatively large in value, are given at very high rates of interest, about 12–18% per annum, and are not necessarily based on merit and need (parental income) of the students, but rather on the ability to repay. The rates of default in these cases are not high, as the banks require full collateral in the form of bonds, or reliable sureties. However, these represent sporadic experiments being made by a very few banks in a few places in the country, and on a very small scale.
- 7. In India, non-repayment of loans is, however, not confined to student loans. Barely 50% of agricultural loans are recovered. See Kulshrestha (1990).
- 8. It may, however, be noted that all kinds of scholarships, stipends, and other financial assistance to students in higher education amount to only 5% of the recurrent budget in higher education in India (1980–81).

APPENDIX

Table 11.7 Number of loan scholarships in higher education in India, 1990-91 (National Loan Scholarship Scheme)

	Fost-matric,/ Higher secondary. Ten plus/ etc	./ ndary./	Post- PUC/ Plus 2/ Inter		Post graduate	te	Post Post-graduate	luate	Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Andhra Pradesh	1240	79.7	65	4.2	242	15.6	∞	0.5	1555	100
Assam	522	87.1	28	4.7	46	7.7	33	0.5	599	100
Sihar	1606	78.9	85	4.2	334	16.4	10	0.5	2035	100
Gujarat	787	78.5	41	4.1	170	16.9	ഹ	0.5	1003	100
Goa	24	92.3	П	3.8	7	3.8	I	I	26	100
Haryana	298	78.2	15	3.9	99	17.3	7	0.5	381	100
Himachal Pradesh	105	84.7	9	4.8	12	6.7	1	8.0	124	100
fammu and	145	81.9	8	4.5	23	13.0	П	9.0	177	100
Kashmir										
Karnataka	863	79.2	45	4.1	175	16.1	9	9.0	1089	100
Kerala	626	85.8	33	4.5	29	9.2	4	0.5	730	100
Madhya Pradesh	1308	85.8	I	I	208	13.6	8	0.5	1524	100
Maharashtra	1490	81.5	78	4.3	253	13.8	8	0.4	1829	100
Manipur	33	78.6	2	4.8	_	16.7	1	1	42	100
Meghalaya	35	87.5	1	2.5	4	10.0	I	I	40	100
Nagaland	22	91.7	П	4.2	П	4.2	I	1	24	100
Orissa	653	86.0	34	4.5	89	0.6	4	0.5	759	100
Punjab	373	76.3	20	4.1	93	19.0	7	0.4	489	100
Rajasthan	832	81.5	I	I	184	18.0	ഹ	0.5	1021	100
Sikkim	∞	80.0	1	10.0	1	10.0	I	I	10	100
Lamil Nadu	7717	00 2	09	7 2	178	120	1	и С	1291	100

(continued)

Table 11.7 (continued)

State	Post-matric./ Higher secondary., Ten plus/ etc	/ ndary./	Post- PUC/ Plus 2/ Inter		Post graduate	te	Post Post-graduate	duate	Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Tripura	49	79.0	co	4.8	6	14.5		1.6	62	100
Jttar Pradesh	2745	84.7	144	4.4	334	10.3	16	0.5	3239	100
Vest Bengal	1302	82.2	69	4.4	205	12.9	∞	0.5	1584	100
A and N Islands	9	100.0	I	I	I	I	I	I	9	100
Arunachal Pradesh	17	89.5	П	5.3	1	5.3	ı	I	19	100
Chandigarh	_	46.7	I	I	8	53.3	I	I	15	100
Jadra Nagar Haveli	œ	100.0	I	I	I	I	ı	I	æ	100
Delhi	141	73.1	<u></u>	3.6	44	22.8	1	0.5	193	100
Daman and Diu	œ	0.09	ı	20.0	1	20.0	ı	I	ιc	100
Lakshdweep	1	100.0	I	I	I	I	I	I	1	100
Mizoram	13	86.7	1	6.7	1	6.7	I	I	15	100
Pondicherry	15	88.2	1	5.9	1	5.9	I	I	17	100
NDIA	16.409	82.0	750	000	2741	13.7	100	C L	20 000	100

Source Department of Education, Ministry of Human Resource Development, Government of India, New Delhi

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CHAPTER 12

State, Households and Markets in Education: Government's Unwillingness and Households' Compulsion to Pay for Education *vis-à-vis* the Exploitative Markets

12.1 Introduction

As the title suggests, I wish to focus in my lecture today on three closely related aspects of the financing of education in India: increasing reluctance of the State to spend on education, compulsion to pay for education by families, which, in my view, is mistakenly termed 'willingness to pay' and the role of the market.

The literature on the economics of education has considered only two domains, individual and social, in the context of investment decision-making in education (e.g., Majumdar 1983). But in my view, there are three domains, namely, individual (household domain), market domain, and public (social) domain. Investment decision-making in these three domains is influenced by three different sets of considerations, and therefore, I argue that it may not be proper to combine the household and market domains into one category and call it individual or private domain, as many do. Decision-making in the public domain ought to be guided by several considerations. Principal among

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them are: the public good, merit good, basic need, human rights nature of education, its basic role in promoting equity and nurturing social values. Public approach to education also ought to be guided by human development perspectives. The long-term interests of society figure prominently in the decision-making process in public domain. Individuals, on the other hand, have a relatively short-term perspective. They are concerned, apart from acquisition of individual values, mainly with the maximisation of their lifetime earnings or at the most their horizon may extend to that of family earnings as a whole. Decisions in the market domain are guided by even shorter term considerations, in fact, the single most important consideration is profit maximisation. Other considerations such as philanthropy and charity were once important factors but they are virtually extinct now. Thus the distinction between the three domains is quite sharp, and hence they need to be separately analysed, recognising, however, at the same time interrelationship between them.

12.2 PUBLIC EXPENDITURE ON EDUCATION

12.2.1 Government Expenditure on Education

First, let us examine State spending on education focusing on some important characteristics and a few long-term trends.

The state spends on education in many traditional and modern societies out of the general revenues, as education is regarded as:

- (a) a public good, producing a huge quantum of externalities—social, economic, technological, political and cultural.
- (b) a social merit good, whose consumption is good for the individual as well as for society, even if the individual is not aware of it and hence reluctant to consume it. and
- (c) as a human right and human development (and also as a freedom in itself, a la Amartya Sen).

Besides, education is favoured by the State as it promotes equality of opportunity. Imperfect capital markets reinforce the case for the state's role in this sphere, as does the fact that education is subject to scale economies. Education is also favoured as it is considered a pious responsibility of the State.

The pattern of spending on education during the post-independence period in India does not indicate that these concerns have been clearly recognised. During this period, there has been a significant increase in expenditure on education: in absolute terms, it increased about 900 times from Rs. 55 crores in 1947 to Rs. 75 thousand crores in 1999–2000. But in real prices, it increased at a rate of growth of 6% during the five decades (1950–51 to 1999–2000). The real rate of growth of per capita expenditure on education was 3.8%; and in per-pupil terms, it was just 2.4% per annum.

The decadal trends in growth in public expenditure on education are indeed interesting to note. During the 1950s, a good beginning was made in the growth in expenditure on education; the decade of the 1960s was the most favourable period, as in many developing and developed countries. This might have been the effect of 'the human investment revolution in economic thought,' initiated by Theodore Schultz (1961). The global disenchantment with education, partly attributable to the growth of educated unemployment on the empirical scene, and the emergence of screening and credentialism theses on the role of education on the theoretical front (e.g., Arrow 1972; Spence 1973), caused a setback for the growth of expenditure on education during the 1970s in the third world. India also has had a similar experience. The 1980s marked the revival of faith in education. Its role in poverty reduction was recognised. 'Human resource (led) development' (Behrman 1990) became a favoured theme by the mid-1980s, and education was regarded as an important component of human resource development. Expenditure on education increased during the 1980s at a reasonably high rate particularly as compared with the preceding decade. Though there were severe cuts in allocations during the first half of the decade of the 1990s, following the introduction of economic reforms, especially stabilisation and structural adjustment policies (Tilak 1996b), the rate of growth rose to some extent. This was partly due to the global recognition of education as not only a means of development but as development itself, as theorised by human development specialists (e.g., Amartya Sen and Mahbub-ul Haq). But on the whole, during the last fifty years, the rate of growth in per-student expenditure on education was a bare 2.4% per annum, less than the *Hindu* rate of economic growth (Table 12.1).

What have been the trends in the relative priority accorded to education after independence?

	Total	Per capita	Per pupil
1950s	10.17	8.12	2.56
1960s	4.78	2.44	4.03
1970s	4.37	2.20	0.98
1980s	7.47	5.19	3.28
1990-91/99-00	8.99	6.94	6.84
1950-51/99-00	6.03	3.75	2.44

Table 12.1 Annual real rate of growth in public expenditure on education in India (%)

Source Based on Analysis of Budgeted Expenditure on Education, Selected Educational Statistics, and Education in India (various years). New Delhi: Ministry of Human Resource Development, Department of Education

Share of Public Expenditure on Education in GNP

On the recommendation of the Education Commission (1966), the Government of India fixed in the *National Policy on Education 1968* a target of investing 6% of the national income in education from the public exchequer by 1986.¹ Over the years, this proportion has increased remarkably from 0.6% of GNP at the inception of planning (1951–52) to about 4% by the end of the century, even though the growth has not been smooth. This may seem to be a remarkable increase (Fig. 12.1). However, it needs to be underlined that the current ratio is much below:

- (a) the requirements of the education system to provide reasonable levels of quality education to all the students presently enrolled,
- (b) the requirements of the system to provide universal elementary education of eight years for every child in the age group 6–14, as universalisation of elementary education in a comprehensive sense, includes universal provision of resources, universal enrolment, and universal retention, and consequent growth in secondary and higher education (estimated to be about 8–10%),
- (c) the recommendations of the Education Commission (1966), the resolve made in the *National Policy on Education 1968*, reiterated in the *National Policy on Education 1986*, the revised *Policy* (1992) and the promises made by successive Prime Ministers repeatedly even from the ramparts of the Red Fort to invest 6% of GNP in education, and

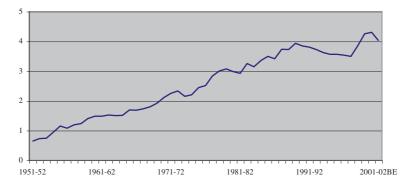


Fig. 12.1 Share of public expenditure on education in GNP (%) (1951–52 to 2001–02) (Source Based on Selected Educational Statistics 2001–02. New Delhi: Government of India, Ministry of Human Resource Development, Department of Education)

(d) the proportion of GNP invested in education in many other developing, leave alone developed, countries of the world, including those in Africa.

It would be a stupendous task to reach a level of 6% of GNP before the end of the tenth five-year plan, i.e., by 2007, as promised by the Government of India recently, from the current level of about 4%. The goal, originally set to be achieved about two decades ago, is being repeatedly postponed and may get further deferred, though it has little sanctity in view of the increasing needs of the education system.

Share of Expenditure on Education in the Total Budget

Perhaps a more important gauge of what is actually happening is revealed by the priority given to education in the budget. Considering the union and the state budgets together, government expenditure on education formed about 14% of the total in 1970–71. Ever since, the ratio has tended to decline. It has been around 11% in recent years. Even though the share of education in the union budget oscillated frequently, on the whole, it has increased from 1.6% in 1967–68 to nearly 4% by the end of the 1990s, and in the state budgets, it has been around 20%. The total appears to be stabilising around 10%—declining from 14% in the early 1970s/1980s (Fig. 12.2).

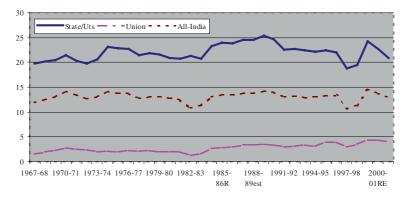


Fig. 12.2 Expenditure on education as % of total government expenditure (1967-68 to 2001-02)

(Source Based on Analysis of Budgeted Expenditure on Education. New Delhi: Ministry of Human Resource Development, Department of Education)

With respect to the share of education in total government expenditure, India fares very poorly in comparison not only with advanced countries but also some of the poorer ones. India has been spending only 11% on education out of total government (union and state) expenditure, compared to more than 15% in many advanced countries (1995–97). The corresponding figure was above 20% in several rich and poor, and small and big countries (UNDP 2003).

In terms of these two indicators of the relative priority accorded to education, viz., the share in GNP and the share in total government expenditure, India fared better during the 1980s. But after economic reforms were introduced in the beginning of the 1990s, the shift has been away from the education sector. Public finances for education began to be affected by severe squeezes.

Expenditure on Education in Five-Year Plans

Five-year plans are an important instrument of development strategy adopted by independent India. Five-year plan outlays set new directions for further development, and hence they assume importance, though they are small in size compared to huge non-plan expenditures in the case of education. Expenditure on education in the five-year plans has

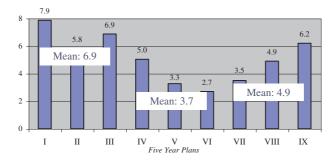


Fig. 12.3 Expenditure on education in five-year plans (Source Based on Analysis of Annual Plan, Education Sector. New Delhi: Government of India, Planning Commission, Education Division (various years))

shown a rapid rise since the first five-year plan. But its relative importance has declined, from 7.9% in the first five-year plan, to 2.7% in the sixth five-year plan. It is only during the seventh five-year plan, and later in the eighth and the ninth five-year plans that this declining trend was reversed. The share in the ninth five-year plan was quite high, above 6%; but it was still much less than the proportion allocated in the first five-year plan (Fig. 12.3).

There are three important phases in the allocation of resources to education in the five-year plans. During the first three plans, the allocation to education as a proportion of total five-year plan expenditure was more than 5%. Even though it declined in the second plan, the decline was immediately checked in the third plan. This phase represents the enthusiasm of the government immediately after independence to allocate higher outlays for education; the average expenditure during the three plans was 6.9%. The second phase, consisting of the fourth, fifth and the sixth plans, was characterised by a consistent decline in the relative share of education (to an average of 3.7%). This is indeed surprising as this is the period that followed the famous Kothari Commission Report on Education and Development that emphasised, inter alia, the need for expansion of education for development. The 1968 National Policy on Education for the first time accepted the 'investment' nature of education. But all these have had little effect on allocation of public resources to education. The seventh, eighth and ninth five-year plans

form the third phase when efforts were made to check the declining trend and to substantially increase the allocation to education. This phase of the post-1986 Policy period reflects the positive effect of the Policy, with the average of the three plans increasing to 4.9%. Whether the beginning of the century and the tenth five-year plan mark a continuation of the third phase or a new phase is yet to be seen.

The relative allocations to all levels—elementary, secondary and higher education—as a proportion of total plan expenditures² have experienced a decline. However, there has been some attempt to increase expenditure on elementary education after the *National Policy on Education (1986)* was formulated. The share of elementary education in plan expenditure has decreased, on the whole, from 4.3 to 3.2% from the first to the ninth plan. It was at the lowest in the fifth and sixth plans at a ratio of 0.8%. The decline was less pronounced in the case of secondary education. For higher education, the share which was a meagre 0.7% in the first plan actually went down to 0.3% in the eighth plan! (Fig. 12.4)

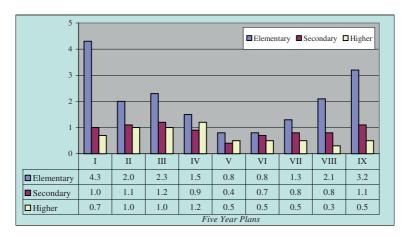


Fig. 12.4 Share of elementary, secondary and higher education in the total five-year plan expenditure (%)

(Source Based on Analysis of Annual Plan, Education Sector. New Delhi: Government of India, Planning Commission, Education Division (various years))

National and, more importantly, international pressures have helped boost the tardy growth in the allocations to elementary education in recent years. International aid also came in handy. In fact, much of the growth in the allocation to elementary education is contributed by external aid and hence it can be described as 'aid-led growth' (Tilak 1999a). But secondary, and more so higher education has suffered very severely. One notices a significant decline in public expenditures on higher education during the 1990s. Public expenditure on higher education per student declined in real terms by 27% between 1990–91 and 1996–97; it has marginally increased in later years, according to revised/budget estimates but the increase may not be sustained. The decline might continue.

A steep decline is noticeable in public expenditure on various items in higher education, such as scholarships, an important measure to promote equity. As a proportion of the total expenditure on higher education of the union government, the amount spent on scholarships that was always small declined further, from about 0.5 to 0.25% between 1990–91 and 2000–01. In absolute terms, also one finds a similar decline in real prices.

To sum up, the state's reluctance and unwillingness to invest in education is attested to by several indicators:

- real growth in total per capita and per-student expenditure
- trends in relative share of expenditure on education in the budget and in five-year plan outlays
- the relative shares of various levels of education in total five-year plan expenditures, and
- public expenditure on higher education

Even as a proportion of GNP expenditure on education has not shown significant increases. It is rather reluctantly increasing at a snail's pace; currently, it is below the 6% norm which was the target set for achievement nearly two decades ago.

The state's unwillingness to invest in education is also clear from the policy statements occasionally made, particularly with respect to, but not necessarily confined to, higher education. For example, following the recommendations of the committees set up by the University Grants Commission (UGC 1993) and the All India Council for Technical Education (AICTE 1994) (Dr. Justice Punnayya Committee and Dr. Swaminadhan Committee, respectively), institutions of higher

education were required to raise at least 20% of the required resources through fees and other sources, implying that government subsidies would be restricted to less than or about 80% of the requirements. Secondly, the Ministry of Finance (1997) in its paper on Government Subsides in India, has stated that subsidies to higher education would be gradually reduced to about 50%. Thirdly, when reformulating the student loan programme in the early 1990s, the government argued that loan programmes would be reorganised so that with the recovery of loans, higher education would eventually become self-financing. In case of school education, it has preferred expansion of low cost and low-quality alternative systems of primary education and literacy to the formal school system. Also, revealing is the preference for recruitment of untrained, under qualified and poorly remunerated teachers to those who are fully qualified and reasonably well paid. Lastly, and tellingly, there is the encouragement and support given to private educational institutions with the almost stated objective of saving public resources. It is difficult not to infer from these the increasing unwillingness of the State to allocate budgetary resources to education.

The question is: Why is the government unwilling to spend on education?

First, there is the general belief that public expenditure has no significant impact upon the development of education, and that its effects on literacy, enrolment rates and achievement levels in school are not pronounced (World Bank 2003).

But this is not necessarily true. As I have tried to show elsewhere (Tilak 1999b), government expenditure on education per capita is the second most important factor (after number of teachers) for the development of education. As budget expenditure on education per capita increases, the rate of attendance of children in schools tends to increase systematically and significantly. The coefficient of correlation is as high as 0.8 (Fig. 12.5). Similar strong relationships are found with expenditure on education and other indicators of educational development including the aggregate index of education.

Secondly, government's reluctance to spend on education is ascribed to the underdevelopment of the economy. One of the most widely held beliefs is that economically poor societies obviously cannot spend much on education and so must be the case in India.

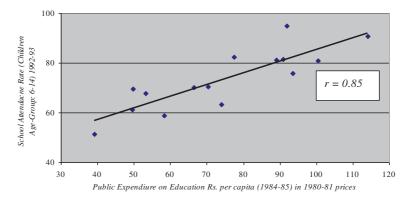


Fig. 12.5 Public spending on education and school attendance in major Indian states (*Source* Tilak 1999b)

Statistical evidence does not support such a presumption.

- (a) There exists no statistically clear relationship between the level of economic development of states (state domestic product per capita) and their level of spending on education as percent of SDP. For instance, economically poor states like Bihar and Assam spend a higher proportion of their income on education, and relatively more prosperous ones like Haryana and Maharashtra allocate small proportions to education (Table 12.2).
- (b) That the levels of SDP vary and hence proportions of SDP do not mean much, may not be tenable, as the weak relationship between economic development and education expenditure holds true with respect to absolute levels of expenditures as well. In other words, this relationship is not confined to the relative proportion allocated to education and SDP per capita. It holds true with respect to SDP per capita and the expenditure on education per capita and many other appropriate indicators as well. The relationship between SDP per capita and expenditure on education per capita is not significant and systematic. For example, of the 18 major states in India, Himachal Pradesh ranks 8th with respect to SDP per capita in 1997–98, but ranks at the top in its spending on education in 1998–99; so is the case of Tripura which ranks 12th in SDP per capita but spends the second largest amount on

education; and the evidence of Kerala is well known: spending the third largest amount on education, it ranks 10th with respect to SDP per capita. The richer states like Punjab and Haryana (ranking, respectively, second and third in SDP per capita) rank poorly (seventh and eighth, respectively) with respect to spending on education per capita. West Bengal figures almost at the bottom (16th among the major states) with respect to spending on education, but ranks 6th with respect to SDP per capita. These are not exceptions; on the contrary, they seem to represent the general rule.

(c) There also does not exist any significant systematic relationship between the *rate of growth* of national income per capita and the *rate of growth* of expenditure on education per capita in real terms. The simple coefficient of correlation between the two is 0.2, when estimated on the all India time series data from 1950–51 and 2000–01 (Fig. 12.6).

But an increase in GNP per capita might lead to an increase in expenditure on education per capita. Government expenditure on education per capita was consistently more elastic to GNP per capita during the first four decades after independence, though the coefficient gradually

		Education as percent of SDP (1998–99)			
		High	Medium	Low	Very low
80	High	Nil	Nil	Tamil Nadu	Haryana
1997–98	_			Punjab	Maharashtra
66				Gujarat	
	Medium	Himachal	Nil	Karnataka	Andhra
oita		Pradesh		West Bengal	Pradesh
сар	Low	Tripura	Rajasthan	Nil	Nil
per capita,		1	Kerala		
ЪБ	Very low	Bihar	Orissa	Nil	Madhya
SDP	,	Assam	Uttar Pradesh		Pradesh

 Table 12.2
 SDP per capita and expenditure on education

Sources Based on Analysis of Budgeted Expenditure on Education, and Selected Educational Statistics. New Delhi: Ministry of Human Resource Development, Department of Education; and Economic Survey. Ministry of Finance, Government of India (relevant years)

declined in value over the years. The coefficient of elasticity was 5.4 in the 1950s, which declined to less than unity (0.8) by the 1990s (1990–91 to 1996–97).³ The economic reforms introduced in the beginning of the 1990s seem to have affected the relationship considerably.

All this makes it clear that both at the national and state levels economic conditions (as reflected in the growth of GNP and the like) do not have a determining effect on allocation to education. Earlier, I have attempted to show that allocations for education by the Finance Commission and the Planning Commission to various states are also not systematically influenced by any meaningful criteria (Tilak 1989). Allocations by the Planning Commission might be expected to favour educationally backward states in order to reduce regional disparities. This is, after all, one of the objectives of the plans. Awards of Finance Commissions, on the other hand, might be expected to tilt towards educationally advanced states since these are mainly meant for maintenance of the system. And larger and more developed educational systems would require more resources. Yet neither set of allocations can be explained with reference to stock or flow indicators on education development or by other economic factors.

Logically the conclusion is that low levels of state expenditure on education are not due to economic constraints. Nor are they influenced

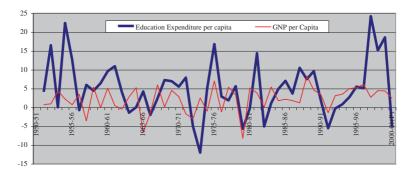


Fig. 12.6 Real growth in GNP per capita and expenditure on education per capita (Sources Based on Analysis of Budgeted Expenditure on Education, and Selected Educational Statistics. New Delhi: Ministry of Human Resource Development, Department of Education); and Economic Survey (relevant years). Ministry of Finance, Government of India

by the level of educational development and corresponding needs. The explanation for the government's unwillingness to invest in education would perhaps lie in misconceptions such as that:

- education is not an imperative for economic development, indeed that economic miracles can be achieved without significant educational progress
- even if education is important for development, higher levels of expenditure do not necessarily improve a population's educational status, and
- internal efficiency in education can be improved through reduced public expenditure and cost recovery measures

In addition, there is the occasional remark that the state is reluctant to increase expenditure on education since the quality of education is poor, teachers do not teach, no worthwhile learning takes place in schools and colleges and universities perform only a baby-sitting role, etc. It is arguable that these are quite likely the consequence of under-funding. They cannot constitute a case for withdrawal of public resources. A 'conspiracy theory' is also advanced suggesting that elite governments do not want the masses to be educated and are therefore reluctant to invest in it. The most likely explanation for the state's unwillingness to invest in education lies in the lack of 'political will' to accord due priority to education (Drèze and Sen 2002).

12.3 HOUSEHOLD EXPENDITURE ON EDUCATION

Let us turn to households' willingness to pay for education.

'Willingness to pay' has gained ground in the context of growing budgetary cuts on education. It is strongly urged by many that this willingness should be tapped to the maximum so that the burden on the exchequer is reduced. Household spending on education is justified on three grounds:

- (a) Governments lack adequate resources to finance education and therefore households have to contribute at least partly towards the cost
- (b) household expenditure through fees will improve the system's efficiency
- (c) household spending reflects willingness and ability to pay in education and this should be tapped in full.

These grounds are resisted by counter arguments resting on the following:

- (i) Household expenditures, more appropriately payment of fees and other user charges, militate against the letter and spirit of free and compulsory education as enshrined, for example, in the Constitution of India and the Convention of the Rights of Children (1948).
- (ii) Such expenditures perpetuate inequities since they tend to vary directly with household incomes.
- (iii) High levels of expenditure may compel the poor not to opt for schooling, and, hence the demand for education will be distorted.
- (iv) Household expenditures are actually a reflection of the state's inability and inefficiency in providing education.
- (v) Household expenditure on education is inconsistent with the nature and philosophy of education and reduces it to a 'commodity' that can be bought.

However, household expenditures on education in India are substantial and they have increased over the years. According to the *National Accounts Statistics*, household expenditure (private final consumption expenditure) on education in India was of the order of Rs. 15.7 thousand crores in 1996–97. This is indeed sizeable, forming more than 1% of the gross domestic product. It increased nearly 100 times in 36 years from Rs. 159 crores in 1960–61 to Rs. 15.7 thousand crores in 1996–97! In real terms, the growth has been seven times between the same periods and in per capita terms, the real increase has been 3.3 times.

The overall rate of growth in household expenditure on education per capita in real prices was 3.4% per annum during 1950–51 to 1996–97, but the growth has not been smooth over the decades. While the first two decades after the inception of planning, i.e., the 1950s and the 1960s registered a reasonably high rate of growth, the economic problems of the 1970s in terms of high inflation, adversely affected total household budgets and allocations to education. Accordingly, the rate of growth was as low as 1.2% per annum in the 1970s. Though in the 1980s there was some reversal in the trend, the situation in the 1990s was not favourable to education. During 1990–91 to 1996–97, the real rate of growth has been only 2% per annum (Table 12.3).

	Total	Per capita
1950s	7.1	5.1
1960s	9.1	6.8
1970s	3.5	1.2
1980s	4.8	2.6
1990s ^a	3.9	2.0
1950-51 to 1996-97	5.6	3.4

Table 12.3 Rate of growth in household expenditure on education (%)

Source Based on National Accounts Statistics (various years) (New Delhi: Department of Statistics, Planning Commission)

Secondary Source Tilak (2000)

Analyses of the 42nd and the 52nd rounds of the National Sample Survey data that refer, respectively, to 1986–87 and 1995–96 (Tilak 1996a, 2002b) and the National Council of Applied Economic Research (NCAER) surveys on human development (Tilak 2002a) highlight certain interesting features relating to household expenditure on education. We shall take note of a few of them.

Households incur huge expenditure on education of their children. According to the National Sample Survey (1995–96), on average a household has to spend Rs. 500 per child per annum on primary education. For upper primary education, the expenditure increases to about Rs. 900; it further increases to Rs. 1577 in secondary schools and to Rs. 2923 in higher education. These figures refer to 1995–96. A quick comparison with the earlier set of estimates shows that there has been a steep increase in the levels of household expenditures between 1986–87 and 1995–96. The expenditure on primary education per student in 1986–87 varied between Rs. 84 in government schools in rural areas and Rs. 569 in private schools in urban areas (Table 12.4).

Systematic patterns are discernible with respect to household expenditures on education. Household expenditure on education is highly elastic to income levels. Rich households spend more than low-income households on education. According to the 52nd round of the National Sample Survey, average household expenditure of the top expenditure quintile on education is about six times that of the bottom expenditure quintile.

a1990s: 1990-91 to 1996-97

//			
	Rural	Urban	Total
Primary	297	1149	501
Middle	640	1529	915
Secondary	1180	2219	1577
Higher	2294	3304	2923
All	570	1686	904

Table 12.4 Average annual household expenditure per student (age group: 5–24), 1995–96 (%)

Source National Sample Survey Organisation Secondary Source Tilak (2000)

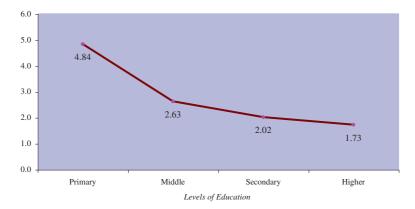


Fig. 12.7 Household expenditure on education: 'Wealth effect' on education (Source Based on National Sample Survey. Secondary Source Tilak 2000)

The 'wealth effect', defined simply as a ratio between the expenditure of high and low income households minus one, is more pronounced in private schools than in government schools. Further, more interestingly the wealth effect is quite pronounced in primary education and declines with the level of education (Fig. 12.7). In a sense, the present system of financing seems to be more equitable in higher education than primary education. This pattern may significantly change with the rapid growth in high fee charging private colleges. Consequently, the wealth effect could become equally, if not more pronounced in higher education.

As a proportion of household income, poor households spend consistently more than the rich. Bottom income households have to spend, according to the NCAER survey (Tilak 2002a), 6.9% of their total income on education and this proportion declines consistently with increasing levels of household income, as one would expect. It is only 0.6% of household income that top income households have to spend on the education of children. This holds for all groups in the population—caste groups including Scheduled Castes, Scheduled Tribes and others, religious groups including Hindus, Muslims and Christians, boys and girls, and among different land owning groups. Further, it is found to hold in all states with almost no exception. The poor households have to spend a larger proportion of their meagre incomes on education than richer households.

The coefficient of elasticity of household expenditure on education to total income (in fact, expenditure) of the households between 1950–51 to 1996–97 is positive and greater than 1; it is 1.5. These are based on *National Accounts Statistics*. It means that household expenditures on education are elastic to household income. A 1% increase in total household income would result in a 1.5% increase in household expenditures on education. When the figures are considered in per capita terms, the coefficient of elasticity is much higher at 2.1. If household income per capita increases by 1%, household expenditure on education per capita increases by 2.1%. This suggests that household expenditures on education change considerably and positively to changes in household income (or expenditure) levels.

In terms of the coefficient of elasticity of household expenditures on education per capita to total household expenditure per capita, the 1950s were a good decade (with the coefficient being 3.0), the decade of the 1960s being the best period, with the highest coefficient of elasticity (5.9); 1970s the worst period (the coefficient was 0.24) and 1990s not much better than the 1970s (the value of the coefficient was 0.78); during the decade of the 1980s it was marginally better (1.0). The spiralling inflation and other economic problems of the 1970s seem to have weakened the relationship between household income (or total expenditure) and expenditure on education over the decades. More basic needs like food and other items might have been given higher priority than education and accordingly increase in incomes might not have caused increase in expenditures on education to any noticeable extent. The relationship did not improve much during later periods.

The values of the coefficients of elasticity of household expenditures on education to household income (or expenditure) are higher than the coefficients of elasticity of government expenditures on education to total government expenditure. This means that households respond to education needs more favourably than governments. A 1% increase in household incomes would result in a more than proportionate increase in expenditure on education, which is much higher than the response of government expenditure to a similar 1% increase in income (or total expenditure) of the government.

Average household expenditure on education per student in a state shows some relationship to the state domestic product (SDP) per capita. Economically prosperous states/union territories like Delhi, Chandigarh, Punjab and Haryana figure at the top of the list in household expenditure on education per student with backward states like Madhya Pradesh, Assam and Bihar at the bottom (Fig. 12.8). For example, households in economically advanced states spend more than the households in economically poor states. The simple coefficient of correlation between SDP per capita and household expenditure on education in 1995–96

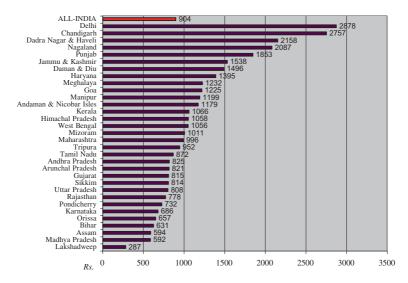


Fig. 12.8 Household expenditure on education per student, by states, 1995–96

(Source National Sample Survey. Secondary Source Tilak 2000)

	Boys	Girls	All
Primary	507	494	501
Middle	904	933	915
Secondary	1552	1619	1577
Higher	2879	2995	2923
All	919	882	904

Table 12.5 Household expenditure on education per student, by gender, 1995–96

Source National Sample Survey Secondary Source Tilak (2000)

was 0.6. Household expenditure is also inversely related to poverty level in the state, the coefficient of correlation being –0.45.

Quite strikingly, according to the 1995–96 National Sample Survey, there are no significant differences in household expenditures on education by gender, i.e., between girls and boys (Table 12.5). In fact, except for a small difference at the primary level, the differences favour girls in other levels of education. This is particularly true in rural areas and for India as a whole. In urban areas, the differences are against girls in all levels of education but the differences are marginal. Perhaps the importance of girls' education is being increasingly recognised by the households, and accordingly, they do not discriminate against girls in spending on their education, a welcome feature.

Why are households 'willing' to spend on education? In general, employment, and economic returns, including not only employment-related earnings, but also factors like dowry, may exercise considerable influence on investment decisions by households in education. This is particularly true with respect to higher education. But why do households spend even on elementary education that is (expected to be) provided free by the State? Households are found to be spending considerable amounts on their children's primary education. As noted earlier, according to the National Sample Survey (1995–96) estimates, on average a household has to spend Rs. 500 per year per child on acquiring primary education, and about Rs. 900 on upper primary education. Even poor households (bottom quintile) spend nearly Rs. 200 on primary education per annum per child. Households from even lower socioeconomic backgrounds—Scheduled Castes, Scheduled Tribes, households whose primary occupation is not high in the occupational

hierarchy—all spend considerable amounts on acquiring education, including specifically primary education. About 30% of the expenditure on primary education goes in the form of fees—tuition and other fees, one-fourth on uniforms, another one-fourth on books and stationery, and a sizeable amount on private coaching, all of which are expected to be provided by the State. Apart from free education, learning/instructional material like textbooks, stationery and other incentives such as uniforms, noon meals are received free only by a small fraction of the students.

In addition to the expectation of attaining a higher social status, households may also spend on education to ensure that their children excel others in the race for ranks. Rich households tend to 'buy' quality education for their children, which is not affordable by the poor households. This means that the households perceive perhaps rightly that public resources are not adequate to ensure 'good quality' education for their children. 'Good' quality may be defined at the bottom as *reasonable* quality or *tolerable* level of quality. Households tend to equate, in the absence of any other information, high costs with high quality.

What I wish to argue is, it is not necessarily the willingness of the households, but the compulsion they feel which makes them spend on education. Households may feel compelled to invest in education, if public efforts reflected in the quantity and quality of physical and human infrastructure (teachers) available in schools are perceived to be inadequate. Under such circumstances even poor households would spend on education out of compulsion. Therefore, the poorer the quality of infrastructure and other facilities in public schools, ceteris paribus, the higher could be the level of expenditure of households on education. The quality of school infrastructure could be measured in terms of a large number of indicators, such as its availability within the habitation or at least within walking distance, type of school buildings, quality and number of teachers, etc. The quantity and quality of school facilities could as well be measured in terms of public expenditure per student. A decline in public expenditure per student is accompanied by an increase in household expenditure on education. If the facilities in public schools were better, families would perhaps not feel the need for incurring expenditure. Therefore, I argue that it is wrong to suggest that families are willing to spend on education; they are in fact compelled to do so. The 'willingness' to pay is also measured in terms of the amount of fees paid to the schools

and other expenditure incurred by households. This may reflect the ability to pay to some extent; in some cases it may not even represent the true ability to pay (as the expenditures might have been incurred by borrowing, and even mortgaging their small fixed assets or their own future earnings), but this does not necessarily reflect 'willingness to pay.¹⁴

12.4 Markets In Education

Now about markets in education.

The private sector in education is not a new phenomenon in India. Role of private sector in education is favoured essentially to meet 'excess' and also 'differentiated' demand for education. Excess demand refers to the demand unmet by the public sector institutions. Differentiated demand refers to demand for a particular type and quality of education (e.g., religious education, English medium education, high quality education, etc.), different from what is provided in public institutions. I have argued elsewhere (Tilak 1994) that in India differentiated demand might explain growth in private education at school level whereas excess demand may be the main factor for growth in private higher education. The private sector is also favoured by the government, as it can tap the untapped resources available in the society for the development of education and correspondingly the government can reduce its expenditures. Many other claims that are made in this context, such as that the private sector will contribute to increase in access, quality and equity in education, etc., are, to my mind, to a great extentuntenable and even false. In an international comparative analysis, I have tried to explore many of these and related myths on private education (Tilak 1991).

The private sector founded several schools and colleges in India before and immediately after independence. The motives of the private sector of the 1950s and the 1960s were to a considerable extent, philanthropy, charity and education development to meet excess and to some extent, differentiated demand. Many of the institutions established during this period willingly subjected themselves to State control and regulation in all respects and even accepted state financing with all its conditions. Profit was not the main consideration. Hence they cannot be equated to the private institutions that have sprung up in the last quarter century, and more particularly after 'marketization' of education became the buzzword. That the earlier kind of private institutions—state-aided private institutions that can be aptly described as *pseudo* private

Table 12.6 Growth of colleges in Andhra Pradesh

	Government	nment Private			Total
		Aided	Unaided	Total	
1969–70	40	80	0	80	120
1979-80	64	147	1	148	212
1984-85	133	181	9	190	323
1989-90	147	182	33	215	362
1993-94	156	182	88	270	426
1996-97	167	187	450	637	804

Source Performance Budget of Andhra Pradesh, 1997–98. Hyderabad: Government of Andhra Pradesh

institutions, led to distortions in the allocation of public resources is a different matter (Tilak 1994).

Private institutions born in the era of marketisation are solely guided by the market principle, viz., profit maximisation. They are also self-financing, and tend to defy or at least resist State regulation of any kind, necessitating judicial intervention very often. Student fees, charged not necessarily in proportion to costs, is often the only source of funds for such institutions. Investment by the private management is very limited, and, if any, is confined, to capital investments in the initial years, which are also recovered in a short period.

The growth of this modern private sector in education is a response to the lack of a clear government policy on the role of the State and markets in education. The historic judgment of the Supreme Court in 1992 that practically banned capitation fee colleges, stating that capitation fee is "patently unreasonable, unfair and unjust" was followed by another historic judgment in 1993 that paved the way for the growth of the very same capitation fee colleges, under the name of self-financing colleges. Elaborate mechanisms were developed by the state that helped in the proliferation of self-financing fee colleges. For instance, in Andhra Pradesh, such colleges have increased in number from almost nil in the early 1980s to 450 by 1996-97 (Table 12.6). Today such colleges offer not only engineering and management education, but also arts and sciences and outnumber public institutions, by several times. In fact, in absolute numbers, and also as a proportion of the total, government colleges turn out to be negligible. For example, in Andhra Pradesh there were 95 private self-financing engineering colleges, compared to 11 government colleges; similarly, there were 303 self-financing medical

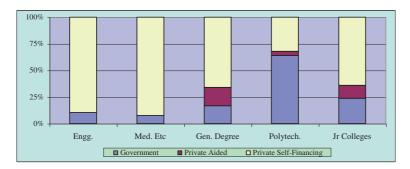


Fig. 12.9 Growth of private sector in higher education in Andhra Pradesh (Source Performance Budget of Andhra Pradesh, 2001–02. Hyderabad: Government of Andhra Pradesh)

colleges, compared to 25 government colleges (2000–01) (Fig. 12.9). The casualty is not just equity, which is well known, but also quality of higher education. Gresham's law of money seems to operate in education: private (bad) colleges drive away public (good) colleges out of circulation.

The *Private Universities Bill*, introduced in the *Rajya Sabha* in August 1995, with a view to providing for the establishment of self-financing universities is still pending in Parliament. It is widely felt that the Bill was not processed and passed in the Parliament, not because the government was not keen on privatisation of higher education in India, not because the private sector is not interested in the Bill, but probably because the latter was not happy with several clauses in the Bill. For example, the Bill requires formation of a permanent endowment fund of Rs. 10 crores, provision of free-ships to 30% of the students, and for government monitoring and regulation of the system.

Though the *Private Universities Bill* has not yet been passed by Parliament, and the recommendations of the Ambani–Birla Committee report (Prime Minister's Council 2000) were per se not accepted, several initiatives taken by the government suggest that higher education is getting rapidly privatised. Perhaps there is no need for the bill. For example, a few private institutions of higher education have been virtually given the status of universities, by recognising them as 'deemed universities.' Universities (e.g., the Guru Gobindsingh Indraprashta University in Delhi)

are created, that consist of only affiliating private self-financing colleges. A few other private institutions (e.g., International Business Schools, Indian Institutes of Information Technology etc.) are allowed to operate almost as universities or their equivalent offering degree/diploma programmes. All this is in addition to allowing rapid growth of private self-financing institutions at college level, and conversion of government-aided private institutions into private self-financing (unaided) institutions in several states.

The private sector found it convenient to remind the state governments that education is, according to the Constitution, a *concurrent* subject, and that state governments could themselves enact legislation for private universities.⁶ Consequently, quite a few state governments have enacted such bills, and private universities have sprung up in large numbers, almost in no time, without necessarily obtaining any approval of the UGC or other concerned authority.

Currently we have a variety of private educational institutions, private universities, private institutions deemed to be universities, and self-financing (capitation fee) colleges, in addition to hundreds and even thousands of unrecognised ones such as teaching shops, 'parallel colleges' and coaching centres—all working within the market framework with the sole objective of profit maximisation. Such institutions are rapidly increasing in number. State-aided private schools and colleges operate within a different framework. But their growth has come to a standstill if it has not declined.

These trends of privatisation are already producing serious effects on various dimensions of the educational system and society at large. Quantitative effects include quantity, quality and equity in education, research, supply of teachers and 'balanced' development of higher education, as I have described elsewhere (Tilak 1999c).

Since there exists 'excess demand' for higher education, it is possible to argue that demand for higher education in India is rather inelastic to changes in fees. But the coefficient of elasticity may not be zero; it is not, in fact, less than unity or inelastic for all levels/types of higher education. For example, it is already noted that steep increases in fees at postgraduate and research levels in the Indian Institutes of Technology have been counterproductive, leading to a decline in enrolments by more than 37% in the mid 1990s.

One of the most important problems refers to ensuring equity in higher education. While the government can, to a great extent, make sure that protective discrimination policies are followed in government and government-aided private institutions, resistance to such policies is much higher in private institutions. The overall fee elasticity of demand for education may not be high but it could certainly be so for economically weaker sections. In other words, with privatisation even if the size of total enrolments does not change, the composition might change in favour of better-off sections with the poor getting completely marginalized.

The government's inability to control the quality of education in private institutions is also being increasingly felt. Even strong proponents of private higher education systems somewhat paradoxically argue that the state should take responsibility for regulating quality in private education. But given the social and politico-economic milieu, the government seems to feel severely handicapped in maintaining quality in these institutions. Generally, once recognition is granted to a private institution (and that is not found to be very difficult) the government cannot enforce any of its conditions. This is true to some extent even of state-aided private colleges. State grants are not usually stopped or delayed for any reason. Massive erosion of quality in private colleges might push down the quality of higher education as a whole.

Further, conflicts between national manpower needs and short-term market signals that influence private higher education institutions can be serious and, in the long run, might produce serious manpower imbalances—both shortages and gluts. This is evident from the estimates and corresponding recommendations made by professional public bodies like the All India Council for Technical Education and the Medical Council of India with regard to the required number of colleges and manpower which are least cared by private colleges, operating in collusion with the government.

All these problems are with respect to 'recognised' private institutions. Emergence of 'fake' national and foreign universities and ghost institutions imparting 'education' and awarding obviously fake degrees is also a problem that is coming to surface. As these institutions are not even 'recognised', the role of the government is practically nil. Occasionally, the UGC or the Association of Indian Universities makes public announcements listing fake universities and ghost institutions, to warn students and parents to be cautious.

In case of school education, even such an arrangement does not exist, though it is well known that there are a large number of private institutions that the government does not recognise. In fact, they cannot be recognised. Many of them were opened under the Registration of Shops

Act relating to shops and commercial establishments (Deshpande 1991). Unfortunately, no quantitative information is available on such institutions, though it is known that they are booming. Such institutions range from teaching shops to new centres offering computer literacy and training, management institutions, institutions of fashion design and what not. They are run completely on a commercial basis, and public educational bodies have no control over them.

The most important apprehensions, which are proving true, relate to the vulgar commercialisation of education, and playing on the anxieties of "gullible parents", charging exorbitant fees formally and informally, starting from application fee to examination fees, fee for grade-sheet and fee for attestation by the universities. The unparalleled greed of private enterprise in education in India has been unravelled. The "carnal lust" (Neave 1996, p. 20) is visible to the naked eye. Education is being viewed by private enterprise as a very lucrative investment to make huge and quick profits. Students who pay exorbitant fees obviously cannot be involved with consideration for national interests such as public service, service in rural areas and service of the poor. The sole objective of these students, whether it is actually realised or not, is to emigrate to greener pastures. No wonder, the products of the carnal lust cannot be expected to be otherwise. This would be the most harmful effect of marketisation of education on the society.

The many legal battles being fought in the high courts and the Supreme Court and the detailed instructions that the courts issue frequently to public bodies suggest a serious malaise with private educational institutions in the country that have little concern for equity, efficiency, norms of educational excellence, and most importantly cherished national goals and ideals. Yet they are increasing in number, as there exists a nexus between them and the seekers of profit, seekers of political power and influence. The casualty is education. As Kothari (1986, p. 596) noted, with the growth of these institutions, "the objective of equal opportunities for education would be jeopardised in a big way. The overall effect would be to convert education into a force for reinforcing the existing stratification of the society."

All this indicates that markets are highly imperfect and incomplete in India, like in many other developing countries (Stiglitz 2002), and fail to perform any normative role in the development of education, and hence any significant reliance on them would be counterproductive.

12.5 Concluding Observations

Let me conclude. I have focused in my lecture on three closely related aspects of financing of education in India, viz., the unwillingness of the government to spend on education, compulsion on households to spend on education and exploitative markets in education. The government is increasingly unwilling to spend on education; households have little choice but to spend huge amounts even on elementary education that the State is expected to provide free. And markets are taking advantage of the situation.

The unwillingness of the government is related to attitudes and policies towards education. The two other phenomena, viz., increase in household expenditure on education and the rapid growth of private sector in education are direct outcomes of government policies and attitudes. They are also mutually related to each other. Rather than perceiving increase in household expenditure as a negative reflection on its inadequacy, and feeling guilty and ashamed of the same, governments are actively encouraging this trend. There is a formidable constellation at work: absence of a coherent long-term policy on education, and lack of clarity regarding the respective domains of households and markets. This has enabled the private sector to hold the state and households to ransom.

The best answer is the provision of good quality education by the State to all its citizens, financed out of tax and non-tax revenues. I have examined earlier (Tilak 1997) alternative methods of financing education, and concluded that of all, state financing remains unequalled. It is not households but the government that should feel socially, economically, educationally and ethically compelled to invest in on education. After all, this is the practice in most civilised societies of the world.

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Notes

1. Among the important quantitative targets and timeframes set in Indian educational planning, are universal elementary education by 1960 (set by the *Constitution of India*), and allocation of 6% of national income to

- education by 1986 (set by the *National Policy on Education 1968*). Both have remained elusive.
- 2. This, namely, the share of a given level of education in total five-year plan expenditure, may be a more reliable indicator of the relative priority accorded to a given level of education than the share of a given level of education in the total expenditure on education in a five-year plan. The later, which is used extensively, implicitly places one level of education against another level, and causes an avoidable fragmented look at education development.
- 3. The corresponding coefficient was 2.3 in the 1960s, 3.2 in the 1970s and 2.0 in the 1980s.
- 4. The hollowness of the concept of 'willingness to pay' becomes clearer in the context of healthcare, where also the concept is used almost synonymously. A person will be ready to incur large expenditures, as he/she knows that the alternative could be fatal. Can this be described as 'willingness to pay'?
- 5. In the last couple of years, there has been a big jump in the number of deemed universities, mostly private, which led the UGC to feel the need to review their working.
- 6. Interestingly, the *concurrency* clause was conveniently not remembered by any state government, when the bill to make elementary education a fundamental right was pending before Parliament for more than five years, before it was finally passed in December 2002 as the 86th Amendment.

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CHAPTER 13

The Dilemma of Reforms in Financing Higher Education in India

13.1 Introduction

Higher education in India is at crossroads (Tilak 1995a). It has started experiencing significant stress with respect to financing, particularly since the introduction of adjustment policies in the country in 1990. In the present overall socio-economic context, it is been generally felt that resources are limited; the government does not have adequate funds, fiscal resources are restricted; tax revenues are relatively inelastic, and hence public resources for higher education will be limited. It is argued that there is a fiscal crisis in India, with the tax system being highly inelastic to the needs of the economy. Ironically on the one hand, the government claims high economic growth during the last couple of years, and hopes to reach a higher rate of economic growth in the near future as an important outcome of adjustment policies, with increased levels of capital inflow from multinational companies and bilateral and multilateral organisations, increased levels of private investment, and high probability

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of availability of more resources with the government as a result of dis-investment in public sector undertakings. Yet, on the other hand, it is forecasted that the education sector, particularly higher education, will continue to be engulfed by the problems of severe financial inadequacy. Even if 6% of gross domestic product (GDP) is allocated to education, as promised by the Prime Minister, in the near future, higher education, it is feared, will face increasing financial crisis. Hence, the need for mobilisation of additional resources for higher education.

Quite a few important proposals are being made in this context. International experience will be of considerable importance in formulating new policies. In this short paper a few select proposals are described, the national and international experience on the same is contrasted with each proposal, and the necessary lessons are drawn. This is preceded by a short discussion on trends in financing higher education in India attempted in the following section to serve as a backdrop for the discussion that follows.

13.2 Trends in Financing Higher Education in India

A few major trends in financing higher education in India can be noted as follows:

- (a) While total expenditure on higher education in India has increased remarkably during the post-independence period in current prices, the increase in real prices is not so rosy. Increase in expenditure per pupil is very small, and in real prices, the same has indeed declined (Tilak 1993).
- (b) The priority given to higher education in allocation of resources of the economy has been steadily falling. The share of higher education in GNP was nearly 1% in 1980–81; but it declined, to nearly half by early 1990s and to <0.4% by mid-1990s compared to 1.0–2.5% in many developed countries, as documented in Table 13.1.
- (c) The share of higher education in total (five-year) plan resources increased from 0.71% in the first five-year plan to 1.24% in the fourth five-year plan. But ever since, it has declined continuously to 0.53% in the seventh five-year plan. As a proportion of total educational expenditure/outlay in the five-year plan, a similar trend could also be noted; it increased from 9 to 25% between

Table 13.1 Priority for higher educati	ion
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		% Share of higher education	
		in total expenditure on education	in GNP
New Zealand	1992	36.7	2.53
Canada	1992	27.9	1.98
The Netherlands	1991	31.9	1.79
Sweden	1992	19.8	1.72
Australia	1991	29.5	1.50
Norway	1992	16.9	1.27
U.S.A.	1990	24.1	1.16
U.K.	1991	20.7	1.04
Japan	1988	22.5	1.04
Singapore	1987	30.7	0.98
Germany (F.R.)	1990	22.4	0.81
France	1992	14.1	0.73
India	1991	14.7	0.56

Source UNESCO (1994)

the first and the fourth five-year plan periods. Subsequently, it came down to 14% in the seventh plan. It is estimated that it might fall to as low as 7% in the eighth five-year plan, as shown in Table 13.2 (Figs. 13.1 and 13.2).

- (d) During the 1980s, the growth in expenditure on higher education has been erratic. The erratic trends are more clear if one examines the figures in real prices (Table 13.3). The 1990s heralded an era of austerity and higher education suffered most. During the 1990s, i.e., in the recent past, the allocation of budgetary resources to higher education has been more erratic, as shown in Tables 13.4 and 13.5.
- (e) Among the alternative sources of finances, the relative share of fees has declined steeply during the post-independence period, from 36.8% in 1950–51 to about 15% in 1984–85, the latest year for which detailed data are available. Voluntary contributions in the form of donations and endowments etc., have also declined in relative proportions (Tilak 1993). More recent data available on a few universities, given in Table 13.6, however, suggest that the fee contributions vary significantly between several central and state universities. In the University of Madras, nearly half the total

Table 13.2	Share of higher	education in	five year plans
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	Expenditure on	Percentage share in		
	higher Education (Rs. in 10 millions) expenditure		Education expenditure	
First five-year plan	14	0.71	9	
Second five-year plan	48	1.02	18	
Third five-year plan	87	1.01	15	
Plan inter-regnum	77	1.16	24	
Fourth five-year plan	195	1.24	25	
Fifth five-year plan	205	0.52	22	
Sixth five-year plan	530	0.49	18	
Seventh five-year plan	1201	0.53	14	
Annual plans	595	0.48	11	
Eighth five-year plana	1516	0.35	7	

^aEstimated outlay Source Tilak (1995e)

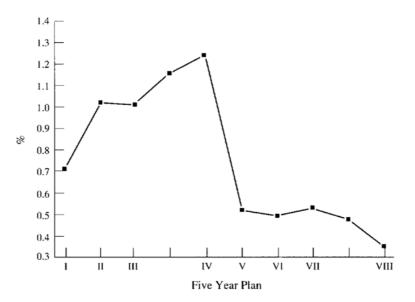


Fig. 13.1 Share of higher education in total five year plan outlay

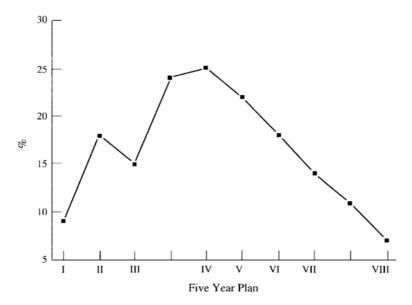


Fig. 13.2 Share of higher education in total education outlay

Table 13.3 Government expenditure on higher education in India (Rs. in 10 millions)

	At current p	prices		At 1980–81 pric	es	
	Centre	State	Total	Centre	State	Total
1980–81	98.8	384.9	483.7	98.8	384.9	483.7
1981-82	109.7	468.1	577.8	99.8	425.8	525.6
1982-83	126.1	555.1	681.2	106.4	468.3	574.7
1983-84	141.2	635.8	777.0	109.7	493.9	603.6
1984-85	181.1	742.6	923.7	131.0	537.1	668.1
1985-86	205.9	840.8	1046.7	138.9	567.1	706.0
1986-87	253.1	947.6	1200.7	159.9	598.4	758.3
1987-88	329.9	1114.9	1444.8	190.9	645.1	836.0
1988-89	562.6	1257.7	1820.3	301.6	674.2	975.8
1989-90	486.2	1723.7	2209.9	240.6	852.8	1093.4
1990-91	464.9	1818.2	2283.1	207.2	810.2	1017.4
1991-92	473.2	1945.1	2418.3	186.1	765.0	951.1
Rate of growth (%)	18.4	16.9	16.9	9.4	7.3	7.3

Source Tilak (1994)

220.0

257.5

245.6

minons)						
	Centre		State		Total	
	Rs.	Growth	Rs.	Growth	Rs.	Growth
1990–91	131.6	_	135.6	_	267.2	_
1991-92	164.5	25.0	127.0	-6.3	316.5	18.5
1992-93	151.9	-7.7	130.1	2.4	274.3	-13.3
1993-94 RE	181.6	19.6	193.9	49.0	395.1	44.0

Table 13.4 Plan expenditure on higher education in the budget (Rs. in 10 millions)

BE: budget allocations/proposed outlay; RE: revised estimates/anticipated expenditure; Growth: growth rate over the preceding year (%)

237.7

21.1

41.8

-4.6

Source Tilak (1995f)

1994-95 BE

1994-95 RE

1995-96 BE

Table 13.5 Budget allocation to the UGC (Rs. in 10 millions)

	Plan	Non-plan	Total
1990–91	112.5	244.2	356.7
1991-92	141.7	260.0	401.7
1992-93	124.9	306.5	431.4
1993-94 RE	141.5	337.0	478.5
1994-95 BE	169.0	323.0	492.0
1994-95 RE	184.3	343.2	527.5
1995-96 BE	189.3	341.8	531.1

22.6

478.8

21.2

Source Tilak (1995f) Note RE revised estimate; BE budget estimate

income is from the students in the form of fees, the government (central and state) grants amount to only 16% of the total income of the university. In central universities, the contribution of the fee is much smaller (see also Ansari 1990).

(f) The pattern of spending by the universities differs widely between different universities. While 88% of the non-plan expenditure in Jamia Millia Islamia was on academic activities, about 50% of the expenditure in Aligarh, Banaras and Guwahati universities is accounted for by administration in 1989/90–1991/92. As the figures in Table 13.7 suggest, academic support and research support do not receive significant shares in the total expenditures on universities.¹

Table 13.6 Sources of income of universities in India (1989/90–1991/92) (non-plan income) (%)

	Government grants	Fees	Press	Farm	Loans	Endowments	Misc.	Total
		Се	ntral un	iversiti	es			
Aligarh Muslim	97.36	1.08	0.03	1.03	0.25	0.00	0.25	100
Banaras Hindu	89.44	0.76	0.56	7.24	0.00	0.37	1.63	100
Hyderabad	94.73	1.90	0.02	0.73	0.00	0.01	2.61	100
Jawaharlal	92.68	1.03	1.03	2.03	0.72	0.00	2.51	100
Nehru								
Pondicherry	86.66	8.34	0.48	0.33	0.04	0.00	4.15	100
Viswa Bharati	97.92	0.50	0.17	0.69	0.00	0.00	0.72	100
AVERAGE	93.19	1.18	0.36	3.65	0.14	0.15	1.33	100
		S	tate uni	persities				
Bombay	11.46	38.96	28.26	2.19	4.06	0.00	15.07	100
Calcutta	91.25	7.52	0.04	0.13	0.00	0.28	0.78	100
Karnataka	53.46	5.51	1.80	0.09	12.73	15.13	11.28	100
Kerala	58.31	30.10	4.48	1.22	1.87	0.00	4.02	100
Madras	15.73	46.78	0.95	0.22	4.51	0.44	31.37	100
Mohanlal	91.33	8.11	0.00	0.33	0.00	0.00	0.23	100
Sukhadia								
Utkal	59.23	22.08	0.00	0.51	2.24	0.67	15.27	100
AVERAGE	54.30	21.15	5.30	0.61	4.30	5.33	9.01	100

Note Miscellaneous sources do not include consultancy services; contributions from consultancy are nil in all universities

Source NIEPA (1995, pp. 186-87)

(g) The need for more and more resources for higher education-for quantitative expansion, improvement in quality and in equity is increasingly felt. To ensure a modest rate of growth in higher education, expenditure on higher education has to be tripled by the turn of the century in real prices from the level prevalent in the early 1990s (see Tilak 1994).

In this overall context, several proposals are being made to generate more resources for higher education, some of which are discussed in the following section.

Table 13.7 Pattern of expenditure of universities in India (1989/1990–1991/92) (non-plan income) (%)

	Academic	Academic support	Research support	Admn.	Infrastructure	Student welfare	Total
			Central universities	ersities			
Aligarh Muslim	30.83	3.58	1.59	50.27	12.70	1.03	100
Banaras Hindu	29.18	5.65	2.69	49.51	9.38	3.59	100
Hyderabad	32.78	15.79	1.32	17.95	25.35	6.81	100
Jamia Millia	87.68	1.68	0.27	0.00	9.26	1.11	100
Jawaharlal Nehru	25.89	8.62	19.03	33.36	12.48	0.62	100
Pondicherry	40.76	5.99	2.74	34.71	12.70	3.10	100
Viswa Bharati	37.35	4.95	1.74	21.44	25.66	8.86	100
AVERAGE	33.46	5.77	3.82	40.92	13.03	3.00	100
			State unive	rsities			
Bombay	59.25	14.14	7.22	1.32	15.41	2.51	100
Calcutta	44.01	3.59	6.33	34.22	10.16	1.68	100
Guwahati	30.95	0.82	4.36	53.33	9.25	1.30	100
Kerala	61.02	3.05	7.05	20.94	5.49	2.45	100
Madras	57.71	13.05	0.91	0.11	27.12	1.09	100
Mohanlal Sukhadia	58.32	3.77	0.03	20.37	13.96	3.56	100
Utkal	67.84	1.95	1.46	19.04	8.60	1.10	100
AVERAGE	54.47	7.24	4.29	17.66	14.50	1.83	100

Note Expenditure on staff welfare is 0.13% in Bombay University; and in all other universities it is nil Source NIEPA (1995, p. 172)

13.3 Prescriptions vs Practice

In this section, a handful of major policy prescriptions that follow from highly influential international organisations like the World Bank and some developed market economies are briefly discussed.² It is important to note that quite a few policy planners and intellectuals share these prescriptions.³ Some of these issues are examined intensively and extensively in the literature.⁴ The main arguments are only briefly summarised here.

Prescription 1: Reduce the State Expenditure (Subsidies) on Higher Education

This is the most general proposal that is increasingly strongly argued nowadays in the overall background of a shift from a welfare paradigm to a free market paradigm.⁵ A strong form of the argument also suggests privatisation of higher education.

Experience:

But the current practice of most developed and developing countries is exactly the opposite. In many societies government is the most important financier of education. Even in many developed countries, the state necessarily finances education rather liberally, footing most, if not all, of the education bill, as shown in Table 13.8. This is held not only to be necessary for the development of education but also as a desirable form of providing education, because markets cannot provide the socially optimum quantities and quality of education, as markets do not capture externalities. State financing is important to capture them. Besides, state financing is also believed to be critically important on equity and efficiency considerations. Hence, even in free market economies, public education systems are relatively dominant and government finances a large proportion of the capital, as well as recurring, costs of public institutions and some part (sometimes a high proportion) of the cost of private institutions.

Secondly, few higher education systems in developed countries are largely privatised. There are a few private institutions in each system, but a substantial part of the higher education system is public. Even in those countries where there exist a good number of private institutions, they are mostly state-supported ones in the form of public grants.

	\		
Country	Type of institution	Year	Share
Australia	Public institutions	1987	87.96
Finland	Public institutions	1987	85.00
France	All institutions	1975	93.00
		1984	89.50
Germany	All higher education	1986	68.50
Japan	Public institutions	1970	83.10
•		1987	63.10
Netherlands	Public institutions	1985	80.00
Norway	Public institutions	1975	95.00
•		1987	90.00
Spain	Universities	mid-1980s	80.00
Ú.K.	Universities	1986-87	55.00
	Polytechnics ^a	1986-87	72.40
U.S.A.	Public institutions	1984-85	59.30

Table 13.8 Share of state finances in the income of the higher education institutions in OECD countries (%)

The number of pure private higher education institutions, i.e., self-financing institutions, is in effect negligible relative to the public and publicly supported higher education systems.

Hence developing countries have reason to suspect the intentions of the free market economies and the international aid organisations, and to argue strongly that "higher education determines its (India's) economic and technological progress" (UGC 1993, p. 18), and "Government funding must continue to be an essential and mandatory requirement for support to higher education. The Government/State must continue to accept the major responsibility for funding ..." (UGC 1993, p. 107).

Prescription 2: Increase Fees (Cost Recovery) in Higher Education Substantially

This prescription is based on the assumption that fee rates are dismally low in India and other developing countries, that there is a willingness to pay for higher education, and that there is unlimited scope for increase in fees. These assumptions are questionable.

^aEngland only Source Tilak (1995d)

Experience:

Fees (tuition and other fees) as a proportion of the recurrent costs of higher education in developing countries like India are reasonably high, 15–20% (Tilak 1993). This is a much higher percentage than the corresponding proportion in many developing and developed countries of the world (Table 13.9).⁶ Even in countries like the United States, fees meet only 15% of total recurrent expenditure in public institutions. Only in South Korea and Chile, is the proportion much higher. On the whole, the corresponding figures are higher in poor countries than in relatively developed countries (see also World Bank 1994).

In the context of these policies, it is also necessary to note that the proportion of student or household expenditure on higher education is much higher in developing countries like India than in countries like the United States (Tilak 1993). Household costs (exclusive of opportunity costs) on higher education as a proportion of GNP per capita are much higher in developing countries than in developed countries (see Ziderman and Albrecht 1995, p. 47). Further, given the standards of living of the population on the one hand, and more importantly, given the absence of any effective student aid programmes on the other, any measure to increase fees substantially and to reduce public subsidies for higher education will produce a brutal impact on disadvantaged students. Thus, the scope to mobilise "greater share" from students does not exist.⁷

The AICTE (1994) Committee and also the UGC (1993) Committee have pleaded for raising the cost recovery rate to about 20–25% of recurring costs, and that this level should be reached gradually. The UGC Committee suggested that it should reach 15% in a five-year period, and 25% in a 10-year period (see Tilak 1995b). Thus, 20–25% cost recovery in terms of fees and other non-governmental resources should be viewed as the maximum limits that can be aimed at.

Prescription 3: Along with Increase in Fees, Introduce Efficient Scholarships Schemes

Along with increase in fees, many other proponents of fees argue in general, for an elaborate and well-designed scholarship and loan schemes to protect the interests of the weaker sections. This is a well-intended proposal; but the experience is not much encouraging.

 Table 13.9
 Share of fees in costs of higher education in selected countries (%)

Country	Year	Share	Country	Year	Share
Developing countriesa			Developed countries		
Sri Lanka		_	Norway (public)	1987	0.0
Tanzania		_	Australia	1987	2.1
Bolivia		1.0	France	1975	2.9
Pakistan		2.1		1984	4.7
Philippines			Germany	1986	0.0
All	(1985/87)	2.5 - 5.0	•		
Public	1985	10.9	Canada	mid 1980s	12.0
Private	1977	85.0	Netherlands	1985	12.0
Nepal	1986-87	4.4	Spain	mid 1980s	20.0
PNG	1988-89	4.4-9.0	Japan		
Brazil		5.0	Pvt 4-yr inst.	1971	75.8
Malaysia		5.8	•	1985	65.8
Thailand		6.9	Public inst.	1970	2.0
Costa Rica		8.0		1987	8.8
Guatemala		10.0	All instns	1971	31.7
Nigeria		12.4		1985	35.8
Indonesia		13.0	U.K.		
Turkey		15.0	Universities	1970-71	12.6
India	1984-85	15.0		1988-89	6.4
South Korea	1985		Polytechnics	1982-83	15.0
Public		49.6	•	1987-88	14.0
Private		82.3			
Chile	1990		U.S.A.		
All		34.2	Private inst.	1969-70	38.6
Public		38.5		1984-85	38.7
Private		95.0	Public inst.	1969-70	15.1
Pakistan	1987-88			1984-85	14.5
Colleges		7.4	All instns	1969-70	20.5
Univ. (Gen)		1.9		1986	22.4
Univ. (Tee)		1.3	Soviet Union	early 1980s	0.0
Colombia			Hong Kong	1988–89	6.5-12.
Public Univ.	1987	9.6	Singapore	1992	<20.0
Private Univ.	1989	81.0	0.1		
Venezuela	1986				
Public		3.8			
Private		83.0			

⁻ Nil or negligible

^aAround 1980, unless otherwise mentioned Source Tilak (1997)

Experience:

In a very few developing countries fee reforms were accompanied by sufficiently strong scholarships schemes. For instance in Kenya, fees were increased, loans were introduced, but the programme of bursaries (scholarships) failed miserably. There is a general tendency to administer fee reforms efficiently but scholarship schemes are not introduced, or if introduced, they are not efficiently administered. Further, since fees lie at the entry point into higher education, and scholarships are received by the students during (and sometimes even after) studies that too with no certainty, the restrictive effect of fees on access of weaker groups to higher education are rarely counterbalanced by the scholarship schemes. Lastly, scholarships cover (a) only a fraction of students coming from lower income groups, and (b) a fraction of their costs of higher education. Thus most scholarship schemes fail to counterbalance the regressive effects of increase in fees on access to higher education of disadvantaged young people.

Prescription 4: Introduce Student Loan Schemes

This proposal is being made like the earlier one, to safeguard the interests of the disadvantaged, but essentially to support fee reforms. It is also advocated as an important solution to the problem of financing of higher education in developing countries, as it aims at shifting the burden of financing higher education from the state to the students.

Experience:

In addition to several well-known theoretical and empirical weaknesses associated with student loan programmes (see Tilak 1997), the most important problem faced by developing as well as developed countries relates to non-repayment of the loans. In India, of the total investment of Rs. 869 million made on student loan programmes during 1963–64 to 1987–88, only 5.9% was recovered. Upper estimates might be around 15% in the recent years (Tilak 1992). It is well known that the default rates are high, and the losses to the government are abnormal in several developing countries. Every student in Kenya, for example, gets a loan, and the loss to the government as a result of defaults was as high as 94%, i.e., 94% of the loan amount was not recovered. Costs of administration

of loans, i.e., costs incurred on personnel and office expenses on administration and attempts to recover, are also very high. While costs of administration of income-contingent loans seem to be small (e.g. in Australia, and Sweden), costs of administration of mortgage type loans are quite high, as shown in Table 13.10. If such costs are added to the loss to the government on loans, the total loss amounts to 103%, in Kenya (Ziderman and Albrecht 1995). Even in some Latin American countries like Colombia, where the modified scheme was believed to be vielding adequate returns, the rate of recovery as a per cent of total costs (value of loan amounts and administrative costs) was only 53% in 1985, even after reforms were introduced in the system. Reforms in loan schemes did improve rates of cost recovery in some Latin American countries like Columbia, Brazil and Jamaica. Nevertheless, the default rates and losses to the government are high. Further, Ziderman and Albrecht (1995) estimated that in some of the countries characterised by the highest public sector cost recovery in the world, governments recover only between 2% (Colombia) and 14% (Quebec, Canada) of instructional costs from loan recipients. There are Governments which actually spend large amounts of money on student support in addition to institutional subsidies.

The net financial gains from student loan programmes are believed to be not substantial. There cannot be any savings in public expenditure in the short and medium term. In fact, the governments have to allocate more public resources for higher education in the form of student loan funds. Colclough and Lewin (1993, pp. 209-210) have estimated that if loans were typically taken to cover four years of study with a 20-year payback period, the government would not recover even 50% of the initial generation of student loans until 14 years after the start of the scheme. This is exclusive of rebates for unemployment etc., and defaults. Barr (1993, p. 725) calculated that the programme in the U.K. produces "no cumulative net savings for at least 25 years". After a thorough review of 24 loan programmes in 20 countries, Ziderman and Albrecht (1995) concluded that in general, developing country loan programmes to date have not reduced significantly the government's fiscal burden for higher education and that the scope for increase in effectiveness of the programme is also restricted.⁸ Hence, the student loans cannot be a short term or a medium term solution to the problems of resource scarcity in higher education. Given, inter alia, the levels of defaults, loans can never become self-financing. On the other hand, they can indeed be "expensive enterprises" (Ziderman and Albrecht 1995).

Table 13.10 Student loan programmes and government losses

Country Yea	Year	Percentage	Governm	Rate of		
		of students with loans	Default	Administration	Default and administration	recovery
			Mortgage	Loans		
Columbia I	1978	_	76	11	87	13
Columbia II	1985	6	38	9	47	53
Sweden I	1988	_	62	8	70	30
Indonesia	1985	3	61	10	71	29
U.S.A.	1986	28	41	12	53	47
Hong Kong	1985	26	43	4	47	53
U.K.	1989	7	30	11	41	59
Norway	1986	80	33	15	48	52
Denmark	1986	_	56	6	62	38
Finland	1986	_	46	6	52	48
Brazil I	1983	_	94	4	98	8
Brazil II	1989	25	65	6	71	21
Jamaica I	1987	20^{a}	84	8	92	8
Jamaica II	1988	_	62	8	70	30
Barbados	1988	_	18	15	33	67
Kenya	1989	100	94	9	103	-3
Canada ^b	1989	59	31	6	37	63
Chile	1989	_	69	13	82	18
Japan	1989	19	51	9	60	40
Venezuela	1991	1	98	10	108	-8
Honduras	1991	1	53 Income C	20 Contingent Loans	73	27
Australia	1990	81	52	5	57	43
Sweden II	1990	_	30	3	33	67

I and II refer to situations where the loan programmes underwent reform

Rate of recovery refers to average loan recovery ratios, as a percent of loan amount, default and administration costs

Source Tilak (1997)

Prescription 5: Reduce the Demand for Higher Education

This prescription is based on the premise that developing economies like India have over-expanded their education systems in relation to their needs and their abilities.

a1985

^bQuebec

Experience:

Despite seemingly high rates of growth of higher education systems in developing countries, a very small proportion of the relevant age group population is enrolled in higher educational institutions, compared to above 70% in the United States and nearly 100% in Canada, as shown in Table 13.11. In India, hardly 5% of the age group 17-23 are enrolled in higher (post-secondary) education. The argument that "the higher education system in the country is now sufficiently developed to meet the nation's requirements" (Ministry of Human Resource Development 1994, p. 75) is unpalatable. Similarly, though India is said to have been

Table 13.11 Gross enrolment ratios in higher education in selected developed and developing countries (%)

Country	Year	Ratio	Country	Year	Ratio
Developed countries			Developing countries		
Canada	1992	98.8	Asia		
U.S.A.	1991	76.2	South Korea	1993	46.4
Finland	1992	57.0	Philippines	1991	27.8
New Zealand	1992	49.7	Thailand	1992	19.0
Norway	1992	49.3	Indonesia	1992	10.1
France	1992	45.6	Malaysia	1990	7.3
Australia	1992	39.6	India	1989	6.0
Spain	1991	39.5	Sri Lanka	1991	5.5
Netherlands	1991	38.8	Bangladesh	1990	3.8
Germany (F.R.)	1990	37.6	Pakistan	1989	2.8
Belgium	1990	37.6	China	1991	1.6
Denmark	1991	37.6			
Austria	1992	36.5	Africa		
Sweden	1991	33.8	Botswana	1992	5.2
Italy	1992	33.7	Nigeria	1989	3.7
Germany (D.R.)	1989	33.3	Kenya	1990	2.2
Japan	1991	31.5	Ghana	1990	1.5
Switzerland	1992	30.7			
Bulgaria	1992	30.0	Latin America		
Iceland	1991	29.2	Mexico	1992	14.0
U.K.	1990	27.8	Columbia	1991	14.8
Portugal	1991	23.4	Brazil	1991	11.7
Poland	1992	23.0			
Hong Kong	1992	19.6			

Source UNESCO (1994)

the third largest reservoir of scientific and technical manpower in the world, in terms of the manpower in relation to total population, India ranks somewhere at the bottom. For instance, India has 134 scientists and engineers per one million population in 1992, compared to 5183 in Japan, 3874 in United States, more than 2000 in France, Australia and Canada, 1550 in the U.K., etc. (Tilak 1995c).

With inadequate higher educated manpower, developing countries are coming gradually to realise that they cannot attain high levels of economic growth. Economic miracles have taken place in some developing countries (e.g. in East Asia) mainly due to high rates of growth of their higher educational systems. A minimum level of 20% enrolment ratio can be viewed as a threshold level for a developing country like India to reach a higher level of economic development. Hence the need to rapidly expand the higher education system in India and in other developing countries.

Prescription 6: Concentrate All Efforts on Basic Education, Until is Universalised

By concentrating on basic education, the prescription clearly implies ignoring of development of higher education. This is influenced by the idea of evolutionary paths of development (\grave{a} la W. W. Rostow), i.e., an economy can look at the second stage of development, only after completing the first stage (see also Riddell 1996).

Experience:

In practice, by concentrating on basic education, many developing countries had ignored the development of higher education, and in the process paid a heavy price. The developing countries that did not focus on the development of higher education are found to have serious disadvantages in the international competitive world. They have to continuously depend for long periods, upon expatriates for development of even school education, for general administration and planning, and on developed countries for technical know-how and technological development. With a high degree of dependency on developed countries and multilateral organisations, few developing countries could achieve high rates of economic growth.

Hence, it will be risky for developing countries like India, particularly in a globalised framework, to ignore development of higher education until basic education is effectively universalised, secondary education is extensively spread, and significant improvement in quality takes place in the whole school education. In short, to focus on basic education and to ignore higher education may not be the best way of enhancing the international competitiveness of a developing economy like India. As Singh (1994, p. 180) rightly argued, "to compete in the world industrial economy, it is essential to have higher educational institutions, scientists, technologists and engineers. Universal primary and secondary education is a worthy goal in its own right, but alone it does not provide the wherewithal to compete in the international market". For the same reason, in India the UGC (1993, p. 18) pleaded: "while it is mandatory that the nation achieves universal elementary education and total literacy, at the same time it cannot afford to neglect and relegate to a neglected position our quest to achieve global standards in higher education". The UGC Committee also "deprecates the tendency which views education in a truncated fashion and sets one sector against another".

13.4 Where Do We Go from Here?

As argued earlier (see Tilak 1995c), the first best method of funding higher education in developing countries is out of general tax revenues by the state. This has both theoretical and empirical advantages. However, when governments are unwilling to finance higher education due to socioeconomic and political pressures, including international pressures, second best solutions have to be found. In such a context of financial squeeze, some of the measures that are being proposed can be experimented with caution.

First, governments cannot reduce their role in funding higher education significantly, and attempts at privatisation of higher education institutions would be disastrous for the development of higher education in India from the points of view of quantity, quality, efficiency and equity. But the method of financing by the state has to undergo change. The grants mechanism has to be made more transparent and should be based on objective criteria like the unit costs of higher education, as suggested by the UGC (1993).

Along with this, however, attempts can be made to mobilise non-governmental resources from students in the form of marginal increases in fees. But the view that there exists abundant or unlimited scope for increasing fees is erroneous. At best, cost recovery rates through fees and other measures can be increased gradually over a couple of decades to the maximum levels of about 20–25% of recurring costs of higher education institutions, as suggested by the UGC (1993).

Thirdly, student loan programmes can be revitalised in India to generate some limited resources for higher education in the long run. In the short run, in fact, the loan programme might require huge funds. For example, the AICTE (1994) argued that a huge capital base of Rs. 3000 crores has to be built to float loans to students in technical education. If the scheme is extended to general education, the requirements could be much higher.

Fourthly, attempts may be made to augment resources from the private corporate sector by forging effective university–industry relations, from which both the universities and the industrial sector benefit. The industrial sector should recognise that the skilled qualified manpower it requires can be produced by universities only if the universities are well endowed with finance. At the same time, it should be noted that establishment of linkages between the industrial sector, essentially characterised by profit motive and universities characterised by non-profit motive, is not easy, and the monetary gains for the universities may not be sizeable.

Lastly, none of these measures should aim at reducing the demand for higher education, as the need for more educated manpower increases with globalisation.

To conclude, it is more out of economic pressures, than belief in the advantages of market reforms, that higher education institutions in India would be required to introduce reforms to generate additional resources. At the same time, few hope that the reforms would generate substantial level of resources of such a magnitude, that government finance for higher education can be reduced significantly.

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Notes

- 1. It is important to know the exact details of how several items are classified into various categories. But such details are not available in the required detail. Hence we are not in a position to explain the unbelievably low figures in Table 13.7 such as those relating to expenditure on administration in Jamia Millia Islamia, Bombay and Madras Universities.
- 2. See, e.g. World Bank (1986, 1994).
- 3. See, e.g. Dandekar (1991).
- 4. See, among others, Tilak (1991, 1995g) on privatisation of higher education, and Tilak (1995d, 1997) on many other issues.
- 5. See Tilak (1995d) for an elaborate discussion on the issue.
- 6. See also Table 13.6.
- 7. See Tilak (1997) for an exhaustive discussion on the issue.
- Even though Ziderman and Albrecht (1995) conclude about the developing countries, their own analysis confirms that the conclusion is equally applicable to developed countries.
- 9. These reforms may have non-financial advantages in terms of improving internal efficiency of the system. These aspects are not discussed here.

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External Aid and Cooperation



CHAPTER 14

Political Economy of External Aid for Education in India

Foreign aid is still an ambiguous concept in economics; the dialogue between economic theory and observable foreign aid is not one of the cogent parts of economics..., there is no generally accepted economic rationale for foreign aid ...

(Schultz 1981, p. 124, original emphasis)

The issue of development aid has been controversial for several reasons in many countries. The period of 'Moral vision in international politics' (Lumsdaine 1993) was long over; in the increasingly globalised world of the twenty-first century, dominated by marked considerations, aid may become more controversial and may at the same time assume more significance. One important reason for it to assume much significance nowadays is at the beginning of the century almost all developing countries of the world have been in the process of adjustment, having taken structural adjustment loans from the World Bank and the International Monetary Fund (IMF). It also becomes more controversial, as tensions between national interests and global interests are becoming increasingly high and serious as the wave of globalisation intensifies. External aid to education becomes a more complicated issue in developing countries like India whereas an adjunct to the structural adjustment operations that stress that 'society can no longer afford social democracy, so expensive social and education programs must be curtailed' (Laxer 1993, p. 13), more loan programmes such as social

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safety net programmes including more specifically education projects with external assistance have been launched (Tilak 1992).

The last decade of the last century marked a new phase of developments in the Indian economy, with the heralding of the structural adjustment policies, which are now known as the new economic reform policies. The decade also marked new developments in the education sector. Following the introduction of the adjustment policies, India resorted for the first time to external borrowing for education. Aid for education was a new phenomenon; but it grew rapidly, and it has its own special contributions—positive and negative as well, to the development of education in the country. The experience of the last decade suggests that while there are strong positive aspects of the aid programme, there are also equally strong, if not more powerful, adverse effects, some of which may affect the very polity of the whole society.

On the relationship between aid and growth, the available research yielded mixed results: a positive relationship between aid and growth (e.g., Heller 1975); no significant relationship between the two (Mosely 1987; Boone 1996); and a negative relationship between the two (Griffin and Enos 1970; Weiskopf 1972).

Similarly there are three divergent views on the role of aid in educational development in developing countries:

- 1. Aid is beneficial to poor countries; it worked in the past and will work in future (Tarp and Hjertholm 2000; Addison et al. 2005); it helps the poor to become more educated, to improve the social, occupational and economic mobility, and the poor nations to reduce poverty and increase economic growth and development, as the human capital theory (Schultz 1961) suggests, all this without hurting the rich; after all, international aid is a public good (Mosely 1987) and 'foreign aid is in everyone's interest' (Sachs 2006).
- 2. Aid is unhelpful or even harmful to the interests of the developing countries, weakening the state and influencing national policies, and it helps only the rich aiding countries (Magdoff 1969; Hayter 1971, 1985; Mosley et al. 1991), as 'a reverse aid' (Petras and Veltmeyer 2002) and it helps the 'aspiring hegemonic states to conquer markets and promote the interests of their capitalist classes' (Petras and Veltmeyer 2002, p. 282); this is more so in the case of education, as rich traditional national education systems and values give way to global culture, and a global common mode of

- education, often described as McDonaldisation of education, if not neo-colonisation of poor countries.
- 3. While experience shows that (1) above is not necessarily always true, aid has the vast potential to help poor countries, by helping them to jump-start the process of growth (Sachs 2005), and can be made to serve as 'the midwife of good policies and good institutions' (World Bank 1998, p. 47) and a powerful instrument of development (Pronk 2001). Even from the point of view of the aiding countries, it is 'an unreliable joystick' (Edgren 2002). There are many significant positive effects of aid, though they are subject to composition of aid (Mavrotas 2002; Chatterjee et al. 2007; Asiedu and Nandwa 2007), marginal reforms in the aid mechanism (Easterly 2003), level of development of the countries and better policy regimes in developing countries (Collier and Dollar 2004). It is also argued that in modern market economies interest-free long-term financial assistance can prove to be actually in the interest of developing countries. It is the improper use of aid that is the cause of the problem rather than foreign aid per se.

I wish to reflect, in this lecture, on these issues by examining some of the randomly selected important issues relating to the politico-economic dynamics of aid for education in India and the consequent developments, which have short-term as well as long-term implications. The questions that I would like to examine in this context are:

- Why and why not aid for education?
- How much is the aid?
- Is the aid additional or substituting the domestic funding?
- Will external assistance for education increase donor dependency?
- Above all, will aid really contribute to long-term development of education in the country?

14.1 Why and Why not Aid for Education?

Education, unlike normal commercial sectors, is associated with a few special characteristic features, and special problems. For the same reason the education sector has not been considered worthwhile for the business of aid for a long period. From the developing countries' point of view, education is so intricately related to the very culture of the society,

and is usually most susceptible to changes, interventionism, dependence and cultural domination, that any external intervention in education is rightly feared to be intervening with the culture and ethos of the society. Second, in many countries, education particularly school education is not a foreign exchange-intensive activity, requiring import of any expensive equipment. Hence no need for external aid for education.

In India also, the need for external assistance for education was not felt for a long time. The offer of US aid for higher education was spurned after independence, essentially due to cultural reasons (see Tilak 1988). Further, foreign aid was felt necessary only in the case of foreign exchange-intensive, capital-intensive and foreign-expertise-needed sectors only. Education in India in general, and school education in particular, does not belong to either of these categories, unlike in some countries in sub-Saharan Africa where even primary education is critically dependent upon expatriate teachers, and imported textbooks, stationery and class-room material. During the first four decades of development planning, accordingly, education has been financed in India mostly with the help of domestic resources, except for the establishment of a very few specialised institutions like the Indian Institutes of Technology in the 1960s for which limited external assistance was used. External assistance was refused for general education, including for general higher education.

From the point of view of the international organisations, the education sector was not regarded for a long period as a productive sector, returns from which would be tangible and would be enough for the aid recipient countries to be able to repay the loan. Education projects were also regarded as complex and were difficult to administer, implement, complete and assess and 'hard to fit to the standards and criteria of accountability' (Weiler 1984, p. 151). Financial institutions like the World Bank felt that 'we can't go messing round with education and health. We're a bank!' (Caufield 1997, p. 64). As a result, though John Maynard Keynes suggested in the Bretton Woods conference long ago in 1944 for the inclusion of education in the World Bank's operations, education was not on the agenda of the Bank until 1962, when the first education loan was given to Tunisia.¹

However, education became over the years an attractive sector for international organisations, as (a) the rates of return to investment in education were found to be high enough for lending,² (b) education contributes to economic growth producing manpower, which would enhance returns to loan amounts invested in commercial sectors, enabling thereby the aid-receiving developing countries to repay the loans

taken for commercial sectors, besides the educational loans, and (c) the international community began feeling somewhat morally compelled to aid poor countries to educate their masses.³ The deteriorating economic conditions of the poor countries also made them vulnerable to opt for loans for any sector including education. Among the several bilateral and multilateral aid organisations, the World Bank has played an important role in it. Although a late entrant into the World Bank system of loan operations, in a very short period, education became an important sector of its loan operations, and the World Bank emerged as the single largest supplier of international aid for education (Tilak 1988).⁴

In India too, the serious economic conditions on the one hand, and the enthusiastic World Bank on the other, caused serious changes in the policies towards aid for education. In a sense, the economic crisis was sudden, and a sudden shock treatment in the form of adjustment loans was felt necessary. The crisis was sudden, as, as late as in 1990, India was recognised as a country that did not need adjustment measures of the kind suggested by the World Bank and the IMF⁵; it was also regarded not as a 'potential candidate' for such loans. 6 Within a year, the situation had changed completely. India had become suddenly an adjusting country with the introduction of a package of sweeping policy reforms in July 1991, and it was rightly feared that it might become 'an intensely adjusting' country soon, as it appears, it did become. Under these circumstances, the pressures of the World Bank finally worked and the World Bank could overcome the government's resistance to borrowing for education projects, and could initiate external aid for education as well (World Bank 2001).

14.2 The Beginning of the Aid for Education in India

The stabilisation policies and structural adjustment policies, that accompanied the adjustment loans from the World Bank and the IMF, had inflicted, like in many other countries under similar circumstances, in India too serious cuts in budgetary resources of all sectors, including education, and primary education in particular (Tilak 2002).⁷ For the international aid organisations like the World Bank, this was also the right time to show their commitment to basic education, following the aid commitments made in the World Conference on Education for All at Jomtien in 1990 (WCEFA 1990). Consequently, again like in many other countries, a social safety net programme, a compensatory programme that aims at reducing the impact of structural adjustment policies, was

launched with loans from the World Bank/IMF, to protect vulnerable but important sectors like primary education from the brutal impact of the economic reform policies. Thus began the international assistance for primary education in India, not sought even for other levels of education for a long time by the Government of India during the preceding four-and-a-half decades since independence. In fact, quite a few international aid organisations were very eager to enter into the primary education scene in India from the mid-1980s onwards. However, the Government of India felt no need of external assistance for primary education. The foreign exchange crisis in 1989 followed by the adoption of structural adjustment policies, which were regarded as 'a necessary evil', changed the whole situation and thereby the approach of the government. For the first time, the primary education sector was rather reluctantly opened to the enthusiastic external aid organisations on a large scale.

Starting with the World Bank assistance for primary education in 10 districts in the state of Uttar Pradesh and that of UNICEF in the state of Bihar, a plethora of international—both multilateral and bilateral—aid organisations entered into the aid business in education in India. In a very short period, almost all the important aid organisations, including UNDP, UNICEF, European Commission/Union, Dutch International Aid Agency, Swedish International Development Agency (SIDA) and the British DFID set foot in India. When the Government of India, after a lot of persuasion by the World Bank, very reluctantly agreed to the World Bank aid for primary education in Uttar Pradesh in 1992-93, it hardly realised that this would open the floodgates for external aid to flow into the education sector in India with all its ramifications. Though there have been many on the scene, the World Bank, like in the rest of the world, emerged as the single most important source of aid for education in India, exercising a high degree of serious influence even on other international actors and their policies in the area in India.

14.3 THE DISTRICT PRIMARY EDUCATION PROJECT (DPEP)

With the growth of the externally aided primary education project from covering a meagre 10 districts by the World Bank to a large number of districts by a multitude of international organisations, coordination of their activities with several state governments became an important issue. In fact, a number of external aid organisations entered the education arena even before a clear well-formulated framework for external

assistance for education was designed. In order to ensure better coordination from the point of view of the Government of India and governments of various states on the one hand, and the host of international aid organisations on the other, the Government of India launched the DPEP, as a broad overall umbrella programme of all international aid projects in primary education in the country. Ouite a few other externally aided projects that were in existence before the formation of the DPEP were also brought under this common umbrella. A project-centric district level programme concentrating on primary education eventually evolved.

14.4 Growth of External Aid

Starting with a meagre Rs. 37 crores¹² (approximately US\$11.8 million) in 1993–94, within a decade, the quantum of total external aid for primary education projects in the country increased steadily to Rs. 1285 crores (about US\$275 million) by 2002–03 (Fig. 14.1).

It is only in recent years, after the end of phases I and II of the DPEP, that the amount of aid started declining, as the government desired to reduce reliance on foreign aid for education, and to bring all national and international projects on elementary education¹³ under the banner

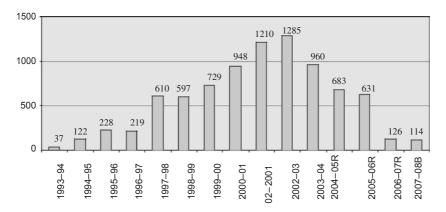


Fig. 14.1 Growth in external aid for elementary education in India (Rs. in crores in current prices) (*Note* R=revised estimate; B=budget estimate. *Source* Based on MHRD-b and MOF (2006, 2007))

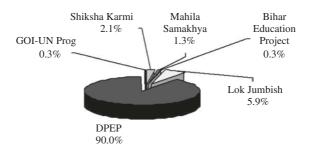


Fig. 14.2 Sources of external aid for elementary education (1993–94/2004–05)

of the new all-encompassing project of *Sarva Shiksha Abhiyan* (SSA), launched by the Government of India. ¹⁴ Further, the Government of India decided in 2003 to discontinue taking bilateral development assistance from small agencies, other than the UK, European Union, USA and the Russian Federation; and also decided not to accept any more *tied* aid. ¹⁵ In all, aid increased at an annual rate of growth of 29.4% in nominal prices and at a rate of growth of 22.6% in real prices ¹⁶ between 1993–94 (the year of commencement of the aid) and 2004–05, the latest year for which we have the data. ¹⁷

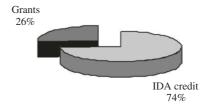
The total cumulative aid received until 2006–07 amounted to Rs. 8400 crores (about US\$1870 million). The aid consisted of funds from both bilateral and multilateral sources. The latter is however more significant than the bilateral aid. Among the several externally aided projects, DPEP is the most important one in terms of the amount of money involved (Fig. 14.2).

About 90% of the total aid received is from the World Bank for DPEP. Other externally aided projects include *Mahila Samakhya*, *Shiksha Karmi* and *Lok Jumbish* and they accounted for small amounts. ¹⁹ SIDA's assistance for Lok Jumbish and Shiksha Karmi together accounted for 8%, the second largest source of funds; and the Dutch aid accounted for only 1.3%. Others accounted for insignificant amounts.

14.5 Is It a Grant or a Loan?

External assistance includes both grants and loans. While World Bank aid is largely composed of loans, much of the assistance from UNICEF, UNDP, the non-financial institutions and many bilateral sources comes

Fig. 14.3 The composition of the aid: Loans and grants (up to March 2004) (Total: Rs. 6945 crores≃US\$1580 million.)



in the form of grants. A substantial amount of funds received consisted of loans from the World Bank received through the International Development Association (IDA). Grants that need not be repaid amounted to only about one-fourth of the total so far (Fig. 14.3).

The assistance received from the World Bank/IDA for education is generally called concessional and semi-concessional assistance. Generally the IDA credits are repayable over 35–40 years with a grace period of 10 years.²⁰ They are also repayable in hard currency. They carry no interest, but there is an annual commitment charge (0.5% on undisbursed balance) and a service charge (0.75% on amount disbursed).²¹

However, in India even the IDA credit for education is widely seen as a grant. This is because, though it is a loan to the union government, in order to encourage the states to go for foreign aid, the union government gives it as a grant to the states, as a part of its plan assistance²² to the states for elementary education.²³ Hence it is natural that the state governments treat this as a grant, without any feeling of liability for repayment. It should, however, be noted that a substantial part of the aid comes as a loan from the IDA and India has to repay it, however low the rate of interest be, however long the repayment and grace periods be, and however small the real value of money would be.

14.6 Is the Aid Substantial or Insignificant?

Of all, the most important consequence of DPEP is relaxation of resource constraints in planning education in India. Educational planning under austerity (or under conditions of severe resource constraints) has been the characteristic feature of financial planning of education in India for a long time, as in many developing countries. Perhaps for the first time, the districts in India were told that each district participating in the DPEP would be given about Rs. 35–40 crores (about US\$11–12.5 million) for a seven-year project period under DPEP. While Rs. 35–40 crores

is a substantial additional amount for a district, Rs. 5–6 crores (about US\$1.1–1.3 million) per annum is not really that high compared to the present level of total public spending of about Rs. 100 crores (about US\$22 million) per district on elementary education in India on average.

Among the several sources of finances of education in India, foreign aid has not been a source of funding during the first four-and-a-half the first decades after independence, though it is a very important source of finances for education in several other developing countries. Once India started taking aid for primary education, it grew fast and as a proportion of the total union government's plan expenditure on education, aid has increased from below 5% in 1993–94 to above 20% by 2001–02 (Fig. 14.4).

The corresponding proportion shows a declining trend during the later years. More importantly, as a proportion of the union government's plan expenditure on elementary education, it increased from about 10% in 1993–94 to above 35% in 2001–02. These are indeed high proportions for a developing county like India and may give an impression

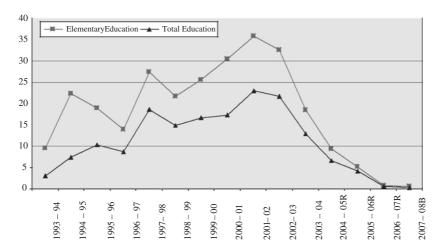


Fig. 14.4 Share of aid in union government's total plan budget for education (%) (*Note* R=revised estimate; B=budget estimate. *Source* Based on MHRD-b and MOF (2006, 2007))

that the aid is very substantial, and that elementary education critically depends upon external aid.

But relative to the total education budget in India (of the union and state governments together), the foreign aid seems to be insignificant. On average per annum the aid received was about Rs. 600 crores (approximately equivalent to US\$144 million) between 1993-94 and 2006–07. Compare this with the total government (union and states) budget expenditure on education, which is of the order of nearly Rs. 120,000 crores (US\$26,500 million) in 2005–2006 (budget estimate) (MHRD-b). In 2002-03, when the total external aid was at a maximum (Rs. 1285 crores, US\$275 million), it amounted to only 1.6% of the total government expenditure on education and about 3% of the total government expenditure on elementary education in the country. The aid also constituted as insignificant as 0.06% of GNP in 2002-03. In the most recent years it has been further reduced, both in absolute amounts and as a proportion of total expenditure on education, probably in response to the increasingly held feeling that foreign aid for primary education undermines India's image as a fast-rising economic power. Thus despite geographical expansion of the programme, and contrary to the general impression on the size of the aid, it still cannot be regarded as a massive large-scale programme of improvement of primary education all over India, as these funds constitute a very insignificant proportion of the total expenditure of the government on education.

Thus, looking at the relative size, one may doubt whether at all India needed aid for primary education and could India not meet the above-mentioned small proportions with her own domestic resources. While the country might require foreign aid for overall budgetary support, described nowadays as 'general budget support', the rationale for external aid for education, specifically primary education, has never been clear. It thus seems to be more a general economic need and perhaps some political and political economy compulsions in the international arena, rather than any specific national educational need, which necessitated the Government of India to go for external aid for education. A strong political will might have avoided the entry of foreign aid into the primary education sector. After all, many countries in the Asian region, such as China, South Korea, Singapore, Taiwan and Hong Kong, could universalise their primary education systems without relying on foreign aid.

14.7 Is Aid Additional or Substituting?

According to the conditions of the DPEP, the aid would be additional to the domestic resources to be spent on education, though it is not very clear what is meant by additional—additional to the level of spending by the government in the base year, or additional to the anticipated normal growth in expenditure, or it would simply be for additional programmes and schemes. It is generally interpreted that the project funds were to be additional inputs over and above the resources provided by the state governments for elementary education. But the macro level trends in total public expenditure on education lead us to doubt whether external aid has been additional to the domestic spending on education, or has it been substituting the national efforts.²⁴

Let us look at the growth rates in government expenditure on education (Table 14.1): the total plan expenditure of the union government on elementary education increased at a real rate of growth of 30.1% per annum during 1985–86 (when the *National Policy on Education 1986* was formulated) and 1992–93 (a year before aid commenced for education in India). In contrast, it increased at a rate of growth of 18.5% during the period when aid had flown into the elementary education sector, that is, between 1993–94 and 2004–2005; and the union government's plan expenditure on total education increased at a rate of growth of 11.8%. The external aid for elementary education increased at an annual rate of growth of 22.6% in real prices during this period.

Thus aid increased at a faster rate of growth than the total government expenditure on education during this period. Clearly the growth

	_		,	
				%
Union government's plan	expenditure o	n elementary	education ^a	
1985–86 to 1992–93				30.06
1993–94 to 2004–05				18.55
Union government's plan	expenditure o	on total educa	tion	
1993–94 to 2004–05	_			11.84
External aid to primary e	ducation			
1993–94 to 2004–05				22.61

Table 14.1 Real rates of growth in expenditure on education (per annum)

^aDepartment of Education only Source Based on MHRD-a (1995) and MHRD-b

in the union government's plan expenditure on elementary education (inclusive of external aid) slowed down after aid began flowing into it! A fall in domestic efforts to finance primary education has been possible despite the condition of additionality in external assistance, as the condition of additionality might refer, as mentioned earlier, to the absolute level of expenditure incurred in the base year, and not to the rate of growth in expenditure experienced.

Thus, an immediate fallout of the external aid programme has been reduced domestic efforts to finance primary education. The union government could suggest to the states to join DPEP and to go for external financing, so that it could reduce its transfers (or additional transfers) out of central revenues to states to finance primary education. For the same reason, the realised overall increase in the union government's plan expenditure on elementary education is described as 'borrowed growth' or 'externally aided growth' (Tilak 1999a). After all, external aid accounted for above one-third of the union government's plan expenditure on elementary education (2001–02/2002–03). Similarly, states have been willing to go for external funds, as it can relieve pressures on themselves to (a) make special efforts to mobilise additional resources on their own and/or (b) reallocate budgetary resources in favour of primary education more efficiently. In addition, external assistance has been attractive to states, as the union government transfers the external assistance to states as grants, not as loans, as already stated.

According to the agreed conditions of the project, the external agency contributes 85% of the project costs that flow through the union government to the concerned state, and the remaining 15% of the cost of the project was to be met by the state governments themselves. Not only is 15% very small, but also given the lack of clarity on the principle of additionality, the state could easily allocate 15% to DPEP, by reallocating from its normal expenditure on elementary education.

After the *National Policy on Education 1986*, we find an increase in the share of education in GNP to above 4% by 1989–90. But with the flow of external aid to primary education in the 1990s, the expenditure on education started declining steadily to below 4%.²⁵ As Sadgopal (2004, p. 51) observes, 'clearly, the political will to mobilise resources for elementary education weakened following the entry of external aid'. While another agreement for a World Bank loan was signed in 2004, for Rs. 4710 crores (nearly US\$1000 million), and for a grant from the European Union for 240 million euros—both for the SSA, the all-in-one

programme of elementary education of the union government, according to the budget estimates the figure of the share of education in GDP in 2004–2005 is further reduced, 3.5%—below the level attained in 1985–86!

The reduction in foreign aid in the most recent years is followed by the introduction of efforts by the union government to raise the resources from taxes, partly realising that provision of elementary education becomes mandatory with the 86th amendment to the Constitution in 2002 that made elementary education a fundamental right. The union government has introduced since 2004-05 an education cess of 2% on all taxes levied by the union government, the revenues from which were to be used only for elementary education (see Tilak 2006), and it has introduced another 1% education cess for secondary and higher education in 2007-08. Efforts are also made in the union budget in 2007-08 to substantially increase the allocations to elementary education and also for the provision of a noon meal scheme, which is hoped to raise the participation and attendance of children in schooling (MOF 2007). That these measures were not contemplated when foreign aid was flowing in at an increasing rate, shows that aid did substitute the efforts of the government to spend on education from domestic resources.

On the whole, the states seemed to view the programme essentially as a centrally sponsored programme with generous resources flowing into the states through the union government. What seems to have been overlooked both by the union and state governments is the long-term debt burden on the people, and hence the need to raise resources on their own has not been felt.

14.8 Policy Conditions and Interventions

One of the most important effects of international aid is not necessarily direct, but indirect, that happens through policy conditions attached to the aid packages (Dijkstra 2002; Easterly 2003). Though there is a continuous debate whether aid should be unrestricted or conditional (Triantis 1962), over the years, conditions became common and explicit too. Some of the conditions could be explicitly agreed between the aid agencies and the government, and many not so explicitly noted. Policy conditions, for example, attached to aid for primary education could include:

- 1. Policy reforms in primary education—such as revision in the *National Policy on Education 1986*, revisions in the 'operation blackboard' scheme, establishment of minimum levels of learning, introduction of decentralisation and district planning in education, measures to increase community participation, setting up of village level committees, development of management information systems, etc. (Basu 2006).²⁶
- 2. Policy reforms referring to other sub-sectors of education, for example, reduction in public subsidies or freezing of allocations to higher education, introduction of cost recovery mechanisms in higher education, introduction of student loan programmes, privatisation of secondary and more importantly higher education, etc.²⁷
- 3. Policy reforms in other sectors, for example power sector reforms.
- 4. Overall macro level fiscal reforms, for example budget restructuring and reduction in budget deficit, liberalisation of the economy. (Boyce 2002).

There can also be policy conditions on reforming primary education, but they are attached to loans for other sectors. There can be yet another set of 'conditions'. Even if some conditions are not stated, aid-receiving countries might anticipate the conditions of the aid agencies, described otherwise generally in the policy papers of the aid agencies (e.g., as in World Bank 1980, 1986, 1990, 1995, 1997), and might fulfil those conditions on their own, either as a part of the agreement or otherwise, which would facilitate the smooth process of aid negotiations. Documentation on these aspects is difficult to get, as most of the agreements are generally inaccessible. But it is widely felt that most of the above-mentioned and similar policy conditions exist in the case of the primary education aid programme in India, some of which might have actually 'improved' the system, but many of which might actually be detrimental to educational development in India.

The policy conditions and their insistence and adherence to them depend upon national and international political economy factors and specifically the power relations between the government of the aid recipient country and the aid agency. In some countries, the aid agencies become de facto, and even de jure advisors to the national government, and even prepare national policy and plan documents, and even national budgets on their own. In a number of countries, they are deeply

involved in core policy processes, planning and implementation. National political institutions including national assemblies and parliaments get sidelined. Normally many conditions generally come up during the negotiations, even though some may be added while the project is in process. All this depends upon the relative strength and relations of the government in relation to the aid organisations. For example, it is stated that in the beginning of the DPEP, India could reject policy credit and accept only the project-centric programme of district-based primary education; further, as the World Bank was eager to enter the Indian education scene, and the government was very reluctant to accept World Bank aid, Government of India could insist on, if not dictate, at least some of the terms and conditions of the loan agreement. Government of India, it is learnt, for example, insisted that all research activities should be carried out mainly by Indian researchers in India; all missions of supervision would necessarily include national counterparts, etc. But over the years, as the aid agencies gained a firm footing, the situation changed, and it is widely felt that the project-centric programme was operated like a policy credit programme. In fact, the whole mechanism of conditionalities contradicts the proclaimed intentions to increase the ownership of foreign aided projects in the national economies (de Renzio 2006).

14.9 Holistic or Divisive?

Initially a large amount of World Bank aid for education was given in many developing countries in the 1960s and 1970s to secondary and then to higher levels of education; and very little amounts to primary education (Tilak 1988; Jones 1992). This was because the objective of the aid was to help developing countries to produce skilled manpower required for economic production. As much as 80% of the World Bank aid for education was allocated to secondary and higher education. Primary education did not get much attention, as it was felt to be a bottomless pit, best left to the developing countries themselves to deal with on their own. The situation changed significantly with the emergence of poverty reduction on the agenda of the international community, particularly the World Bank in the mid-1980s. The World Conference on Education for All in 1990 at Jomtien added further fillip to aid to basic education. In fact, primary education is found to be so important by the international community that developing countries were specifically required to neglect secondary and higher education in their national

development plans. As a result, both in the international aid framework and in the national development strategies, higher education and to a lesser extent secondary education disappeared and the focus has rather been exclusively on basic education.

This can be noted in India too. The importance given to higher education reduced very significantly during the 1990s. Significant decline can be noted in the relative priority accorded to higher education (see Tilak 2004). Allocations to higher education in the eighth and the ninth five-year plans reached the all-time bottom levels: hardly 7-8% of the total education outlay was devoted to higher education, compared to nearly one-fourth in the fourth five-year plan. The share of expenditure on higher education in GNP fell from 0.46% in 1990-91 to 0.35% in 2002-03. Expenditure on higher education per student declined in 1993-94 prices by nearly 28 percentage points in a 12-year period between 1990-91 and 2002-03. Not only have budgetary resources for secondary and higher education been either stagnant or declined in recent years, but also even the planning and management aspects of secondary and higher education do not seem to be receiving the usual level of, if not adequate, attention of the government. Such a sectarian approach causes serious imbalances in educational development in society. In addition, privatisation of education is encouraged, overlooking the inequities and other problems that privatisation creates (Tilak 1991).²⁸

Basically, the World Bank approach to education has been fragmented. It argues that one level of education can progress only at the cost of other levels of education, and accordingly views one level of education against another. It refuses to recognise that all levels of education are interdependent, and holistic development of the education sector requires balanced development of all layers of education. After all, it is higher education that produces teachers for primary education, and the graduates of primary education go into secondary and then into higher education.

It is generally argued that many of these trends owed directly to the economic reform policies, and indirectly to the explicit or implicit conditions imposed by the World Bank on loans for primary education. In this sense, it is felt that though funding for DPEP is programme-based, it worked like policy-based lending operations of international aid organisations.

14.10 Donor Dependency

In terms of quantum of aid received, one cannot say that India is critically dependent upon international aid for educational development. But the way and the purposes for which aid has been used, and more importantly the changes of attitudes it has brought in may lead one to wonder whether the culture of donor dependency has grown.

As already stated, primary education itself does not require foreign exchange and hence foreign aid. Two major contributions of the aid programme have been strengthening of decentralised mechanisms of planning, particularly district planning and capacity building at local levels. As an aside, it may be noted that decentralised planning also led to setting up of 'societies' at various levels and sidelining of the whole government and political systems, creating different kinds of distortions. More importantly, neither decentralised planning nor capacity building really requires external assistance. It is a sad point that they could be made possible only under an externally assisted programme of primary education. While the contribution of DPEP has to be acknowledged, it should be emphasised that the very fact that district planning and capacity building are revitalised only under an externally assisted programme speaks more about the inability and failure of the government on these two fronts during the last 50 years, and the performance in the last few years can therefore be described as 'borrowed performance' (World Bank 2001, p. 38). Moreover, most, if not all, of the components of the DPEP whether they relate to quantitative expansion, improvement in quality, or improvement in equity, or decentralization—do not actually require foreign exchange. Many of these components have been funded with the help of domestic resources. But within a 10-year period, it appeared as if most aspects of additional improvement in primary education critically depended upon aid. The attitudinal changes to aid and its criticality are very striking and disturbing.

14.10.1 Attitudinal Changes

It is well recognised that aid, despite being small in quantum, has created new attitudes on the criticality of foreign aid for improvement in elementary education. A view, which people used to question, has been now widely accepted and has been least questioned, and it is: government does not have money even for primary education—for the development of any

qualitative or quantitative or any dimension of primary education. Also along with this, an unfortunate and not necessarily a correct impression has been created that improvement in primary education in the country would be possible only with the help of external assistance. As a result, district after district and state after state enthusiastically participated in the DPEP, as if the only source available for financing primary education is external assistance. Resource-poor as well as resource-rich states competed with each other to enter into the DPEP arena for external assistance for primary education. This, what can be described in familiar terms as dependency culture, has widely spread in no time both horizontally across all parts of the country in all states, irrespective of the political ideologies of the ruling parties in the states, and vertically at all layers of government and administration, and people in general in the whole country, creating a euphoria that external aid is the panacea for development of primary education in the country. This also included research on elementary education. As most research in recent years on elementary education was carried out under the aid programme, many tend to feel that research in elementary education can be done only with external funds! This is indeed a very important and in my view, the most damaging consequence of the external aid programme for education in India.

Another closely related dimension relates to evaluation of aid effectiveness. Often both the aid organisations and the governments claim 'grand' success of the aid programmes. For example, the number of schools built, the number of teachers appointed, the number of meetings held, etc. are often cited as important achievements of the projects, as in India. But these may be exaggerated achievements, or irrelevant indicators of growth. As Easterly (2003, p. 38) observed, aid agencies are often reluctant to promote honest evaluations that could lead to publicity about failures. Government also forms a willing partner to such activities.

14.11 Concluding Observations

It seems ironical that a country whose rate of economic growth is reasonably high, more importantly, prospects for economic growth are claimed to be very encouraging, and mobilisation of private funds, including private foreign investment is at a high level, had to resort to external borrowing for financing primary education, a basic need and a sector that is not characterised by any high degree of foreign

exchange-related investments, and a sector closely related to the very culture of the society.

During the last 15 years the amount of aid received was not particularly high. Though the quantum of aid is not massive, the effects it produced are many, some positive and many not. Many tall claims are made on the growth in the primary education system in terms of number of school buildings built, number of teachers trained, number of block/ cluster resources centres set up, number of village education committees constituted, the number of meetings held, etc. Much more than these gains, many problems it created are also widely noted. A close and careful look at the balance sheet may reveal that on the whole, external aid for education seemed to have raised more questions than it could answer.

To sum up:

- 1. Initially the government was reluctant to accept foreign aid for education and the international aid agencies were enthusiastic to provide aid to India. But it appears that there was a reversal of the trends over a decade: India was probably more willing to accept aid for education, and the aid agencies were not so enthusiastic (Tilak 1999b).
- 2. Actually the government was to take the foreign aid for education for overall budgetary support, though primary education does not seem to need external assistance.
- 3. Though there are some tangible gains, significant attitudinal changes have taken place and a culture of donor dependency has seeped into the system, which are more dangerous than a small increase or decrease in numbers—buildings, teachers or dollars (or rupees).

I think there is no need to further sum up the main arguments made in my lecture so far. I admit that I have not been comprehensive in the coverage of the issues on external aid to primary education in India. On the whole, I have tried to show that some of the effects of external assistance of education are very serious and have dangerous long-term effects on the development of education and on the society at large. The failures and fallacies associated with aid are too important to miss not only by India but also by all other developing countries, including those in Asia, which are relying much upon foreign aid for development of basic education. The experience of India also reveals that with strong political will it is possible to cut the nation's reliance on foreign aid for basic education. Secondly, if the country goes for aid, the launching of an umbrella programme to coordinate the programmes of the various aid organisations of the kind launched in India is already found to be worth emulating by those who are facing a similar situation, with a multitude of aid organisations. Thirdly, strong, stable and forward-looking governments can also influence many of the policies and practices of the aid organisations, withstand some of the conditions of aid and mitigate the adverse effects of these conditions.

Let me now end my lecture by reflecting on the basic question: *Does aid contribute to development*? Research from the IMF (e.g., Masud and Yontcheva 2005) found that foreign aid does not help reduce illiteracy, while government expenditure does. Basically one should not be too optimistic about the contribution and effectiveness of aid in the development of education in any country. Aid might at best work if it focuses on small goals. Even if external aid helps in educational development in the short term, it cannot be a long-term method of educational development. Foreign aid cannot be expected to solve the financial problems in education or educational problems substantially in a vast country like India, when it could not do so significantly even in small countries of Africa, Latin America and Asia. A World Bank expert, who was deeply involved in World Bank lending for education in many countries, including in India, answered the question:

International aid has not been able to change the course of events. International meetings have set goals and redefined priorities on a regular basis. Over the past 25 years, a well-established education aid community has developed, with a busy meeting schedule, several newsletters, professional networkers, and aid watchers. It includes also an international education research community with several respectable journals. But the action has rarely been at part with the rhetoric. In fact, it can be argued that external aid to education has been peripheral to the course of educational development. (Verspoor 1993, pp. 103–104, emphasis added)

In the final analysis, at the bottom line, as the Government of India (1993a, p. 90) noted, while external funding would at best 'be an interim contribution to meet the resource gap, there is no alternative other than augmenting domestic resources to achieve the objective of EFA (Education for All)'.

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Notes

- See Jones (1992) for an in-depth discussion on the evolution of World Bank policies on education. See also King (1991), Tilak (1994), and for a more general discussion Mason and Washer (1973) and Kraske et al. (1996).
- See, among many, Psacharopoulos (1973) for estimates on rates of return to education in world regions. Psacharopoulos updated the figures several times; the latest update is available in Psacharopoulos and Patrinos (2004). See also Psacharopoulos (1984). See Tilak (1987) for estimates on rates of return to education in India.
- 3. See Opeskin (1996) for a good discussion on ethical foundations of foreign aid. See also Lumsdaine (1993).
- 4. The World Bank's share used to be about one-third of the total education aid, it forming the single largest source of aid (Tilak 1988). The Bank accounts now for 53% of the total multilateral aid for education, and 65% of aid for basic education in 2003–2004 (UNESCO 2006, p. 92).
- 5. Kakwani et al. (1990, also see Kakwani 1995) classified in the context of analysing the impact of the World Bank/IMF adjustment policies on levels of living, 86 developing countries of the world—Africa, Asia, Europe and the Middle East, and Latin America—into five categories, based on their adoption of adjustment policies: (a) 'intensely adjusting' countries, that have relatively long periods of experience with the adjustment policies and processes, having taken three or more structural adjustment loans by 1989, and having started in or before 1985 (25 countries), (b) 'pre-1986 adjusting countries' that have received less than three structural adjustment loans, but were included in the programme before 1985 (11 countries), (c) 'post-1985 adjusting countries' that received adjustment loans between 1986 and 1988 (19 countries), (d) 'non-adjusting countries' (of type I), that did not need IMF/World Bank type of adjustment measures, and which had an increase in average annual growth in GDP per capita during 1980-87 (17 countries), and (e) 'non-adjusting countries' (of type II), that were 'potential candidates' for World Bank

- adjustment loans with a decline in the average annual growth in per capita GDP during 1980–87 (14 countries). India was classified in category (d).
- 6. It is not only the World Bank research, but also others were highly optimistic about India's economic growth in the 1990s. For example, Adams (1990, p. 9) concluded: 'India remains well poised to continue its rapid growth through the 1990s'. See also Rosen (1991).
- 7. The policies affected the other levels of education also. See Tilak (1996a) for an analysis of the impact of these policies on higher education.
- 8. However, it may be mentioned that India was borrowing liberally from the World Bank for other sectors for a long period. For example, between 1973 and 1990, as many as 257 projects were funded by the World Bank. Seven of them refer to social sectors.
- 9. There were a couple of minor projects in operation earlier. They include non-formal education projects in a few selected villages financed by United Nations Children's Fund (UNICEF) and primary education projects in 328 schools in the state of Andhra Pradesh in the southern part of India funded by the British Overseas Development Administration (ODA).
- 10. The government of India is justified in launching this umbrella programme, as education is, after all, a *concurrent* subject, after the 42nd amendment to the Constitution of India was made in 1976, though states still enjoy a considerable degree of autonomy in making education policies and programmes. See Tilak (1989) on the centre–state relations in education in India.
- 11. For a description, the logic and logistics of the DPEP programme, see the Government of India (1993b, 1995), Varghese (1994, 1996), World Bank (1994) and also Ayyar (2005). A couple of projects, namely, *Shiksha Karmi* and the *Lok Jumbish* projects in Rajasthan, both funded by the SIDA and the *Mahila Samakhya* project financed by the Dutch government, however, remained separately. Others merged with DPEP or perished.
- 12. A crore equals 10 million. In 1993–94, US\$1 equalled Rs. 31.4; and in December 2007, Rs. 39.0.
- 13. Elementary education in India includes primary (five years of schooling) and upper primary (three years of schooling), in all eight years of schooling.
- 14. More than the reduced interest on the part of the government, it is probably the less enthusiasm on the part of the aid agencies that might be responsible for the slowdown in growth in aid. The decline in the enthusiasm on the part of the aid agencies is not confined to India; there is an overall decline in aid to education in many countries both from

- multilateral and bilateral sources. For example, the World Bank (IBRD plus IDA) commitments to education declined from US\$1.8 billion in 1990 to US\$0.8 billion in 2001 (in 2000 constant prices); and bilateral aid from US\$58.1 billion (1990–92) to US\$43.9 billion (1997–2000). See UNESCO (2002).
- 15. India also refused to accept foreign aid to deal with the aftermath of the Tsunami in December 2004.
- GNP (gross national product) deflators (base: 1993–94), based on Government of India (2005), are used for conversion into real prices (in Rs.).
- 17. All rates of growth are estimated using a semi-log regression equation.
- 18. Converted at the year-wise exchange rates.
- 19. See Bordia (2000) for a description of Lok Jumbish, Jagannathan and Karikorpi (2000) for a description on the European Commission's involvement in education in India, and Varghese (1998) and Tilak (2000) for a description on these and a few other projects.
- 20. IDA credits approved before 1987 were repayable over a 50-year period.
- 21. Up to June 2004, IDA's cumulative lending to India was US\$30.6 billion, and has financed 269 development projects since inception in 1960, that include projects on human development such as health, education, nutrition, water supply and sanitation, poverty alleviation and technical education.
- 22. In the Indian budgetary framework, plan expenditure refers to development expenditure on new programmes and schemes, while maintenance expenditure on on-going programmes is called non-plan expenditure. The five-year plan period is used to demarcate new programmes and on-going programmes.
- 23. Accordingly, all externally aided projects included in DPEP are listed in the union budgets as centrally sponsored schemes in elementary education.
- 24. In the case of total aid in India, it has been found that foreign aid substituted government spending, union government reduced its transfers to states and that union government's expenditure choices are unaffected by external aid. See Devarajan and Swaroop (1998) and for a study on India, see Swaroop et al. (2000).
- 25. This is not altogether surprising. External aid to education in sub-Saharan African countries in the 1970s and the 1980s have not led to an increase in total expenditure on education—total or relative shares in GNP; in fact, they declined. See Tilak (1990).
- 26. In some countries (e.g., Malawi) introduction of a fee even in primary education was a condition attached to World Bank loan operations. See Thobani (1983). See also Tilak (1996b).

- 27. The recent neglect of higher education in India is largely attributed to the World Bank's explicit or implicit conditions, and the general approach of the World Bank that viewed higher education as against primary education, ignoring the interdependence between several levels of education. See Tilak (2003).
- 28. See Reddy (1994) who describes how the Bank's policies and approaches create inequities in the education system.

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CHAPTER 15

South-South Cooperation: India's Programme of Development Assistance

15.1 Introduction

The international aid scene was until recently dominated by a few advanced OECD countries. But as Woods (2008) described, 'a silent revolution is taking place in the development assistance regime'. Traditional donors have not been in a position to address some of the serious concerns of the developing countries, particularly relating to non-intrusion, sovereignty and benefit incidence of aid (donors benefiting more than the others). Some of the developing countries launched programmes of development assistance to provide assistance to fellowdeveloping countries, addressing these concerns. Their attempts have been robust. Today some of these countries, which are essentially non-DAC (Development Assistance Committee) donors, are being recognised as 'emerging (re-merging) donors' (Mawdsley 2012), 'nontraditional donors' (Kragelund 2011), 'new development partners' (Park 2011) or as 'Southern providers' (UNDCF 2013), which are viewed as a challenge to the traditional donors and/or are having significant impact on the global aid architecture triggering a sea change in international aid

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(Langton 2012). The total aid from these nontraditional donors seems to constitute about 30% of the total global aid (Yamada 2013).

All this does not mean that these developing countries had never earlier provided aid to other developing countries. They are not necessarily new in their activities of financial aid and technical cooperation (Davies 2010; King 2010). As Mawdsley (2012) stated, many developing countries have historically contributed to significant share of official aid [but], Western academic and policy analysts have tended to overlook their roles and activities something that is now changing. Mainly in the broad framework of South-South Development Cooperation (SSDC), which began with the Colombo Plan established in 1950, to promote collective intergovernmental effort towards cooperative economic and social development of member countries in Asia and the Pacific, developing countries began providing assistance to fellow-developing countries in the 1950s. This received further fillip from the Bandung (Asian-African) Conference in 1955 that brought together 29 countries from Asia and Africa and which established Asian-African Strategic partnership aiming at mutual interest and cooperation (Kahin 1956), the Non-aligned Movement (NAM) in 1961 and the formation of the Group of 77 (G-77) in 1964. The Busan conference in 2011 marks a major turning point and gives full legitimacy to South-South cooperation as a development cooperation modality (deRenzio and Seifert 2014). India was one of the above mentioned four major participants in the first one and is a founder member of the later groups, in addition to the Colombo Plan. Over the years the model of aid based on the principle of SSDC emerged gradually as a distinct model from the standard DAC model of the West and the Arab model (Walz and Ramachandran 2011). Of the many nations often described as emerging donors, India, along with China is considered as a major donor (Langton 2012; Roche 2012). For a long period, India has been described as a poor, major aid-recipient country. It is only of late, having graduated from the status of low income country to a middle income country in the classification of the World Bank and having discontinued in 2003 receiving of bilateral aid from all but five major countries (Germany, Japan, Russia, UK and US), India is being begun to be recognised as an emerging economic power, as a resurgent and powerful state, with an annual rate of growth of about 7-9%, as the South Asian giant and as 'an emerging donor', or as a 're-emerging donor' (Mawdsley 2012), when it gained momentum in recent years and its foreign assistance touched the level of \$1.6 billion in 2015–16,² next only to China among developing country donors (Mullen

and Ganguly 2012). Now it is projected that this would go up to \$3.5 billion annually, that is, nearly 0.2% of GDP, which makes India to rank among the big donors in the world (Ninan 2013). In fact, with a foreign aid budget which is more than double the net foreign aid receipts of \$655 million in 2014–15, it is felt that India will eventually become a net exporter of development assistance, as shown in Fig. 15.1.

It may not be proper to describe India as a new donor country or as an emerging donor. India has been giving substantial amounts of aid to other countries since independence. Probably India is one of the oldest aid providers, even compared with traditional donors. India's external assistance programme began as early as in the 1950s, immediately after independence, with its assistance to Nepal, Bhutan and Burma, the three neighbouring countries having strong historical, cultural and social bonds with India. Providing mainly technical assistance during the last 5-6 decades, India has finally emerged as a country to provide big amounts of direct cash transfers and subsidised loans. In short, 'India has quietly become a significant provider of development assistance to other less developed countries' (Agrawal 2007). Though India has been one of the largest aid-receivers, it is now recognised as an emerging competitor in the international aid business, competing with China and other BRICS countries, viz., Brazil, Russia and South Africa, on the one hand and the established OECD donor countries on the other. India's

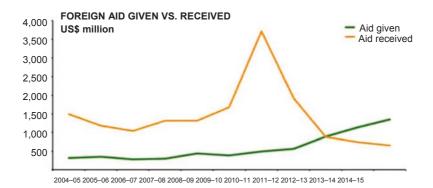


Fig. 15.1 India's foreign aid: Outflows and inflows (*Source* https://www.devex.com/news/in-latest-indian-budget-aid-spending-dwarfs-aid-receipts-82915)

long history of aid practice, including its modalities was recognised by some scholars, though only recently. For example, Kondoh et al. (2010) observed, 'India, as a full-fledged donor with a long history of aidgiving, has a full set of aid modalities similar to those of traditional donors and incorporates both bilateral and multilateral aid'.

15.2 India and South-South Development Cooperation: India's Aid Programme

India has a small traditional aid programme of grants and assistance for a long time; its programme started with giving aid to Nepal under the Colombo Plan in the early 1950s. Though small in the size, India's contribution constituted fifth largest among the donor states and first among the developing states included in the Plan (Dutt 1980). Though Colombo Plan is a multilateral agreement in form, in its operation it was largely a bilateral arrangement. Under the Colombo Plan, India sent experts to as many as 64 countries and trained until 1961 as many as 1442 members, and an additional 3550 between 1961 and 1971 in India in areas such as engineering, forestry, agriculture, power, finance and administration. India's aid under the Colombo Plan between 1950 and 1971 was estimated to be about Rs. 40 million.

Today India provides aid under different modalities. The total external assistance provided by India has grown steadily for a long period and in the recent years the rate of growth has been quite impressive. In 2011, the total assistance provided by India is estimated to be about \$1.5 billion (Mullen and Ganguly 2012). In addition, India has pledged \$5 billion aid to Africa in the form of concessional loans in 2011. It also pledged \$700 million to help establish new institutions and training programmes in African countries in consultation with African Union. It also promised 10,000 new scholarships for the India-Africa Virtual University and 22,000 scholarships for studying in India (Guardian, 25 May 2011).³ India has also offered Bangladesh a \$1 billion loan package. The India, Brazil and South Africa (IBSA) Trust Fund (founded in 2003) in which India is a major partner, provides an innovative means of delivering assistance to other countries. Each of the three countries has to contribute \$1 million annually to this Fund. India is also a member of the Afghanistan Donors Group and has been its largest donor. Thus it is clear that the Colombo Plan is not the only major channel through which development has been provided by India. Other major channels include the Indian Technical Economic Cooperation (ITEC),

the Special Commonwealth Assistance for Africa Programme (SCAAP) and the Export and Import (EXIM) Bank of India. Most of the development assistance could be classified into three major components: (a) project assistance to developing countries like Bhutan and in recent years to Afghanistan, (b) technical assistance to as many as 158 countries mostly in Asia and Africa under the Colombo Plan, the ITEC, the SCAAP and (c) loans through the EXIM Bank. While substantial assistance (under the Colombo Plan, ITEC and SCAAP) is provided through the Ministry of External Affairs, lines of credit are provided by the EXIM Bank, which is a constituent part of the Ministry of Finance. Lines of credit with subsidised interest rates soft loans are provided through the EXIM Bank of India for financing imports of Indian equipment, technology, projects, goods and services on deferred credit terms.⁴ In other words, the total assistance is a 'mixed bag' of project assistance, purchase subsidies, lines of credit, travel costs, technical training, etc., provided to developing countries including some of the fragile states and strife-ridden countries.

Reliable comprehensive estimates of India's total assistance are not available, and available ones vary widely from each other and with no proper definitions, no necessary details, and no proper consolidated statements, they are indeed confusing. Hence any trend analysis is rather impossible. This is a common problem with many of the non-DAC countries (see Sinha and Hubbard 2012); the problem is also aggravated as aid and foreign policy issues have historically been insulated from public discourse (Mawdsley 2012). There are no proper definitions of development assistance, or of aid. India is not a member of the DAC of the OECD and its assistance is not categorised as 'official development assistance' (ODA). After all, DAC's donor classification is 'selective and insular, effectively discriminating against non-Western and Southern donors (Kapoor 2008, p. 89). India's assistance is called development assistance/cooperation and not 'aid'. In line with the principle of SSDC, both the country that provides assistance and those that receive assistance are referred to as development partners and not as donors and aid-recipients. Further, an important problem is until recently there is no nodal agency to effectively manage and coordinate all the programmes relating to assistance flowing from different sources in India. An associated and equally important problem is the absence of budget categories of assistance. All development assistance does not flow under clear budget headings. As a result of all this, there are no consolidated estimates of India's total assistance and the very limited data that is available in public domain does not help one to make any clear appraisal of

the magnitude, quality and nature of assistance, and assistance by sectors and activity. Noting the growing magnitude of external economic assistance programmes, it is only in 2012 an overseas development assistance agency called Development Partnership Administration (DPA) was set up under the Economic Relations Division of the Ministry of External Affairs, which is vested with the responsibility of overseeing all aid projects through all stages from the stage of conception, formulation, launch, execution, completion, monitoring, evaluation and impact assessment (MOE 2015). It is expected to help in consolidation of all outgoing aid, streamline all administrative matters related to this process and provide overall unified administration of development assistance flowing from various ministries. This is described as a significant and definitive step in right direction (Roychoudhury 2013; see also Horaváth 2013).

With these limitations, let us note a few available estimates.⁸ Data presented need to be noted with caution, as they are collected from several primary and secondary sources; all of them are not strictly comparable. So, one has to interpret the available estimates with discretion.

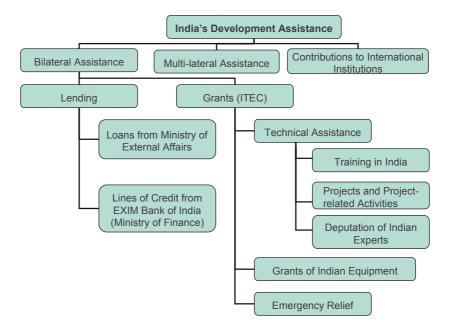


Fig. 15.2 India's development assistance (*Source* Adapted from Kondoh et al. 2010)

The various kinds of aid that flow from various sources in India can be categorised as shown in Fig. 15.2. Some of the available statistics refer to the assistance provided through the Ministry of External Affairs only, and some through Ministry of Finance, and many exclude either and also aid flown through other channels. But actually the total assistance includes bilateral and multilateral assistance, in addition to contributions to international organisations.⁹

India's accumulated aid over the last three decades is estimated to be over \$2.5 billion (Agrawal 2010). Walz and Ramachandran (2011) report that the estimates of India's total aid vary between \$488 million (0.04% of gross national income) and \$2171 million (0.16% of gross national income) in 2009. Smith et al. (2010) estimate the figure to be \$610 million (2008–09). Langton (2012) reports this to exceed \$2 billion a year. Chaturvedi (2012) puts this figure for the most recent period at \$3 billion. According to another estimate (Bijoy 2010), total estimated foreign aid in 2008–09 was of the order of Rs. 266,712 million.

According to Chanana (2010), India's total foreign aid-related budget has increased from \$526 million in 2004 to \$785 million (Rs. 36.6 million) in 2010, as shown in Table 15.1. It was estimated to have increased to \$1293 million in 2013–14, excluding lines of control. These amounts include grants and loans, which constitute the major bulk nearly 85%, contributions to international organisations, investment in international financial institutions and EXIM Bank-related expenditure.

	2010	2009	2008	2007	2006	2005	2004
Grants and loans	23,834	24,083	26,999	18,133	17,290	21,620	19,619
Of which grants (percent)	84.1	82.3	65.6	93.7	90.7	79.1	70.9
Contributions to international organisations	5578	5317	12,775	3550	3595	3320	2568
Investments in international financial institutions	2948	67,627	30,900	137	580	180	101
EXIM bank expenditures	4300	4394	5098	2350	1600	1717	2266
Total estimated budget Total in US\$ million	36,600 785	101,421 2171	75,772 1622	24,169 517	23,065 494	26,836 574	24,554 526

Table 15.1 India's foreign aid-related budget (Rs in millions), 2004–10

Source Chanana (2010)

The corresponding estimate of the total for 1998–99 was Rs. 9955 million. Aid through Ministry of External Affairs is estimated to have recorded a significant increase over the years; it increased in 2000 constant prices, from about \$112 million in 1966 to about \$400 million in 2010 (Fuchs and Vadlamannati 2012). But for a big allocation in 1972 to Bangladesh (approximately Rs. 18,000 million grants and concessional loans), the growth has been slow until the early 1990s. The rate of growth is much higher after 1991. Loans form still a small share of the total. There is a steep decline in the total aid between 2008 and 2010. It appears that economic slowdown and cuts in the inflow of aid did affect the outflow of aid. Further, under the India Development Initiative, and the Heavily Indebted Poor Countries initiative, In India has also written-off debts and restructured commercial debts; the total debts written off were of about \$37 million and many more debt relief agreements were in pipeline (Chanana 2009).

India makes huge contributions to international organisations. ¹² Such contributions increased from Rs. 1621 million in 1998–99 to Rs. 3531 million in 2008–09 (Table 15.2). The latter figure excludes allocations made to international financial institutions to the tune of Rs. 171 million (Bijoy 2010). In 2003, India became a net creditor to the IMF and a contributor to the World Food Programme. India is one of the largest contributors to the Commonwealth Fund for Technical Cooperation (CFTC) set up in 1971, which provides developmental assistance for conducting workshops, deputing technical advisors and capacity building.

India also makes sizeable contributions to the World Bank and United Nations (UN) organisations. In addition to the World Bank, it makes subscriptions and contributions to the Asian Development Bank and the African Development Bank. It has a strong relationship with the UN system and contributes in the form of peacekeeping forces to human security and also to disaster relief, etc., ¹³ and other UN programmes. India contributes to the UN organisations and also to the UN budget. Total such contributions increased from \$68 million in 2005–06 to \$121 million in 2010–11. India is among the largest contributors to the new UN Democracy Fund (Agrawal 2007). It recently became a donor to the World Bank's Trust Fund for South-South Learning. It also makes contributions to the Global Environment Facility and the Afghanistan Reconstruction Trust Fund. These contributions come from various ministries of the government of India. In short, funding of provision of

Table 15.2 India's contributions to international organisations

Ministry	International organisation	2005-06	2010-11
Agriculture		3.98	4.99
_	Food and Agriculture	1.76	2.26
	Organization		
	World Food Programme	0.99	1.10
Environment and forestry		0.75	0.02
	United Nations Environment	0.11	0.11
	Programme		
External affairs		26.35	54.32
	Contributions to UN Budget	18.49	33.42
Finance		16.11	20.93
	United Nations Development	4.69	4.96
	Program		
	Afghanistan Reconstruction Fund	0.20	0.22
Health and family welfare		1.90	5.33
	International Committee of Red	0.00	0.01
	Cross Society		
	World Health Organization	1.71	2.13
Human resource development		2.61	2.90
	UNICEF	0.70	0.86
Total (includes other Ministries)		68.03	120.85

Notes (US\$ Million). Each Ministry's total contributions include contributions to other organisations, which are not listed here

Source Price (2011)

global public goods lies 'at the heart of the country's interaction with multilateral institutions, coupled with its concern about the under-representation of developing countries in those bodies that define global public goods' (Price 2011). It is widely acknowledged that India provides a range of global public goods.

The whole programme of development assistance is executed by various ministries and institutions, led by the Ministry of External Affairs. Sizeable assistance also flows from the Ministry of Finance. Putting the assistance from all the miniseries together, the total government aid budget aid was estimated to be Rs. 26,241 million in 2008, which was Rs. 18,001 million in 2002 (Kondoh et al. 2010). Aid budget of the Ministry of External Affairs accounts for above 80% of this total, and that of the Ministry of Finance 12%; the balance is accounted by other ministries. The relative share of the Ministry of External Affairs has also increased over the years; it was 67% in 2002 (Fig. 15.3).

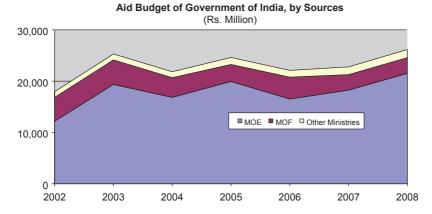


Fig. 15.3 Growth in India's aid budget, by sources (*Source* Based on Kondoh et al. **2010**). *Note* MOE: Ministry of External Affairs; MOF: Ministry of Finance

Of the several components of India's external assistance, technical cooperation is a very important one. In 2012–13, nearly 40% of the budget of the Ministry of External Affairs and 58% of the total foreign aid budget of India pertains to technical and economic cooperation with other countries (and another 13.4% to loans to foreign government enterprises Standing Committee on External Affairs 2012). Most of the assistance under technical cooperation flows through the ITEC.

15.3 TECHNICAL COOPERATION: ASSISTANCE FOR TRAINING AND DEVELOPMENT

ITEC is the major flagship programme of India's development assistance. It is mostly devoted to training, capacity building and other 'soft' investments. As explained earlier, no detailed data are available to examine the trends in aid in general or education-related aid in particular. Fuchs and Vadlamannati (2012) estimated that out of the total aid given by the Ministry of External Affairs, education sector accounted for 3.1% in 2008–10. But, according to Agrawal (2012), of the total official aid, education and skills account for about 30%. Education is an important priority sector of India's grants, along with rural development, health and technical cooperation (UNESC 2008). The Small Development Project (SDP) programme of assistance launched in 2003 focuses on

areas like infrastructure development and capacity building in the areas of education, health and community development. Since IBSA stresses that education is vital for development, it is likely that contributions to education sector will be substantial under the IBSA programme. India finances liberally the newly set up South Asia University, which is meant for the South Asian students. India is also setting up Nalanda International University which also caters to the needs of many foreign students. Both are funded by the Ministry of External Affairs and are located in India. Indian Council of Cultural Relations (ICCR), funded by the Ministry of External Affairs, is responsible for cultural exchange programmes including bringing in foreign students, teachers and artists to India for various short periods. The budget of the ICCR was \$15 million in 2007-08. About 2000 foreign students come to India on average every year to study in Indian universities with the fellowship provided Government of India and administered by the ICCR (Grover 2011). There are several scholarship schemes such as the General Cultural Scholarships Scheme, Commonwealth Fellowship Plan, Colombo Plan, SAARC Fellowship Scheme, and special schemes for Sri Lanka, Mauritius and African researchers (see Agrawal 2012).

India spends about Rs. 500 million annually on ITEC activities. About 40% of the ITEC budget is spent on training, which can be described as assistance for development of human capital. ITEC allocations do include specific amounts for scholarships and for building educational institutions. In addition to providing opportunities for formal training programmes in India, and deputing Indian experts abroad for a variety of purposes, some of the activities under ITEC, relating to education include building of schools (in Maldives), assistance in the transformation of the education system of South Africa, establishment of Plastic Technology Demonstration Centre in Namibia, Vocational Training Centre for Construction Sector in Indonesia, teaching unemployed youth in South Africa, useful trades such making biscuits, or binding books, teaching Vietnamese students to converse in English, establishment of Vocational Training Centre for Small and Medium Enterprises in Senegal and Zimbabwe, Vietnam, Mongolia, Afghanistan and Indonesia and sharing of experience in dry farming techniques with Iraq (Bijoy 2010). Capacity building and development of human resources have been the important concerns of the ITEC programme (Grover 2011).

The ITEC, fully funded by the Government of India, was instituted in 1964 as a bilateral programme of assistance of the Government of India

as a 'partnership for mutual benefit', based on the principle of 'equality'. By the 1970s, ITEC had become the most predominant programme of India's external assistance. Through ITEC, India has provided over \$2 billion worth of technical assistance to developing countries (RAMC 2010). SCAAP is a sister programme which covers only African countries. Under ITEC and the SCAAP together, more than 150 countries in Asia, East Europe (including former USSR), Central Asia, Africa, Latin America, the Caribbean as well as Pacific and small island countries share with India its developmental experience in various fields. ¹⁵

The assistance under ITEC/SCAAP Programme, which is in the form of grants, includes six major components: (a) Training civilian and defence personnel of nominees from ITEC partner countries in India; (b) projects and project-related activities such as feasibility studies of development projects and consultancy services, including preparation of techno-economic surveys; (c) provision of experts to other countries to assist their development; (d) study tours for personnel nominated by recipient countries; (e) gifs and donations of equipment at the request of partner countries; and (f) humanitarian assistance, including aid for disaster relief. The programme implies not only provision of skilled manpower, experts and financial resources, but also transfer of technology.

Though the ITEC Programme has been envisaged essentially as a bilateral programme, on quite a few occasions ITEC provides funding technical cooperation programmes planned in regional, interregional and trilateral contexts such as Economic Commission for Africa, Afro-Asian Rural Reconstruction Organization, Southern African Development Community, Industrial Development Unit of Commonwealth Secretariat, UNIDO, G-77 and G-15. In more recent years, activities of ITEC activities also covered regional and multilateral organisations like Association of South-East Asian Nations (ASEAN), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Mekong–Ganga Cooperation (MGC), African Union (AU), Afro-Asian Rural Development Organization (AARDO), Pan-African Parliament, Caribbean Community (CARICOM), World Trade Organization (WTO) and Indian Ocean Rim Association for Regional Cooperation (IOR-ARC).

The focus areas of the core training programmes of the ITEC are categorised as ¹⁶: government courses (e.g., governance, parliamentary studies, accounts, etc.), information technology and telecommunications, management, skills and rural development, technical, specialised areas

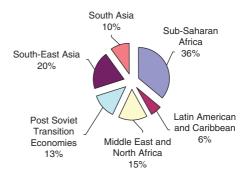
and environment and renewable energy. 17 Currently nearly 50% of the slots (trainee places) in ITEC programmes are in information technology. Since the beginning, ITEC has been a major vehicle for providing technical assistance. The training programmes aim at capacity building, empowerment and upgrading of skills. In 2015-16 around 280 shortterm, medium-term and long-term programmes are offered in India every year in 47 public and private institutions, ¹⁸ covering a wide range of special areas such as information technology, auditing, accounts and finance, crime records, standardisation, parliamentary studies, rural development, rural electrification, tool design, scientific instruments, production management, remote sensing, pharmaceuticals, mass communication, labour issues, entrepreneurship development, railways signalling, textile research, statistics, bank management, technical teachers training and educational planning and administration. In addition, ITEC also offers programmes for defence personnel. 19 All costs of the participants including travel, visa, fee, accommodation, living allowances, book allowance, study tour, medical facilities and all other expenses of the trainees are covered by the ITEC. Under ITEC, project assistance is also provided for instance, for establishing vocational training programmes in Indonesia and Afghanistan.

In 2012, about 161 countries, recognised as ITEC 'partner' countries, benefited from the ITEC and SCAAP. There is also a big increase in the number of trainees under the programme. In 1999, the number of training slots allotted was around 3000, which increased to 7400 in 2011–12. Additionally, under the Technical Cooperation Scheme, another 500 civilian training slots were given to 18 member countries of the Colombo Plan in 2011–12. In all, according to recent estimates, there are above 60,000 alumni of the ITEC programme in various parts of the world. Though small in money transfers in fact, there is little outflow of funds from India under training ITEC 'bore fruit', as thousands of bureaucrats and politicians from several developing countries received their educational training in India and India earned enormous goodwill.

A large number of ITEC training slots have been enjoyed by SubSaharan Africa. As observed by Fuchs and Vadlamannati (2012), the distribution of ITEC training programmes favours sub-Saharan Africa. Thirty-six percent of the total slots between 1998 and 2005 were allocated to SubSaharan Africa, 20% to South-East Asia, 15% to Middle East and North Africa, 13% to post-Soviet transition countries and only 10% to South Asia. Thus the focus of the ITEC has been sub-Saharan Africa (Fig. 15.4).

Fig. 15.4 Assistance through ITEC (Source Fuchs and Vadlamannati 2012)

Distribution of ITEC Slots, by Region, 1998-2005



However, it is interesting to note that in the total technical cooperation budget, of which training is one major component, Sub-Saharan African countries receive only 5.6% and neighbouring Asian countries receive the maximum, as shown in Table 15.3. Fuchs and Vadlamannati (2012) also noted that a lion's share, nearly 85%, of the aid administered by the Ministry of External Affairs was allotted to South Asian countries such as Bhutan and Nepal during 2008-10 and a tiny share was accounted by sub-Saharan Africa. But there are several projects being launched in Africa, as a part of the total external assistance programme, such as the Pan-African e-Network Project that was launched in 2004, which aims at improving schooling and health situation in African countries. Apart from building 10 super-speciality hospitals and 53 general hospitals, the project with a commitment of \$100 million aims at connecting 53 educational institutions across Africa via satellite fibre-optic network. The project covers 29 countries in the region. It also aims at creation of India-Africa Virtual University (IAVU) intended to meet demand in Africa for higher education in Indian institutions, by providing 10,000 new scholarships to African students. The IAVU project with an estimated cost of US\$ 3.5 million and annual cost of over US\$ 0.5 million, envisages formations of academic programmes, promotion of collaboration in distance education, coordination of special action plans and strengthening of the consultation mechanisms mediating education exchanges between India and African nations (Duclos 2012).

Table 15.3 India's technical cooperation budget, 2011–12	Table 15.3	India's techni	cal cooperation	budget, 2011-12
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	2005–06 Rs. (million)	%	2011–12 Rs. (million)	%
Bhutan	11,311	60.4	20,300.0	59.2
Afghanistan			2900.0	8.5
Maldives	132	0.7	2730.0	8.0
Nepal	660	3.5	1500.0	4.4
Sri Lanka	250	1.3	1330.0	3.9
Myanmar	220	1.2	1118.2	3.3
Bangladesh	520	2.8	80.0	0.2
Mongolia			20.0	0.1
Eurasian countries	90	0.5	300.0	0.9
Latin American countries			50.0	0.1
African countries	610	3.3	1240.0	3.6
Others	4948	26.4	2705.5	7.9
Total	18,741.0	100.0	34,274.0	100.0
Total in US\$ (million) ^a	400.9		666.8	

^aEstimated using the then prevailing exchange rates

Source Annual Report 2011–12; Ministry of External Affairs and Price (2011)

Further, India is funding several projects in Africa. Earlier in 2008, India offered a \$5.4 billion worth of aid to Africa at the first India-Africa Summit in Delhi focusing on regional integration through infrastructure development. Much more assistance was promised in the second Summit in 2011. India offered an additional \$700 million to establish new institutions and training programmes in consultation with the African Union and its institutions (Zimmermann and Smith 2011). The assistance is for establishment of 19 new training institutions in Africa in coordination with the African Union; 4 of these will serve all the countries in Africa one is on information technology, one on foreign trade, one on diamond polishing and one on educational planning. The programme of assistance also covers setting of 10 vocational training institutions and five human settlement institutions for training in the construction of low cost housing. African Union decides the location of the institutes, the partner country in Africa will provide land and construct buildings, and India will run the institutes for three years until they become self-sustaining. In addition, over the years, India has provided substantial aid to many African nations such as Ethiopia, Somalia, Libya and Angola and is still in the process of supporting development in these countries. In all, India's aid to Africa has been found to have grown at a compound annual growth rate of 22% over the past 10 years (Ramachandran and Walz 2010). Over the next five years, India has promised \$1.87 billion annually to Africa (Ninan 2013).

As already stated, ITEC is not confined to sub-Saharan Africa. Nearly two-thirds of the ITEC slots are provided to developing countries in other regions of the world including in South and South-East Asia, Middle East and North Africa, Latin America and the Commonwealth of Independent States. India's development assistance for investment in human capital development and capacity building are spread all over the developing world. In all, India's external assistance to human capital related programmes seems to be quite significant.

15.4 Summary and Conclusions

15.4.1 What are the Salient Features of India's Development Assistance Programme?

India's external assistance programme is quite old, and has grown in size, and is still growing. In the last few years, marked shifts in the architecture of India's development assistance in the size, direction, nature and motives have taken place.

India is also a major aid-receiver, but the government is consciously reducing the inflow of aid. As has already been shown, India is eventually emerging as a net aid-giver. India's approach in providing assistance to others is also influenced by its own experience as a recipient of aid.

In terms of geographical focus, India concentrates on neighbouring countries in Asia South Asia and Afghanistan, as it aims at political and economic stability of the region. But its assistance programme is increasingly covering countries outside the immediate neighbourhood of Afghanistan, Bhutan, Nepal, Sri Lanka and Bangladesh. Substantial assistance also flew to Africa and in recent years the assistance is getting extended to Central Asia, islands in Pacific Ocean, South-East Asia and to Latin America and the Commonwealth of Independent States. Gradually its programme of assistance is getting extended to different corners of the world.

The preference in its aid programme is bilateral assistance: bilateral assistance is substantial, though India also provides assistance

on multilateral platforms, apart from making big contributions to international organisations, including UNCTAD, World Bank, Asian Development Bank, African Development Bank, ESCAP, IMF, IDA, UNDP, etc. Though the size of the loans is increasing, a big shift from grants to loans or soft loans is yet to be seen.

The motives of India's external assistance programme are varied and blurring (Price 2004). Its focus on South Asia revolves around considerations for regional leadership and influence, besides stability in the region, while its assistance to Africa can be seen as complementary set of political and commercial interests, for example, first to support struggle against colonialism and apartheid, to strengthen NAM movement and to express solidarity with the countries of the third world; in more recent years for access to African energy resources and its interest in multilateral forums could be to promote its strategic interests (Agrawal 2007). All this lead Fuchs and Vadlamannati (2012) to describe India as a 'needy' donor.

During the Cold War period, influenced by the NAM and anticolonialism, India's programme of assistance was largely influenced by political ideological considerations, but with the end of the Cold War, the programme became more apolitical. With the economic liberalisation of the economy in the 1990s, the aid policy has become more pragmatic and is guided by strategic economic interests (Kondoh et al. 2010).

India's development assistance to South Asian countries focuses on infrastructure, health and education, and the assistance to African countries focused more on technical training, though assistance to infrastructure building is also rapidly growing. It may also be stated that India faces less competition in its programme of assistance in South Asia, while India has to face fierce competition with China and others in its programmes in Africa. But the competition even in Africa is less for India in the area of technical cooperation essentially training, compared to assistance in terms of loans and grants for infrastructure and other tangible projects.

The total amount of aid that flows from India, on which we have varying estimates, is still small, compared to the ODA of the OECD countries or countries like China. But the real significance of the programme lies not so much in the magnitude of assistance grants, or loans or technical cooperation or financial resources flowing, but rather, as noted by the RAMC (2010), in 'the character of the relationship expressed by these exchanges, especially when compared with traditional North-South development cooperation'.

What is the Special, if Not Unique, Character of India's 15.4.2 Development Assistance?

India believes in the spirit of SSDC, and this has been a traditional pillar of the country's foreign policy and diplomacy. Accordingly, its programme of external assistance is based on the foundational principles Panchsheel and the Bandung conference, which formed the spirit of the SSDC. SSDC is based on 'the principles of solidarity, non-interference in internal affairs, equality among developing partners and respect of independence, national sovereignty, cultural diversity and identity and the local content' (Accra Agenda for Action of the Third High Level Forum on Aid Effectiveness 2008). The relationship between the countries is not donor and recipient, but of partners and the goal is collective self-reliance. India's programme of assistance is firmly based on principles of the Nehruvian notion of noninterference. The approach is characterised by a principle of solidarity with others. There is empathy based on shared identity and experience. Its assistance aims at bolstering the development efforts of the recipient country. Virtues of solidarity, mutual benefit, partnership and recognition of reciprocity sharing of learning and best practice, in the whole process are well emphasised, in contrast to the traditional donor debate over recipients' needs versus donors' interests (Rowlands 2008).

As a result, compared to aid programmes of traditional donors, Indian programme is not associated with any 'discredited or fashionable' conditionalities or policy prescriptions. India's programme is designed, inter alia, to promote local capacity building and ownership. India has gained huge 'goodwill' with its novel aid strategies and 'soft power' approach. 'Much of India's success in its relations with the developing world has been built through its traditional aid programme and a shared colonial history with countries in Africa and elsewhere' (Ramachandran and Walz 2010). Assistance, that too coming in the name of development cooperation from a fellow-developing country which was also a victim of colonialism is viewed not as a neo-colonial tool, but as healthy developmental assistance.

India's expertise is based on experience of a developing country, with a long tradition of stable democracy, and an ex-colony, which is much more relevant to other developing countries than that of the West. The quality of Indian goods and services could be more appropriate and prices reasonable. The programme of assistance is also associated with less procedural requirements, quicker disbursements and flexible terms, though some assistance is tied to the purchase of goods and services from India. In contrast, as Woods (2008) observed, many developing countries are 'sceptical of promises' and 'way of conditionalities' and 'fatigued by heavy bureaucratic and burdensome delivery systems' associated with Western aid programmes that also perpetuate aid-dependence. On the other hand, the idea of the Indian programmes of assistance in general, and of the SDP in particular, is that it should meet local needs, and should be managed by local communities and institutions, minimising project implementation costs. Local ownership of the programme is the most important feature (Chaturvedi 2012). India does not have strong commercial interests in its major programmes of technical cooperation. For instance, it was clearly stated that India's 'long term vision of extending technical and economic assistance to other countries is to secure friendship and cooperation with the partner countries, enhance goodwill for India among the peoples of these countries and further peace and stability in the world leading to a more secure world for the nations at large' (Standing Committee on External Affairs 2012, p. 34).

Though widely recognised as a major emerging donor, India refused to sign the Paris Declaration on Aid Effectiveness (2005), to be a part of OECD's DAC, and/or to align with major traditional donors and 'to be seen as reproducing traditional donor recipient hierarchies' (Rowlands 2008). It also resisted pressures at Busan (South Korea) in 2008 to be a part of 'triangular development cooperation' according to which, donors in North and South join together to aid another country in the South. Rather, it plans to maintain its identity and retain the principle of SSDC in all its assistance programmes.

As Mullen and Ganguly (2012) observed, 'due to India's status as an emerging economy, a consolidated democracy, and a developing country free form colonial influence, Indian foreign assistance has great legitimacy in the eyes of other emerging countries It is this legitimacy that differentiates Indian development assistance and is likely to bolster its soft power'.

With such special features, India's programme is recognised as 'an Indian model of aid' (Oglesby 2005, p. 30). Some of these features are worth noting and traditional donors may even find something to learn from Indian practice and experience, rather than criticising India and other emerging donors as 'free riders' who benefit from conditions for effective aid prepared by traditional donors and not contribute to maintain it (Woods 2008) or expecting them to follow the order

(Davies 2010). After all, the very presence of countries like India and China in the aid arena offers many new insights, besides challenges to the traditional donors (Rowlands 2008).

15.4.3 What are the Prospects and What are the Challenges that India Face?

The entry of counties like India (and China) into the aid arena in a big way in the recent years, though they have been aid-givers for a long time, is fared to be causing changes in the geographies of economic and political power relations. India, leading the SSDC, seems to be posing challenges to the very character of the established aid architecture of the traditional donors, including the standards and norms they have developed. As described in the Economist (13 April 2011) 'big developing countries are shaking up the world of aid'.

India is nowadays widely recognised as a major emerging or as a 're-emerging' donor or as a 'development partner'. India has a few specific comparative advantages, building on which India can play a bigger role in the international arena of development cooperation. First, it earned a lot of goodwill from the developing countries with its programme of assistance over several decades. Second, while many developed countries continue to be in economic crisis and suffering from long periods of recession, India's growth, on the other hand, is still positive and high. With a large economic base fourth largest economy of the world in terms of PPP GDP in the world, India is regarded as a giant economic power playing a key role in several multilateral groups such as BRIC, BRICS, G-20, G-77, IBSA, World Bank, IMF, NAM, SAARC, UN, WTO, Commonwealth, etc., and as one influencing the agenda of groups such as G-8, even if it is not a member.

Third, with a large network of educational, training and research institutions in public and private sector, India's human capital base is strong; moreover, it has advantages in language and in IT skills. Fourth, the rapid growth of the IT (information technology) sector, 'in view of its alleged aptitude to foster capacity-building, inclusive growth, and knowledge transference', can help in escalation of India's efforts in expanding cooperation to other countries (Duclos 2012). Fifth, India is widely seen as championing and providing a range of public goods and 'has the potential to offer more' (Price 2011, p. 1), and through this, India can become a big power in the international arena.

In short, in addition to not just becoming 'a conduit between the Global North and the LDCs' (Kumar et al. 2012, p. 39), India has a great potential to become a more significant player on its own in development assistance. But there are quite a few challenges that India faces. Presently its programme of assistance is very small in size. For India to become a big player, it has to substantially increase its budget allocations for assistance. Given the high levels of poverty in the country and reliance on aid from traditional bilateral and multilateral aid organisations for its own development, this is indeed a big challenge. The challenge becomes stronger, as it has to compete with countries like China and other traditional mainstream donors. Second, with a large part of the assistance being grants and technical assistance (training), and focusing on local capacity building, India has amassed goodwill. If this is sacrificed in favour of commercial interests, India may be accused of the same that India levels against traditional donors. There is a need to strike a balance between grants, loans and technical cooperation and to balance multiple interests of the assistance programme. Third, there is need to maintain detailed database, and consolidated statements of various types of aid, the sources and activities and put the database in public domain for sound research, effective policymaking and to be transparent. Fourth, there is a need for a clear statement from the government outlining coherent long-term policy of development assistance. Now that a new dedicated one umbrella development agency is set up in 2012 to deploy, measure, coordinate, monitor and consolidate all aid programmes of the country, it is hoped that this will produce a well-articulated development assistance policy statement that helps in chalking out a harmonised development assistance programme of India for the future.

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Notes

- 1. India's Panchsheel, the five principles, viz., mutual respect for each other's territorial integrity and sovereignty, mutual non-aggression, mutual non-interference in each other's internal affairs, equality and mutual benefit and peaceful coexistence, emphasised by India's first Prime Minister Jawaharlal Nehru formed the basis for the Bandung Conference, the Colombo, Plan and the NAM (http://en.wikipedia.org/wiki/Five_Principles_of_Peaceful_Coexistence). Manmohan Singh, India's Prime Minister (2004–14) was the Secretary General of the South Commission, which prepared a report that stressed the importance of South-South Cooperation in the changing times. See South Commission (1990).
- 2. We note later, the several figures on India's total external assistance are confusing.
- 3. http://www.guardian.co.uk/global-development/poverty-matters/2011/may/25/india-pledges-5bn-to-help-african-states-meet-mdgs.
- 4. LOCs are generally extended to overseas financial institutions, regional development banks, sovereign governments and other entities overseas, to enable buyers in those countries to import goods and services from India on deferred credit terms. A line of credit is not considered as a foreign aid instrument, but rather as an instrument for promoting international trade. It is used as a tool not only to enhance market diversification but also as an effective market entry mechanism for small and medium Indian enterprises. See Sinha and Hubbard (2011). But they are also often treated as a part of the total assistance/aid. The total lines of credit that India had offered through the EXIM Bank was to the tune of \$4500 million in 2010 (Sinha and Hubbard 2011).
- 5. As a result, even a major international source of data on external aid like Aiddata.org does not have much information on aid outflows from India.
- 6. In the preceding years there were proposals to institute 'India Development Assistance' (2003), 'Indian International Development Cooperation Agency' (2007) and 'Indian Agency for Partnership in Development' (IAPD) (2011). But none materialised.
- 7. Immediately the DPA is expected to oversee \$11.3 billion assistance over the next 57 years (Patel 2011).
- 8. It is not attempted here to reconcile the several confusing and contradictory statistics.
- 9. Often the line between foreign direct investment and aid/assistance is blurred, as is the line between aid and trade.
- 10. http://articles.timesofindia.indiatimes.com/2003-04-12/international-usiness/27268819_1_%20international-financial-institutions-rbi-governor-bimal-jalan-quotaformula. By launching the 'Initiative' in 2003,

India repositioned itself in the international development community, as a major aid provider to give grants or project assistance to developing countries in Africa, South Asia and other developing nations. Nothing is known later about the Initiative, except that the Government has written off debt worth \$30 million due to it from seven heavily indebted countries as part of the Initiative.

- 11. It was originally launched in 1996 by the G7.
- 12. Though such contributions may not be considered as 'direct' aid, they are listed as a part of India's foreign aid-related budgets.
- 13. India has been recognised as an important humanitarian donor. See Horaváth (2013).
- See also http://www.mea.gov.in/meaxpsite/budget/Budget_11-12_ Eng.pdf and https://www.devex.com/news/in-latest-indian-budget-aid-spending-dwarfs-aidreceipts-82915.
- See http://itec.mea.gov.in for more details and a complete list of countries covered.
- 16. See http://itec.mea.gov.in/. However, the categorisation does not seem to be neat and non-overlapping.
- 17. These are only civilian training programmes. Training programmes for defence personnel include security and strategic studies, defence management, marine and aeronautical engineering, logistics and management, etc., and they cater to the needs of all the three wings of defence services, viz., army, air force and navy.
- 18. http://itec.mea.gov.in/?1320?000. See also ITEC: Civilian training programme 2010–11. Ministry of External Affairs, New Delhi 2011.
- 19. The focus in this chapter is on training civilian personnel.
- 20. http://www.therichest.org/world/worlds-largest-economies/.

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Structural Adjustment, Neo-Liberal Policies and Private Education



CHAPTER 16

The Effects of Adjustment on Education: A Review of Asian Experience

The social costs of adjustment and considerations of distributional equity seem to have been universally neglected in World Bank-supported adjustment programmes. Where distributional outcomes were relatively benign, they were accidental.

(Helleiner 1991, p. 535)

16.1 THE CONTEXT

The importance of human resource development in general, and human capital in socio-economic development in particular, has been well recognised ever since the 'human investment revolution in economic thought' was initiated by Theodore Schultz in 1960 (Schultz 1961). Of the various components of human capital, education and health have been found to be the most important. Accordingly, several developing and developed countries have invested huge resources in education. Education witnessed a 'golden period' during the 1960s with a substantial flow of

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public investments. Both the rates of growth in enrolments and public investments in education were highest during the 1960s. This phase was followed by a decade of setbacks, with the human capital theory being jolted by critics who argued that the role of education in productivity was negligible, and that education served only as a screening device and a mechanism for awarding credentials (Arrow 1973; Spence 1973).

But the setback proved to be only temporary. The screening and credentialism theories lacked empirical support, and the 'hardcore' aspects of human capital theory remained intact. Accordingly, the basic tenets of human capital theory have been the least questioned. A slow and steady re-emergence of faith in human capital marked the 1980s. Both developing countries and international agencies began paying serious attention to investment in human capital. The contribution of education to economic growth is found to be positive and significant, when measured not only in monetary terms, but also in physical terms, such as agricultural efficiency, labour productivity, etc. The contribution of education has also been found to be significant not only for economic growth, but for poverty reduction, improvement in income distribution, and for various dimensions of social, demographic and political development (Tilak 1989a, 1994a). The relative significance of human capital has also been found to be higher in developing countries and among poor people, than in developed countries and rich people (Psacharopoulos 1984, 1994). But, as national and international agencies began expressing their commitment to education and their faith in human capital for development, the world economic crisis was unveiled with the first and the second oil crises, inflation, mounting foreign debt, structural adjustment and readjustment policies, and recessionary trends. Very soon it was realised that the last decade of the century—the 1990s—was going to be the decade of containment.

The decade of containment in certain Asian countries, such as India, began with the introduction of new economic policies, commonly known as 'adjustment policies', associated with the World Bank and the International Monetary Fund (IMF). It is strange that, while many countries had adopted these policies after long periods of economic problems, including balance of payments crises, India had to resort to such policies rather suddenly became an adjusting country with the introduction of a package of sweeping policy reforms in July 1991. These policies have been hailed by some as the most promising ones to

make economies like that of India into 'a tiger', and at the same time criticised by others as a signal of derailment from the Nehruvian path of planned development and welfare in India.

Such reforms are being implemented in as many as 105 countries. But, unfortunately, these policies are neutral to time as well as to space. Inter alia, they seem to question the dominant role of the State in development, and to encourage an increased role for the market mechanism. They also specifically stress reductions in government expenditures. The most direct consequence would be a drastic reduction in public subsidies across the board, although reduction need not necessarily be-and most often is not—uniform across all sectors. These economic policies are feared to have an adverse effect on all sectors of the economy. The effects of these reforms were found to vary significantly across the three major developing continents: Africa, Asia and Latin America. Latin America fell into a debt trap and Africa suffered very severely in standards of living and levels of educational development in particular. The experience of Asian countries, however, is generally believed to be different, and that of East Asian countries indeed favourable. Due to this, many countries seem to be keen on emulating the East Asian experience. Hence, a review of Asian experience may be of particular use.

But a majority of studies have focused their attention on African and Latin American countries, and not much documentation exists on Asian countries. This chapter is an attempt to fill this gap in research and information. Such a review may also benefit the Asian countries that have just adopted, or are likely to adopt, similar adjustment policies, as well as countries in other regions of the world. It may also benefit the financial lending institutions that may be examining the need for a modification of their policies in Asian countries.

With the help of some readily available data collected from UNESCO and World Bank publications, and some recent research studies, a few comparisons are made in the following sections between the adjusting and the non-adjusting countries in the development of education, following the classification of countries made by Kakwani et al. (1990). The aim is to examine whether there is any discernible difference in educational development trends between the adjusting and the non-adjusting countries. For this purpose, a select list of indicators on educational development has been chosen, concentrating on the allocation of financial resources, growth in enrolment ratios, and on quality and equity. The focus of discussion is

also biased in favour of primary education. But, first, a brief discussion on how education is generally treated during periods of crisis and austerity.

16.2 EDUCATION UNDER ECONOMIC AUSTERITY

16.2.1 Investment in Education

Generally, the relationship between investment in education and the state of the economy is not simple and straightforward. Under normal conditions of economic well-being (including situations of economic progress), the allocation of resources to education is generally found to be the least significantly influenced by economic factors. Economic ability factors, such as gross national product (GNP) per capita and public spending on education, are not significantly related. Economically poorer societies, like Kerala in India and Sri Lanka in South Asia, spend a higher proportion of their GNP on education than many economies that enjoy higher GNP or higher income per capita (Tilak 1984, 1986). Efficiency criteria, such as the rate of return on educational expenditure, are not significantly related to levels of public spending on education (Tilak 1982). Further, neither the manpower needs of the economy nor even social factors, such as constitutional directives on the universalisation of elementary education and widespread levels of illiteracy, guide educational planners in their decisions on investment in education (Tilak 1980).

On the other hand, there seems to be a strong and positive relationship between economic conditions and public investment in education during crisis periods, such as adjustment periods. Worsening economic conditions do have a strong influence on the allocation of resources to education, as policymakers find education an easy scapegoat under such circumstances. Moreover, the nature of investment in education is not widely recognised. Expenditure on education is still treated not as investment that needs to be expanded, but as consumption, a social burden, even as social welfare where economies need to be made, and the tighter the general problems the more needs to be saved. That the benefits of education are not tangible and not immediately evident contributes to the tightening of the flow of resources to education. As a result, education becomes a highly vulnerable sector under deteriorating economic conditions (see Tilak 1989b, c, 1990b).

Thus, while under normal economic conditions there does not seem to be any significant relationship between the economic situation and public investment in education, under worsening conditions there seems to be a strong positive relationship, with a deterioration in both the economy and investment in education.

16.2.2 Priorities

During periods of economic deterioration, priorities become distorted, and some desirable aspects of education are traded off for some avoidable and unacceptable aspects. In most modern political systems, popular pressures are important. No modern welfare State can afford to face popular unrest and the associated consequences of closing down the human development sector, such as educational institutions, even during a severe economic crisis. Gripped by the two forces, i.e., worsening economic conditions on the one hand, and sociopolitical popular pressures for educational expansion on the other, policymakers make a few trade-offs.

First, the quality of education gets traded off for quantitative expansion. Policymakers find a compromise solution for apparently maintaining the status quo by satisfying the quantitative demand fairly well, by diluting the quality of education as reflected through the inadequate allocation of physical and monetary resources for programmes and activities that are related to improvement in quality. More and more schools, colleges and even universities get opened, but with insufficient teachers and inadequate allocations for buildings, classroom materials, books, libraries, laboratory materials, etc. As a result, not only schools, but also colleges and universities are found to be under-funded, in impoverished physical conditions, opening in dilapidated buildings and in sheds and open spaces with no furniture. Underqualified or untrained teachers would get appointed. Brief crash courses receive preference over long-duration programmes, and short-term training programmes over long-term training programmes, and so on. In other words, resources get spread very thinly, adversely affecting the quality of education.

Secondly, equity in education is traded off for quantity. Although total enrolments increase due to the existence of a large unmet demand for all levels of education (particularly higher education), the internal composition of enrolments undergoes a drastic change. The distribution of student enrolments moves in favour of higher income groups to the detriment of socially and economically weaker segments of society. Although total public expenditure on education might increase, the allocation for items such as scholarships for the disadvantaged and student welfare in general is reduced. Total numbers of schools might increase, but special schools exclusively intended for poorer sections, such as

Ashram schools in India, and hostels for the disadvantaged, etc., will not increase; they may in fact decline. Equity thus appears to be sacrificed in favour of quantitative expansion.

Thirdly, under economic austerity, it is mostly the sectors that benefit the relatively middle and upper income groups get protected, even at the cost of the sectors relating to mass education (see Tilak 1990a). Investment priorities generally shift from primary education, adult education and other mass education programmes to higher education. Literacy programmes may pass into oblivion in favour of expansion of the university sector. In societies where higher education is relatively democratised, with a large number of students coming from lower- and middle-income groups, higher education also suffers. This is due to several factors, including the vested interests of the ruling class- the politicians and the bureaucracy. Thus, even during periods of economic crisis, the rates of growth in elite higher education institutions would be higher than those in mass education.

Fourthly, apparent expansion takes place along with hidden erosion in public investments. Although increases in total allocation for education may be reported, they tend to be in current market prices, whereas in real prices there could be a significant decline. This has happened in annual budgets, and also (quite unbelievably) between the third, fourth and fifth five-year plan outlays for education in India (see Tilak 1995, 1996). Due to popular pressures and populist strategies, the wages and salaries of teachers and other staff in educational institutions increase, but only in monetary terms, and the increase would normally be less than the increase in prices, resulting in a decline in real terms. Thus, hidden erosion actually takes place in public investments although, on the face of it, one may find significant increases.

16.2.3 Undesirable Policies

Thirdly, in the process of seeking new strategies and methods of funding education, certain undesirable methods get approved and legalised. Recent policies and policy shifts with regard to foreign assistance to education (see Tilak 1995) and privatisation in India testify to this. Countries that have previously refused external assistance on political, social, economic and educational grounds, relax their policies and seek external assistance (see Tilak 1993). The whole approach towards foreign aid for education changes, as is the case in India.

Privatisation of education of all different forms (see Tilak 1991, 1994c) takes place in a big way, including: (a) an 'extreme' degree implying total privatisation of schools, colleges and universities managed and funded by the private sector, with little government intervention, and motivated by profit (e.g., capitation-fee colleges in India); (b) a 'strong' form of privatisation, which implies recovery from students of the full or very substantial cost of even public education; (c) a 'moderate' form of privatisation, implying public provision of education but with a reasonable level of financing from non-governmental sources through increased student fees, student loans, taxes, etc.; and (d) 'pseudo' privatisation, characterised by private schools and colleges receiving nearly all of their expenditure from the government, thereby causing distortions in the allocation of public resources. All these forms of privatisation get approved and encouraged by the government and society at large.

16.3 Adjustment in Asia

Due to the consistently worsening economic situation, and deteriorating financial conditions and of governments in particular, together with long-term and extremely complicated problems, since the beginning of the 1980s several countries have embarked on adjustment policies. These policies have produced mixed effects on various social and economic sectors of the countries concerned. It has been mainly found that the effects of this 'blunt instrument' are adverse and 'heavier' on social sectors, notably education, than on other sectors. Decline in public investment in education (total, and per student-in real and sometimes in current prices, and as a proportion of GNP, and of total government expenditure), decline in gross enrolment ratios, particularly at the primary level, and a decline in indicators pertaining to quality and equity in education have been found to be strongly associated with structural adjustment policies in several developing economies. Within the education sector, it has also been found that the axe falls more severely on primary education than on higher education, on capital budgets as compared to recurrent budgets, and on equity and quality as compared to quantitative expansion.¹

What is the experience of developing countries in Asia? Although Asian countries were less severely affected by the global economic crisis of the 1970s and the 1980s, several countries were to adopt adjustment, including structural adjustment policies, having received adjustment

loans from the World Bank/IMF and also from other bilateral and multilateral institutions that insist on similar adjustment policies. The Philippines was one of the first Asian countries to adopt structural adjustment programmes, starting in 1980. Pakistan was to follow suit in 1982. Even the newly industrialising countries of East Asia that have achieved rapid economic growth 'have not been free of necessary structural adjustment' (Koo and Nam 1990, p. 261). The Republic of Korea and Thailand took their first structural adjustment loans in 1981 and 1982 respectively. In 1987, Nepal had to resort to the same practice. India is the latest entry into this arena of structural adjustment and the positive effects of adjustment are yet to be observed.

There are thus more than half-a-dozen major countries in Asia that have had some experience of structural adjustment. Several other countries, such as Bangladesh, China, Indonesia and Sri Lanka, had also taken other (sectoral/programme) adjustment loans, beginning with Bangladesh in 1980. Pakistan had taken sector adjustment loans in 1980, followed by structural adjustment loans in 1982, while in many other countries, structural adjustment loans preceded sectoral adjustment loans (see Nicholas 1988; Noss 1991, pp. 51-55). Some countries adopted adjustment-like policies 'voluntarily'. In Indonesia, for example, a series of 'adjustment' programmes were undertaken starting in the early 1980s, with currency devaluations first in 1983, and later in 1986 (Azis 1990, p. 242). Singapore underwent a phase of 'economic restoration' during 1979-84, but the programme included policy components such as wage increases, fiscal incentives and training activities that are somewhat different from other 'adjustment' programmes (Tan 1990, p. 400). Many other East Asian economies had adopted some sort of adjustment programmes even in the 1970s, if not earlier (see Agrawal et al. 1992; Kohsaka and Ohno 1996).

The remainder of the present chapter concentrates primarily on the effects of the World Bank/IMF structural adjustment programmes, since these programmes are clearly distinct from others in their nature and effects, and it is the structural adjustment programmes that have no direct reference to education or to any social sectors, but whose effects are generally found to be the most severe. With respect to these adjustment programmes, it was claimed that 'Asia as a whole achieved better results in adjustment and growth than have other regions, its experience nevertheless comprises a range of successes and failures' (Karaosmanoglu 1991, p. 412).

As in many other countries, structural adjustment policies in Asian countries did not express any explicit policy towards education. Nevertheless, educational adjustment programmes that 'could parallel and reinforce the larger economic strategies of structural adjustment' (King 1990) do have policy conditions on education attached to them.² During the whole process of adjustment, several Asian countries did try to protect education from the negative impact of adjustment policies; many succeeded, some achieved 'limited success', some 'partial success' or some 'semi-success', while others failed in their efforts.

As a consequence of the adjustment policies, while public expenditure in general, and on social sectors like education in particular, declined in many regions/countries, it has been found to have risen in most countries of the Asian region due to-or in spite of-adjustment policies. It was found, for instance, that the share of health and education in government expenditure increased between 1980-81 and 1985-87 in nine out of the ten Asian countries studied (Cornia and Stewart 1990, p. 16). Generally, it is felt that the impact of adjustment policies in Asian countries has not been as severe as in African and Latin American countries. This is partly because many of the Asian countries had adopted 'inward'-looking policies, with less reliance on foreign debt. Other similar policies included reduction in imports (e.g., South Asian countries), penetration into export markets (e.g., mainly the newly industrialising countries of East Asia), and reliance by countries such as India and China on the expansion of domestic demand. Other countries (e.g., Philippines and Thailand) adopted policies 'neutral' to inward- and outward-looking strategies (see International Labour Office 1987; Lo et al. 1989; Asian Development Bank (ADB) 1992/1994).

In the long list of Kakwani et al. (1990),³ Asian countries figured in only three groups: the *intensely adjusting countries* (Pakistan, Philippines, Republic of Korea and Thailand), the post-1985 adjusting countries (referred to here simply as adjusting countries, Bangladesh, China, Indonesia and Nepal), and non-adjusting countries (of type I) that did not need World Bank/IMF type policies and loans (Myanmar [Burma], India, Sri Lanka and Malaysia). The former two categories together are also referred to here as adjusting countries. Following this classification, in the present analysis, India is regarded as a non-adjusting country, although since 1991 India has adopted adjustment policies. Sri Lanka is also regarded as a non-adjusting country, although it had adopted IMF-World Bank stabilisation and adjustment policies since 1965 (Jayalath 1995).⁴

16.3.1 Changes in Public Expenditure on Education

One of the strongest effects of stabilisation and structural adjustment policies is found to be a reduction in public expenditure in general, and on social sectors like education in particular. This is due to the fact that stabilisation and adjustment policies aim at a reduction in deficits in public budgets, and envisage a reduced role of the State and a correspondingly enhanced role for the market mechanism. Paradoxically, some governments declare that the adequate financing of social sectors, like education and health, are 'precisely the objectives of [our] stabilisation- cum-structural reform programme' (Singh 1992, p. 31). It is argued that macroeconomic stabilisation and structural reforms release funds for public investment in sectors like education. However, with the introduction of adjustment policies, education budgets were slashed and the role of the State began to diminish in many developing countries. Asian countries are not a strong exception, as shown in Table 16.1. In Indonesia, an adjusting country (of the post-1985 phase), the share of education in GNP declined steeply, from 2.2% in 1985 to 1.3% in 1993. Expenditure on education as a proportion of total government expenditure also declined from 9.3 to 4.3% in 1988. Even in absolute terms and in current market prices, the 'development' expenditure on education declined from Rp. 1413 billion in 1985-86 to Rp. 1076 billion in 1988-89 (Azis 1990, p. 250). In contrast, in the Philippines, another intensely adjusting country, there has been a steady increase in the priority being accorded to education in GNP since 1980: from 1.6% in 1980 it was nearly doubled to 2.9% in 1991, but later decreased to 2.4% in 1993. In a few other intensely adjusting countries, decline did take place, but not so steeply as in the case of Indonesia. The share of education in GNP declined from 3.2% in 1987 to 2.7% in 1991 in Pakistan, and in South Korea from 4.5% in 1985 to 3.5% in 1990. In South Korea, the share of education in total government expenditure also declined from 28.2% in 1985 to 14.8% in 1992. Decline of a lesser order can be noted in Thailand: from 3.9% of GNP in 1985 to 3.2% in 1989 (it then increased to 4% in 1992), and from 20.6% in 1980 to 16.6% of total government expenditure in 1988. In China also the share of education in GNP declined, though marginally, during the post-1985 period. Among the non-adjusting countries, in Malaysia, the share of education declined from 7.8% in 1986 to 5.6% in 1991. The changes in other countries, including declines, are marginal, and somewhat normal, than could probably have happened even in the absence of adjustment operations.

Table 16.1 Trends in public expenditure on education

		_		_							
	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
As percent of G	NP										
Intensely adjusti	ng coun	itries									
Pakistan	2.2	2.0	2.7	3.0	3.2	2.6	2.6	2.6	2.7	_	_
South Korea	2.2	3.7	4.5	4.0	3.9	3.3	3.6	3.5	4.0	4.2	_
Thailand	3.6	3.4	3.9	3.8	3.6	3.2	3.2	3.6	3.5	4.0	_
Philippines	1.9	1.6	1.3	1.7	2.0	2.2	2.9	2.9	2.9	2.3	2.4
Adjusting countr	ries										
Bangladesh	1.1	1.5	1.9	2.2	2.0	2.1	2.2	2.0	2.2	2.3	_
China	1.8	2.5	2.7	2.1	2.4	2.3	2.4	2.3	2.2	2.0	1.9
Indonesia	2.7	1.7	2.2	_	_	0.9	_	1.1	1.2	2.2	1.3
Nepal	1.5	1.8	2.8	2.6	_	_	-	2.0	2.7	2.9	-
Non-adjusting c	ountrie.	s									
India	2.8	2.8	3.3	3.5	3.2	_	3.2	4.0	3.8	3.7	_
Sri Lanka	2.8	3.1	3.0	3.5	3.7	3.0	3.0	2.7	3.2	3.3	3.1
Malaysia	6.0	6.0	6.6	7.8	6.9	6.1	5.7	5.5	5.6	5.5	5.1
As percent of to	otal										
Government ex	pendit	ure									
Intensely adjusti	ng coun	itries									
Pakistan	5.2	5.0	_	_	_	_	_	_	_	_	_
South Korea	13.9	23.7	28.2	27.3	26.6	23.2	23.3	22.4	25.6	14.8	_
Thailand	21.0	20.6	18.5	19.4	17.9	16.6	_	20.0	19.1	19.6	_
Philippines	11.4	10.3	7.4	-	_	12.7	11.5	10.1	10.5	-	_
Adjusting countr	ries										
Bangladesh	13.6	8.2	10.5	10.5	9.9	10.3	10.5	10.3	11.3	8.7	_
China	6.3	9.3	12.2	_	11.1	12.1	12.4	12.8	12.7	12.2	12.2
Indonesia	13.1	8.9	9.3	_	_	4.3	_	_	_	_	_
Nepal	11.5	12.7	10.8	10.8	_	_	-	8.5	12.3	13.2	-
Non-adjusting c	ountrie.	s									
India	9.4	10.0	9.4	_	8.5	_	_	10.9	11.9	11.5	_
Sri Lanka	10.1	8.8	8.0	9.4	10.9	7.8	7.8	8.1	8.4	8.8	7.8
Malaysia	19.3	14.7	16.3	16.9	_	18.5	18.2	18.3	18.0	16.9	-

⁻ Not available

Source UNESCO-a (1995 and earlier years)

On the whole, expenditure on education, as monitored by the proportion of GNP allocated to it, diminished in six out of eight adjusting countries and in four out of six such countries on which data are available, the expenditure as a proportion of total government expenditure also declined. The steepest decline is to be noted in the adjusting country of Indonesia and to a lesser degree in the intensely adjusting

countries of Pakistan (1987–91) and the Republic of Korea (1985–90). The share of education in GNP declined to a lesser extent in Thailand in the late 1980s (with a subsequent increase between 1989 and 1992) and more marginally in China during the post-1985 period. In a number of these countries on which data are available, public investment in education as a proportion of total government expenditure also declined.

However, it is not only the cut in total expenditure on education, but also the nature and quality of the expenditures subject to being cut that are important. In situations of economic hardship, it is not uncommon for current expenditure to increase at the cost of capital investments in education, as current expenditures (comprised primarily of the salaries of teaching and related staff) cannot be reduced even during adjustment and economic restructuring. Accordingly, there tends to be an increase in the relative share of current expenditure in total expenditure on education.⁵ A similar trend is noted in some of the Asian countries (Table 16.2). This does not seem to be the case in all Asian countries considered here, as only marginal changes may be observed in the composition of educational expenditure. One notable exception is China where the share of current expenditure has increased sharply from 80.9% in 1986 to 93.9% in 1991. In contrast, in the Philippines there was a decline in the corresponding proportion for some period, followed by an increase of around 90%. In most other adjusting and other countries only marginal changes could be noted.

16.3.2 Allocation to Primary Education

Under adjustment conditions, the general pattern of intra-sectoral allocation seems to favour higher education and to discriminate against primary education, as demonstrated by the decline in the relative share of primary education in educational budgets in a number of developing countries. In a few Asian countries also, similar changes can be noted, though not very consistently (Table 16.3). According to UNESCO figures, this was the case in Bangladesh where the relative share went down by 7% points from 51% in 1985 to 44% in 1992, and, to a lesser degree, in Pakistan (from 39.4% in 1980 to 36% in 1987); it however, increased in Pakistan to 47% in 1989. The decline in the Republic of Korea from 50% in 1980 to 42.2% in 1992 need not be a matter of concern, given that primary education is nearly universal.

 Table 16.2
 Current expenditure on education as percentage of total expenditure on education

	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Intensely adjustir	ıg coun	tries									
Pakistan	69.6	73.1	74.3	75.1	75.8	77.0	76.1	82.7	86.7	_	_
South Korea	74.4	84.3	79.7	81.9	86.4	86.2	84.6	89.2	78.8	79.8	_
Thailand	73.3	70.6	85.9	87.0	87.1	86.5	_	83.6	82.0	_	_
Philippines	_	96.0	93.4	92.0	89.2	88.6	84.7	92.4	88.8	_	_
Adjusting countr	ries										
Bangladesh	67.4	66.8	77.2	74.8	76.7	77.3	77.4	79.1	76.0	79.7	_
China	92.9	90.7	87.9	80.9	89.6	91.8	91.8	93.2	93.9	91.7	_
Indonesia	77.6	_	_	_	_	88.5	_	69.0	63.2	65.4	63.1
Non-adjusting C	'ountrie	s									
India	99.1	98.8	97.6	98.4	98.5	_	_	98.8	98.5	98.9	_
Sri Lanka	93.6	85.3	76.7	74.5	79.6	82.9	_	81.5	73.6	76.3	81.2
Malaysia	84.9	83.0	85.4	84.1	87.5	_	79.1	77.3	80.2	86.4	87.8

⁻ Not available

Source UNESCO-a (1995 and earlier years)

However, Pakistan and Bangladesh have a long way to go to make primary education universal. Among the other adjusting countries, one finds some increase in the share of primary education in China and Nepal. Among the non-adjusting countries, India has made a concerted effort to provide an increasingly higher share of total educational expenditures to primary education.⁶ Finally, the share of higher education did not increase remarkably during the same period in any country of the region except India and Malaysia. In many other countries, it even declined. The decline in the share of higher education is found to be remarkable in India during the 1990s, i.e., after the adjustment policies were introduced.

More importantly, the real expenditure per pupil in primary education (as a multiple of GNP per capita) did not show any decline between 1980 and 1988 in any country, though the increase is very small; but there is a modest decline between 1990 and 1992 in China, Malaysia, Nepal, Pakistan and Thailand (Table 16.4). In contrast, higher education suffered between 1980 and 1990, with a decline in all the countries, except Pakistan, an intensely adjusting country, and India during the non-adjusting phase. More clearly, current expenditure at the primary

 Table 16.3
 Percentage of intra-sectoral allocation of public expenditure on education

	C		1 1	
Country	Year	First level	Second level	Third level
Intensely adjusting	countries			
Pakistan	1980	39.4	31.0	18.8
	1985	36.0	33.3	18.2
	1986	36.0	31.2	18.2
	1987	36.0	31.2	18.2
	1989	47.4	19.1	18.3
South Korea	1980	49.9	33.2	8.7
	1985	46.7	36.7	10.9
	1988	54.1	31.8	7.0
	1989	46.5	31.5	8.0
	1990	44.3	34.1	7.4
	1991	43.6	38.6	7.2
	1992	42.2	39.4	6.9
Thailand	1981	55.1	25.3	13.3
	1985	58.4	21.1	13.2
	1987	59.0	22.9	11.5
	1988	58.2	23.3	11.9
	1990	56.0	21.6	14.6
	1991	53.9	21.2	16.3
Philippines	1980	61.4	15.7	22.1
	1985	*	74.0	22.5
	1987	*	68.7	16.8
	1988	*	73.1	15.1
Adjusting countries				
Bangladesh	1980	45.3	29.2	23.0
C	1985	51.0	37.1	10.1
	1988	46.4	42.3	8.7
	1989	45.0	43.4	8.3
	1990	45.6	42.2	8.7
	1992	44.2	43.3	7.9
China	1980	27.1	34.3	20.0
	1985	28.6	33.2	21.8
	1986	28.5	33.6	21.0
	1988	30.8	34.1	20.6
	1989	31.5	34.4	18.6
	1993	34.0	38.0	17.8
Nepal	1985	35.7	19.9	11.0**
•	1992	44.5	17.7	28.1
Non-adjusting coun				
Sri Lanka	1980	*	91.9	8.9
	1985	*	90.2	9.8
	1990	*	84.3	13.4
	1991	*	85.7	12.1
	1992	*	81.6	13.7

(contiuned)

Table 16.3 (contiuned)

Country	Year	First level	Second level	Third level
India	1980	36.9	24.2	13.5
	1985	37.1	25.2	15.5
	1986	35.6	26.0	15.6
	1987	41.8	29.1	17.0
	1988	44.1	31.5	19.8
	1989	43.9	38.9	19.6
	1992	38.5	27.0	14.4
Malaysia	1980	35.0	34.0	12.4
•	1985	37.8	37.1	14.6
	1987	37.9	37.7	14.9
	1989	*	72.3	14.9
	1990	34.3	34.4	19.9
	1991	34.0	34.9	19.9
	1993	34.3	38.7	17.3

Source UNESCO-a (1995 and earlier years)

Notes Totals may not add up to 100, as 'others not distributed' are not included here

Table 16.4 Expenditure on education per student as a multiple of GNP per capita

	Prima	Primary*			ıry	Higher			
	1980	1990	1992	1980	1990	1992	1980	1990	1992
Intensely adjustin	ig counti	ries							
Pakistan	0.09	0.13	0.09	0.18	0.29	_	1.17	1.57	_
South Korea	0.11	0.12	0.13	0.10	0.11	0.13	0.16	0.06	0.05
Thailand	0.09	0.13	0.12	0.10	0.16	0.14	0.36	0.26	0.26
Philippines	0.05	0.06	_	0.04	0.03**	_	0.13	0.11	_
Adjusting countr	ries								
Bangladesh	0.05	0.06	0.09	0.10	0.22	0.23	0.86	0.37	0.29
China	0.04	0.05	0.04	0.13	0.15	0.11	3.62	1.93	1.40
Nepal	0.10	0.19+	0.11	_	_	0.15	2.44	2.22 +	1.61
Non-adjusting co	untries								
India	0.09	0.11	0.12	0.15	0.15	0.16	0.46	0.83	0.70
Sri Lanka	0.10	0.16	_	_	_	_	0.69	0.53	0.54
Malaysia	0.11	0.15	0.11	0.22	0.26	0.21	1.49	1.24	1.17

^{*}Includes pre-primary level

Source UNESCO-b (1991, 1993 and 1995)

^{*}Included in secondary

^{**}Includes all others

^{**}Around 1990/1988

⁻ Not available

Table 16.5 Expenditure on primary education, 1985 (in US dollars)

	1980	1985	% Change
Intensely adjusting	g countries		
Pakistan	23.6	28.0	19.13
South Korea	162.1	310.9	91.80
Thailand	53.5	101.7	90.09
Philippines	39.2	26.9	-31.38
Adjusting countri	es		
Bangladesh	7.4	16.4	121.62
Nepal	19.6	13.7	-30.10
Non-adjusting con	ıntries		
India	22.5	30.6	36.00
Sri Lanka	17.3	20.8	20.23
Malaysia	205.1	282.2	37.59

Source Lockheed et al. (1991)

level registered a significant increase in real terms in almost all countries of the region on which such data are available for the period 1980–85. The exceptions are only the Philippines and Nepal, where there was about a 30% decline between 1980 and 1985 (Table 16.5). In all other countries, the growth is positive and rather substantial.

16.3.3 Growth in Envolments

One of the most significant and dominant effects of adjustment policies on education that is well documented is a consistent decline in gross enrolment ratios in primary education. Even Kakwani et al. (1990), who found no 'discernible evidence' of the adverse impact of adjustment on various social indicators, discovered that regressive trends in enrolment ratios were a notable exception. Enrolment ratios declined during the adjustment process.

Growth in enrolments (in absolute terms) in primary schools in Asian countries is mostly positive (though the rate of growth itself may be decreasing), except in those countries where (a) primary education is nearly universal, and/or (b) where the rate of growth of the population of the relevant age group is negative, which is understandable. However, a significant decline in enrolment ratios can be observed in those countries, where one expects the ratios to increase. Adjustment policies in Pakistan can be found to be associated with decreasing enrolment ratios.

T 11 1//	D	1	1
Table 16.6	Percentage of gross	enrolment ratios in	primary education
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	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Intensely adjust	ing cou	ntries									
Pakistan	41	39	48	44	45	44	44	44	_	_	_
Thailand	84	99	96	96	95	87	86	88	99	98	_
Adjusting coun	tries										
Bangladesh	73	62	60	60	59	70	70	77	_	_	_
Nepal	51	88	82	82	83	82	95	103	105	109	_
Non-adjusting	countri	es									
India	81	83	96	98	99	99	98	98	99	101	102
Malaysia	_	93	101	_	_	_	96	93	93	93	93

Notes Countries with 100% gross enrolment ratios in 1980-85 and continue to be above 100% are excluded

Source UNESCO-a (1995 and earlier years)

The 'gross' enrolment ratio at primary level in Pakistan declined rapidly from an already low level of 48% in 1985 to 44% in 1990 making it one of the lowest enrolment ratios in the world, and only better than Afghanistan and Bhutan in the Asian region (Table 16.6). Net enrolment ratios would be expected to be even lower. The intake level in Grade I in Pakistan has also decreased from 74% in 1980 to 69% in 1988, while in many other countries it is above 100%, and was on the increase during the period 1980–88 (except in Thailand). Indeed, both the primary enrolment ratio and the apparent intake level declined in Thailand (from 98% in 1980 to 85% in 1988) although the gross enrolment ratio seems to have increased remarkably in the subsequent years. This is not a matter of great concern as Thailand is well on the way to achieving fast the goals of 'Education for All' (WCEFA 1990), compared to Pakistan (see Haq 1988; World Bank 1984).

Declining enrolment ratios or in the demand for education during adjustment and economic restructuring may be explained by the diminishing real incomes of households. Even though the unit opportunity costs also fall, the need to increase the supply of labour (including child labour) increases in an attempt to boost the falling levels of household income. Although this might be the case in Pakistan, the opposite is true of Bangladesh, another adjusting country. In the latter case, the gross enrolment ratio has registered a significant increase from 60% in 1985 to 77% in 1990. Even the net enrolment ratio in Bangladesh increased significantly from 54 to 69% during the same period, which is

⁻ Not available

indeed a significant increase. Moreover, Bangladesh was able to maintain a stable enrolment ratio at the secondary level, though at the very low level of below 20%.

Enrolment ratios increased in all other countries where primary education is still not universal; and it stabilised in those countries where the ratio is above 100%. After all, a decline in the gross enrolment ratio, say from 130 to 120, may not mean any decline in enrolments. It might, in fact, suggest an improvement in efficiency levels, as the difference between gross and net enrolment ratios narrows. This is also referred to as 'age-efficiency' (Psacharopoulos and Nguyen 1986).

16.3.4 Quality of Education

While there are several aspects to the quality of education, one standard indicator that is commonly used is the number of pupils per teacher (pupil—teacher ratio). In the absence of data on other indicators of quality, and despite a school of thought that argues that pupil—teacher ratio or class size is irrelevant to quality, the pupil/teacher ratio continues to serve as the single best measure of quality. This is particularly true in countries where such ratios are rather alarmingly high. Perhaps a threshold level (or a range) of the pupil/teacher ratio may be identified whereby a ratio higher than the threshold could indicate an erosion in the quality of education. Inversely, a pupil/teacher ratio much below the threshold may be indicative of economic inefficiency, or inefficiency in the utilisation of teaching manpower, though it may also reflect an increase in the quality of teaching.

Although the Republic of Korea and Bangladesh had similar pupil/teacher ratios of around 50:1 in 1975, the former was able gradually to reduce it to 31:1 by 1993. The ratio in Bangladesh, however, has consistently increased ever since 1985 when it was 47:1 to become (at 63:1) the highest in the region and one of the highest in the world in 1990 (Table 16.7). Surprisingly, there has been a simultaneous increase in gross and net enrolment ratios in primary education in Bangladesh, but at the same time Bangladesh seems to have been traded off quality for quantity. Indeed, the number of teachers in primary schools in Bangladesh has been declining over the years. With a growth rate in the number of teachers of 4.3% per year during 1980–85 as compared to -0.4% during 1985–89, the total number has been brought down from 191,000 in 1987 to 187,000 in 1989.

T 11 1/7	D 1 . 1			1 1
Table 16.7	Pupil–teacher	ratio in	primary	schools

	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Intensely adjusti	ng coun	tries									
Pakistan	40	36	39	39	41	41	41	41	_	_	_
South Korea	52	48	38	38	37	36	36	36	34	33	31
Thailand	28	23	19	20	20	19	18	22	20	20	_
Philippines	29	31*	31	31	32	33	33	33	33	34	33
Adjusting count	ries										
Bangladesh	51	54	47	48	48	58	60	63	_	_	_
China	29	27	25	24	24	23	22	22	22	22	22
Indonesia	29	32	25	24	24	24	23	23	23	23	_
Nepal	29	38	35	35	35	37	40	39	39	39	_
Non-adjusting c	ountries	ş.									
India	42	43	46	46	46	46	46	46	47	48	48
Malaysia	32	27	24	23	22	21	21	20	20	20	20

Source UNESCO-a (1995 and earlier years)

In other countries the changes—both increases and decreases in the pupil—teacher ratio—are not very significant; but many countries experienced falling teacher numbers or a decline in the growth of teacher numbers. A country that has experienced falling teacher numbers is Pakistan where the number of teachers declined by -3.42% per year between 1985 and 1987, compared to an annual rate of growth of 5.9% between 1980 and 1985. In Thailand the rate of growth was also negative (-3.03% between 1985 and 1988, compared to -0.67% between 1980 and 1985). Moreover, the proportion of underqualified and untrained teachers in the total number might have increased.

Internal efficiency at the primary level, in terms of repeaters and drop-outs, does not seem to have been affected by the adjustment and economic restructuring policies adopted by several Asian countries (Table 16.8). According to the coefficient of efficiency, ¹⁰ there has been a remarkable increase in Bangladesh, and a negligible increase in other countries. On the whole, in only few Asian countries did internal efficiency deteriorate in primary education. This may be largely due to policies such as automatic promotion or non-retention of students adopted by many countries.

^{*198]}

⁻Not available

Table 16.8 Internal efficiency in primary education

	1980	1990
Intensely adjusting countries		
Pakistan	_	0.74*
South Korea	0.97	1.00
Thailand	0.78	0.95
Philippines	0.82	0.84
Adjusting countries		
Bangladesh	0.34	0.68
China	_	0.86
Indonesia	0.72	0.78
Non-adjusting countries		
India	_	0.74
Sri Lanka	0.86	0.91
Malaysia	0.98	0.97

^{*} Includes secondary education

Source UNESCO-b (1991 and 1993)

16.3.5 Composition of Enrolments

During the adjustment process, living standards are adversely affected rendering economically and socially weaker sections of the population more vulnerable, thereby reducing their levels of participation in education. However, no detailed data are available on temporal changes in the socio-economic characteristics of students during the adjustment and economic restructuring phases to examine whether enrolments from poorer groups fell and, thereby whether or not equity in access to education was affected.

However, data on female enrolments and gender disparities are available. Gender disparities in educational levels of the adult population seem to have widened in three out of four intensely adjusting countries (Pakistan, the Republic of Korea and Philippines), and in two adjusting countries (Indonesia and Nepal) (Table 16.9). In Pakistan, the coefficient of discrimination (defined as the ratio between male and female enrolment ratios minus one) increased from 2.8 in 1980 to 3.3 in 1990. In Indonesia, the Philippines and the Republic of Korea it has also increased marginally. In contrast, in all of the three non-adjusting countries the evidence suggests the contrary; there was a significant improvement in Malaysia and a marginal improvement in India and Sri Lanka.

⁻ Not available

Table 16.9 Changes in mean years of schooling of adult (25+) population and gender discrimination

	1980				1990	1990					
	Total	Male	Female	Coefficient of discrimi- nation	Total	Male	Female	Coefficient of discrim- ination			
Intensely adjustin	ıg count	ries									
Pakistan	1.7	2.7	0.7	2.8571	1.9	3.0	0.7	3.2857			
South Korea	6.6	8.1	5.1	0.5882	8.8	11.0	6.7	0.6418			
Thailand	3.5	4.1	2.9	0.4138	3.8	4.3	3.3	0.3030			
Philippines	6.6	6.8	6.4	0.0625	7.4	7.8	7.0	0.1143			
Adjusting countr	ries										
Indonesia	3.1	3.9	2.3	0.6957	3.9	5.0	2.9	0.7241			
Nepal	1.8	2.7	0.9	2.0000	2.1	3.2	1.0	2.2000			
Non-adjusting co	ountries										
India	2.2	3.3	1.1	2.0000	2.4	3.5	1.2	1.9167			
Sri Lanka	5.5	6.2	4.8	0.2917	6.9	7.7	6.1	0.2623			
Malaysia	4.0	4.7	3.3	0.4242	5.3	5.6	5.0	0.1200			

Source Tilak (1994a)

At the same time, female enrolments as a proportion of total enrolments increased in all the countries. Also gender discrimination in enrolments, in terms of coefficients of discrimination, decreased in all countries at primary, secondary and higher levels of education (Table 16.10) with the exception of higher education in Sri Lanka (UNESCO-a; Tilak 1994a).

16.3.6 Effects on Other Policies

Adjustment policies are generally associated with 'conditionalities'. But rarely have structural adjustment policies included conditions on educational policies, although educational adjustment policies do contain such conditions (see Stevenson 1991, pp. 53–55). Educational loans/credits in Bangladesh contained conditions on quality, access and institution building. Conditions that are feared to have adverse effects on education include: (a) privatisation; and (b) measures relating to cost recovery, such as the introduction or enhancement of fees in schools. Both of these conditions result in significant changes in educational policies.

 Table 16.10
 Gender disparities in enrolment ratios in education: coefficients of
 discrimination

	1980	MRE
Intensely adjusting countries		
Pakistan		1990
Primary	0.889	0.900
Secondary	1.500	1.154
Higher	1.286	1.333
South Korea		1994
Primary	-0.018	0.000
Secondary	0.141	0.010
Higher	1.840	0.705
Philippines		1985
Primary	0.000	0.009
Secondary	-0.116	-0.015
Higher	-0.065	-0.284*
Thailand		1992
Primary	0.031	0.010
Secondary	=	0.027
Adjusting countries		- · · · · · ·
Bangladesh		1990
Primary	0.652	0.151
Secondary	1.889	0.923
Higher	4.750	4.250
China		1993
Primary	0.175	0.345
Secondary	0.460	0.177
Higher	2.000	1.304
Indonesia	2.000	1992
Primary	0.150	0.036
Secondary	0.522	0.231
Higher	1.600	0.743
Nepal	1.000	1992
Primary	1.346	0.494
Secondary	2.667	1.000
Higher	3.300	2.148**
Non-adjusting countries		
India		1993
Primary	0.463	0.242
Secondary	0.864	0.553
Higher	1.605	1.143***
Sri Lanka	2.000	1993
Primary	0.050	0.010
Secondary	-0.070	-0.090
Higher	0.292	0.420
11181101	0.2/2	0.120

(contiuned)

Table 16.10 (con	tiuned)
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	1980	MRE
Malaysia		1993
Primary	0.011	0.000
Secondary	0.087	-0.082
Higher	0.677	0.088***

Sources Based on UNESCO-a (1995 and earlier years), and Tilak (1994a)

Notes MRE: most recent estimates, around 1990-94, available in the Statistical Yearbook, 1995 (UNESCO-a)

Table 16.11 Enrolments in private schools as a percentage of total enrolments

	Primar	Primary				Secondary			
	1980	1985	1990	1992	1980	1985	1990	1992	
Intensely adjusting	countries								
South Korea	1	2	1	2	46	40	41	39	
Philippines	5	6	7	7	48	42	36	35	
Thailand	8	9	10	10	13	20	11	10	
Adjusting countrie	es .								
Bangladesh	15	11	15	14	95	93	90	90	
Indonesia	21	17	17	17	49	50	50	44	
Nepal	1	_	4	6	_	_	_	24	
Non-adjusting cou	ntries								
Sri Lanka	1	1	1	2	2	2	2	2	

Sources UNESCO-b (1991, 1993, 1995), Lockheed et al. (1991), and Tan and Mingat (1992, p. 18)

It is believed that economic restructuring contributes to the growth of private schools, as public expenditure is reduced. According to the available data on growth of enrolments in private schools (Table 16.11), the role of the private sector seems to be limited to primary education in several Asian countries. Private schools include privately managed, but not necessarily privately funded, schools. A large number of private schools are financed by the State. Hence, the distinction between private and public schools refers mainly to management. In Sri Lanka, a non-adjusting country, the share of private enrolments in primary and secondary education is negligible, and has remained rather constant at

^{*1993}

^{**1991}

^{***1990}

⁻ Not available

those low levels over the years. The corresponding figure for primary education in Nepal, however, was the same (1%), but increased four-fold between 1980 and 1990 and to 6% in 1992. In the Republic of Korea, the Philippines and Thailand, enrolments in private primary schools constitute a small percentage of total enrolments at primary level. However, in all of these three intensely adjusting countries, there has been an increase in the relative share of private schools. In Bangladesh and Indonesia, the other adjusting countries, the relative proportions are higher. Between 1985 and 1990–92, the more relevant period, the corresponding proportions have increased in Bangladesh, and remained stable in Indonesia.

With respect to secondary education, the share of enrolments in private institutions declined in several countries, except in Indonesia. Indonesia is exploring the possibility of enhancing the role of the private sector by having the government assist the private education system, which operates on a full cost recovery basis (Julius and Alicbusan 1989, p. 48). 12

In Thailand, the share of private enrolments in higher education increased from 5.1% in 1980 to 6.4% in 1985. It may be noted that, though the relative shares are small, the absolute numbers of enrolments in private schools may be sizeable, and there might have been significant growth in absolute enrolments. Furthermore, there could also have been growth of 'unrecognised' private schools, data on which might not be available. In Pakistan, after the lifting of the ban on private schools in the mid-1980s, private institutions were booming again (World Bank 1986, p. 34). As Tilak (1992) has argued, private enrolments might increase, but the increase would not balance the decrease in enrolments in public institutions, and as a result, social investments in education would be suboptimal.

Fees are the most important cost recovery measure. However, there is not much elaborate information available to determine whether fees were introduced or enhanced as part of or due to adjustment and economic restructuring programmes. But reforms in fees are generally consistent with the adjustment policies of the World Bank/IMF. The World Bank's loans to Bangladesh, for example, included covenants for cost recovery in the textbook programme (Julius and Alicbusan 1989, p. 48). China introduced an 'additional educational fee' in 1986, contributions from which were double the contribution from the earlier forms of fees (Ahmed et al. 1991). Though reforms in fees are largely expected to be

confined to higher education, primary and secondary education have also been subject to such reforms, and the contribution of fees in primary education—which is expected to be 'free'—may be rather substantial and ranges from 7.4% in Bangladesh, 7.1% in Indonesia, to 3.7% in Malaysia (Tan and Mingat 1992, p. 190; and on China, see also Burki and Yusuf 1992, p. 44). Furthermore, the contribution of fees to total (government and non-budgetary) expenditure on primary schools in China increased from 4.8% in the early 1980s (Tan and Mingat 1992, p. 190) to 24.6% in 1988 (that includes the revenue from the additional educational fee). There was an 83% increase in the total fee contributions in primary schools between 1986 and 1988 compared to a rate of growth of only 3.5% between 1986 and 1987. 13

Although a one-to-one relationship between fees and enrolments cannot be established from these figures, it is interesting to note that primary enrolments in China decreased at an annual rate of 2.34% between 1987 and 1988, and this was the highest negative annual rate of growth since 1975. Indeed, there was a consistent pattern of declining enrolments in primary education in China between 1975 and 1989 (from 151 to 123.7 million). Compared to a rate of growth of -1.75% during 1980–85, enrolments declined at a rate of growth of -1.92% during 1985–89 (UNESCO-a 1991). Similarly, the rate of growth of primary enrolments in Pakistan declined from 7.16% during 1980-85 to 2.7% during 1985–89.14 It should be noted that Pakistan's Sixth Five-Year Plan (1983-88) proposed 'user charges at all levels of education to recover a sizeable part of the costs of education through the introduction or enhancement of fees'. World Bank (1995, p. 120) expressed an opinion in favour of fees in primary education in India after the adjustment process began.

It may be argued that, in general, reduction in public subsidies in primary education and the introduction of cost-recovery measures, such as fees, will have a serious adverse effect on enrolments and on the goals of 'Education for All.'

16.4 Summary and Conclusions

In this chapter some fragmentary evidence that is readily available is presented to examine the effects of policies of adjustment and economic restructuring on education in Asian countries. It is difficult to isolate the effects of adjustment policies on education. Even elaborate country

studies could not properly assess the definitive effects of adjustment. As Stanley Fischer (1991, p. 526) observed, 'the evaluation of adjustment lending is not only extremely difficult, but also essential. None of the methods of evaluation are entirely satisfactory'. Here, an attempt has been made to examine the association between adjustment and the development of education. The effects identified can, at best, be treated as probable effects. While no causal relationship could be found, intense adjustment is generally associated with declines in a variety of indicators on educational development in Asian countries, similar to patterns observed in many other countries and regions. At the same time, it should also be noted that, while on the whole, on the average, while the education sector in Asian countries suffered during adjustment, it also seems to have been relatively well protected from the brutal effects of adjustment in several countries, compared to other developing countries in other regions that have undergone (or have been undergoing) the process of adjustment.

It does not mean that the effects of adjustment, however, have not been uniform on all countries of the Asian region, and several economies suffered severely. For the purpose at hand, the Asian countries on which data are available have been grouped into three categories: 'intensely adjusting', 'adjusting' and 'non-adjusting' countries; depending upon the duration of experience with the World Bank/IMF structural adjustment policies. It has been found that, during the adjustment processes, the proportion of GNP or of total government expenditure allocated to education declined in a majority of the adjusting (including intensely adjusting) countries, even though the corresponding figures also point to a decline in some of the non-adjusting countries. In a large number of the adjusting countries, the relative share of capital expenditure on education declined and that of current expenditure increased.

The allocation of resources to primary education seems to have been protected in most countries, except in Pakistan and Bangladesh. This is also true of non-adjusting countries, such as India and Malaysia, where the relative share of primary education actually increased. More importantly, the real expenditure per student in primary education increased significantly in all countries, with the exception of the Philippines and Nepal, during the first half of the 1980s (the only period for which these data are available). Expenditure per student in primary education as a ratio of GNP per capita also increased in all countries, while the corresponding proportion relating to higher education declined in

all countries, except in India. All this indicates that concerted efforts have been made by the adjusting as well as the non-adjusting countries in Asia to protect primary education—a remarkable achievement, when compared to other developing countries of the world (see Berstecher and Carr-Hill 1990). Adjusting countries could have protected primary education from bud- get cuts through social safety net programmes introduced as a part of adjustment policies in several countries, as in India during the 1990s.

However, enrolment ratios in primary education declined in Pakistan and Thailand, two intensely adjusting countries, where it was expected to increase. Although the gross enrolment ratio in Pakistan is deplorably low (44% in 1990), Bangladesh registered remarkable progress with increases not only in gross but also in net enrolment ratios, which went up from 54% in 1985 to 69% by the end of the 1980s. The number of pupils per teacher in Bangladesh, however, has increased to one of the highest levels in the region, suggesting that quality was traded off for quantitative expansion.

Internal efficiency also increased in all countries of the region. While gender discrimination has been found to have increased as far as the stock of the educated people is concerned, gender discrimination in enrolments has been coming down in all the countries.

Lastly, the relative share of the private sector, although limited at present, seems to be increasing. Fees appear to have been introduced even in primary schools in some countries and have had a negative effect on the demand for education and on total enrolments. Increases in the degree of privatisation and the introduction/increase of fees in education have been dominant, though not necessarily explicit, components of adjustment policies.

While, on the whole, the effects of adjustment on education seemed to be mixed, and no striking difference could be observed between adjusting/intensely adjusting and non-adjusting countries in short-term educational development trends in Asia, the tentative evidence from a few countries does suggest a strong association between adjusting policies and a deterioration in educational situations. Such a strong association is clearly discernible with respect to several important indicators of educational development, although not with respect to all. It would be useful to look into this association more closely in one or two selected countries to clearly understand the effects of adjustment on education. Though the problems that will be found and the associations observed in

a particular country may be unique, and may not be relevant for others, such country studies would be valuable to draw lessons, not only for the countries concerned, but also for others, on how to proceed and how not to proceed.

The experience of both the Asian (and even other) countries, as well as of international agencies with structural adjustment programmes is short (about 10 or 15 years). As 'adjustment' is a long on-going process, analysis of its effects over a short period of time would be premature and problematic, as quick results cannot be expected. More importantly, it is probable that the 'positive impacts are realized with a considerable time lag, while its adverse effects are immediate and highly visible... [but these programmes] may not be sustainable, economically and politically, if their immediate [negative] impacts are not mitigated' (Yanagihara 1989, pp. 319–321). Otherwise, programmes may not be taken to their logical conclusion. Further, gradual adjustment policies have been generally found to be successful in the East Asian economies, rather than a 'big bang' approach involving shocks and sudden simultaneous shifts in all policies in an attempt to move forward quickly (Agrawal et al. 1992, p. 182). The latter approach can, in fact, be counter-productive.

As a result of the growing research in the area and the interest of international organisations, such as UNICEF, the adverse effects of structural adjustment on social sectors are being monitored by both the donor agencies, such as the World Bank/IMF, and the countries concerned. Accordingly, structural adjustment programmes are being supplemented in a number of countries with sectoral adjustment and 'social safety nets' and other contingency programmes, so that the poor are not severely affected. Primary education is one of the important components of such programmes. In general, it is necessary that structural adjustment programmes and education sector adjustment programmes be integrated, and that the adjustment programmes include agreements on increasing public expenditure on education. Structural adjustment policies without such education sector adjustment programmes and social safety net programmes that guarantee increases in public expenditure on education are likely to cause serious adverse effects. Hence, 'it is important that structural adjustment agreements recognize the need for countries to commit new resources and reallocate existing resources toward investment sectors, such as basic education, which affect both social welfare and medium- and long- term economic growth' (Organisation for Economic Co-operation and Development 1992, p. 63).

Further, it is necessary for the success of the adjustment programmes that the primary responsibility for the conception of structural adjustment programmes lies with the national authorities that will implement and sustain the programme; imposed programmes may not work (Malan 1991, p. 539). The Republic of Korea is a good example of how structural adjustment programmes could succeed because it was undertaken on the basis of its own conviction. This will also help in reducing the political costs of adjustment programmes. With the level of expertise and competence available in the Asian countries one should expect that shifting the primary responsibility to the national governments is perfectly possible, compared to those regions that do not have indigenous expertise.

Of late, some flexibility in and softening of the World Bank/IMF's hardline views of precisely what an ideal package of structural adjustment reforms should consist of are visible (Ranis 1987, p. 97), though it may have to be further improved (Tilak 1992). Lastly, it should be realised by all—the lending institutions and the countries concerned—that education becomes an important input in the success of the adjustment programmes, and hence investment in education is necessary for the very success and sustenance of structural adjustment programmes.

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Notes

- See Tilak (1992) and Stewart (1994) for a recent summary of the effects of adjustment on education. Research in this area is rather limited. Important recent studies include several World Bank studies, particularly, Kakwani et al. (1990), Noss (1991) and Stevenson (1991). See also International Labour Conference (1992) and Jayarajah et al. (1996).
- 2. See Jones (1992) for a detailed discussion on the World Bank's lending policies for education and the policy conditionalities attached to the loans. See also Tilak (1994b).
- 3. In the context of studying the impact of the World Bank/IMF adjustment policies on standards of living, Kakwani et al. (1990) classified

eighty-six developing countries of the world into five categories, based on their adoption of adjustment policies: (a) 'intensely adjusting' countries that have relatively long periods of experience with adjustment policies and processes, having taken three or more structural adjustment loans by 1989, having started on or before 1985 (twenty-five countries); (b) 'pre-1986 adjusting' countries that have received less than three structural adjustment loans, but were included in the programme before 1985 (eleven countries), (c) 'post-1985 adjusting countries' that received adjustment loans between 1986-88 (nineteen countries); (d) 'non-adjusting countries' (of type I) that did not need IMF/World Bank types of adjustment measures, and which had an increase in average annual growth in GDP per capita during 1980–87 (seventeen countries); and (e) 'non-adjusting countries' (of type II) that were 'potential candidates' for World Bank adjustment loans with a decline in the average annual growth of GDP per capita during 1980-87, and were 'probably the closest one can get to a counter-factual' (fourteen countries).

- 4. For a brief account of trends in growth in education, including expenditures in education in particular in Sri Lanka, see Tilak (1996b).
- 5. Traditionally, international assistance to education used to concentrate on capital investment items. But, of late, items of current expenditure (e.g., provision of textbooks and teacher training) have received priority.
- 6. The share of primary education seems to have declined in India (down to 38.5% in 1992 from much above 40% in the 1980s) only after adjustment policies were adopted.
- 7. The 'apparent intake level' is defined as the number of new entrants in Grade I, regardless of age, and expressed as a percentage of the population of official admission age to first grade. See UNESCO-a (1991, p. 102).
- 8. The total gross enrolment ratio at all levels of education in Thailand (age group 4–23) also declined from 45% in 1980 to 43% in 1988.
- 9. In Indonesia, the urban population living below the poverty line increased from 9.3 million individuals in 1984 to 9.7 million in 1987. Further, the adverse impact of adjustment included an increase in open unemployment and a fall in earning levels (see Azis 1990 and Ahmed et al. 1991, p. 377). In India, the level of employment was estimated to have declined and unemployment to have increased as a result of the structural adjustment policies adopted (see Mundle 1992).
- 10. The 'coefficient of efficiency' (at the primary level) is obtained through the 'reconstructed cohort method'. It is the ratio between the normative number of pupil years that it would have taken the graduates to complete the cycle of education, had there been no repetition or drop-out, and the number of pupil years actually spent by the cohort (UNESCO-b 1991, p.

- 103). The value of the coefficient varies between zero (maximum inefficiency) and one (maximum efficiency).
- 11. Rose (1994) concentrates on the effects of adjustment programmes on female education. Based on the evidence on a large number of developing countries, she argues that 'there has been a slowdown in the increase in female enrolment rates at the combined first and second level in countries that have agreed to World Bank adjustment operations' (1994, p. 1940).
- 12. It is not clear regarding the nature and rationale of government assistance, if these schools run on full cost recovery basis.
- 13. These are the author's calculations based on Ahmed et al. (1991, p. 203).
- 14. In general, declining enrolments or a decline in the growth of enrolments in primary education may not be inexplicable in countries where enrolment ratios are very high (e.g., 90% or above), as the children to be covered would be small in number. Also it may be due, inter alia, to declining population growth of the relative age group. Declining growth in enrolments in Pakistan, however, should be a matter of concern since Pakistan has low gross enrolment ratios and a high rate of population growth.

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CHAPTER 17

Reforming Education in India in the Neo-Liberal Era

Education system in India has emerged as one of the largest systems in the world in terms of number of students and number of schools. There are today about 280 million students enrolled in nearly 1.4 million schools, colleges and universities in the country, in which there are nearly seven million teachers. The number of students in India outnumbers the total population of several countries.

Education in India presents a saga of both notable achievements and significant failures. In recent years, government has taken quite a few initiatives for reforming education. While the achievements are impressive, the failures are also shocking. The chapter presents a quick review of some of the major policy reforms and developments in education in India over the last couple of decades. It elaborates an array of typical strategies and approaches that the government of India has adopted, with analysis of their impact upon education development. Finally it summarises the achievements and the gaps and concludes with highlighting future prospects.

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17.1 Context of the Reforms

After independence, India has adopted a strategy of socialistic welfare state for development policies, development planning and mixed economy. India also recognised the importance of education and resolved to provide universal elementary education. A few important initiatives were taken by the government. In the first five-year plan, a reasonably high allocation of resources was made to education sector.

17.1.1 Earlier Reform Initiatives

The 1950 and 1960s were a golden period for education with generous allocation of budgetary resources to education that were marked by overall enthusiasm created by the newly acquired independence. Development planning was adopted as a strategy and several new institutions were set up at all levels of education, including in higher education and higher technical education. Enrolments at every level of education increased at impressive rates. The period coincided with the human investment revolution in economic thought (Schultz 1961) that recognised the relationship between education and economic growth. The first National Policy on Education 1968 was formulated, following the recommendations of the Education Commission (1964/1966) that emphasised the role of education in national development. The decade of 1970s was a period of setbacks with war, inflation, graduate unemployment and tight budgetary conditions. The growth in education suffered severely. Budgetary resources became scarce. The 1980s marked a slow and steady re-emergence of faith in education and consequent hopes for a smooth flow of public funds to education. The National Policy on Education 1986 was formulated and several new schemes were launched including the 'operation blackboard' scheme that ensured every primary school in the country to have a minimum level of basic infrastructure, including teachers; setting up of District Institutes of Education and Training for improving training facilities for teachers; and setting up of Academic Staff Colleges in universities to provide avenues for professional development of college teachers. Several initiatives were also made to improve the access to education in general and to the meritorious students among the marginalised sections of the society (e.g., Navodaya Vidyalayas) and to raise the quality of education.

The 1990s heralded an era of budget containment, with the introduction of structural adjustment policies in the beginning of the 1990s. Budgets for education suffered severely during adjustment

period. The expenditure of the union and state governments on education has declined fast. Quality of education was traded off for quantitative expansion, as new institutions were opened with declining allocations being spread thinly; and equity was also sacrificed, as the budget allocations for scholarships and welfare programmes waned fast. Private institutions began to increase in number at the cost of growth of public institutions. The budgetary squeeze on education has contributed specifically to a few major developments in education. Important among them include inflow of external aid for education, privatisation of education and cost recovery. Introduction of economic reform policies included introduction of policies of globalisation. Education policy is influenced by domestic and as well international developments. Though inflow of external aid for primary education that began in the early 1990s almost ceased within 10-15 years, some of the other developments have taken strong roots in the system and seem to continue and rather dominate the education policy in the following decades.

17.1.2 Spectacular Quantitative Progress

It may be pertinent to start with noting the somewhat spectacular quantitative progress India made in education during the last two decades. India has made rapid stride in improving the literacy situation. Nearly three-fourths of the population were literate in 2011, compared to about 50% two decades ago. Even among the females, the rate of literacy was 66% in 2011, the gender gap falling to 16% points from 25 points in 1991. Literacy among youth has improved very impressively to 91% in 2009–2010 from 60% in 1983.

In elementary education—primary plus upper primary education—which constitutes the compulsory education phase, as defined in the Constitution, there are nearly 200 million students, with a gross enrolment ratio above 100%. Fifty-two percent of the population of the age group 14–17 are enrolled in secondary (and higher secondary) schools. In all, as per the gross enrolment ratio, 87% of the children of the age group 6–17 are in schools in 2010–2011. In case of higher education, there are about 600 universities and about 40,000 colleges, with an enrolment of above 20 million. The 20 million constitutes 15% gross enrolment ratio. In all, the mean years of schooling of the working population (15 years old and above) increased from 4.2 years in 2000 to 5.1 years in 2010 (Table 17.1). These are quite impressive quantitative achievements for a developing country.

Table 17.1 Progress in education in India

Literacy		

	Male	Female	All	Gender gap
1991	64.1	39.3	52.2	24.8
2001	75.3	53.7	64.8	21.6
2011	82.1	65.5	74.0	16.7

Progress in enrolments and enrolment ratios in education

	Enrolments (n	million)	Gross enrolment ratio (%)		
	1999–2000	2010–2011	1999–2000	2010–2011	
Elementary	155.9	197.4	81.0	102.5	
Primary	113.6	135.3	94.9	115.5 (98.0)	
Upper primary	42.3	62.1	57.8	81.5 (58.0)	
All secondary	28.0	51.2	30.0	52.1	
Secondary	18.6	31.8		65.0	
Higher secondary	9.5	19.4		39.3	
Higher	7.7	21.8*	8.1	15.2*	
Note () refers to net	enrolment rati	OS			

Number of institutions (in thousands)

	1999–2000	2010–2011
Elementary	853.7	1196.1
Primary	651.4	748.5
Upper primary	202.3	447.6
All secondary	117.9	200.1
Secondary	83.3	128.3
Higher secondary	34.5	71.8
Higher	10.2	46.43*

Teachers in schools

	Teachers (milli	on)	Pupil–teacher ratio		
	1999–2000	2010–2011	1999–2000	2010–2011	
Elementary	3.2	4.0	79		
Primary	1.9	2.1	42	42	
Upper primary	1.3	1.9	37	34	
All secondary	1.7	2.5	32		
Secondary	1.0	1.2	30	30	

(continued)

Table 17.1 ((continued)
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Teachers in schools				
	Teachers (milli	on)	Pupil–teacher	ratio
	1999–2000	2010–2011	1999–2000	2010–2011
Higher secondary Higher	0.7 0.4	1.3 0.7*	34 22	39 24

^{*}Figures exclude open distance learning

Source Selected Educational Statistics, Statistics on School Education and Annual Report (Ministry of Human Resource Development); Annual Report (University Grants Commission). Relevant years

Apart from universal elementary education, India has set targets in recent years for universal secondary education and a gross enrolment ratio of 30% in higher education by 2020. It is only during the Eleventh five-year plan period, major expansion of higher education has been attempted. The number of central universities was doubled and so are the numbers of high quality of institutions of technical education, viz., Indian Institutes of Management, Indian Institutes of Technology, Indian Institutes of Information Technology and similar institutions (Table 17.2).

There has been a substantial increase in the numbers of not only institutions set up by the union government, but also institutions set up by state governments and private institutions. The total number of institutions of higher education increased by 58% from 29,384 at the beginning of the Eleventh five-year plan period to 46,430 by the end of the period.

The principal objective of the Eleventh and the Twelfth five-year plans (2002–2007 and 2007–2012, respectively) has been inclusive and faster growth. By strengthening the vast education system, India aims at building up a knowledge society and transforming itself into an advanced economy.

17.1.3 Persistent Daunting Challenges

However, it faces daunting challenges. One-fourth of the population of the country is illiterate. With 287 million illiterates in 2011, India is still the largest home of illiterates in the world. Elementary education is not

Table 17.2	Growth	in	central	government	institutions	of	higher	education
during the El	eventh fiv	ve-y	ear plan	(2007-2012)			

	2006-2007	2011-2012	Increase
Central universities	19	40	21
Indian Institutes of Technology	7	15	8
Indian Institutes of Management	6	13	7
Indian Institutes of Science Education & Research	2	5	3
Schools of Planning and Architecture	1	3	2
National Institutes of Technology	20	30	10
Other technical institutes	15	15	0
Other universities/institutions	17	31	14

Source Planning Commission (2012)

completely universal, in terms of the three dimensions, viz., enrolment, completion and attainment of a minimum level of learning. One can identify at least three persistent problems: (a) high rates of dropout, (b) high degree of inequalities in participation in schooling, and (c) low levels of learning. Special measures initiated in recent years have resulted in a significant reduction in dropout rates; yet they continue to be high (DISE 2011). Hardly 50% of the eligible children are in secondary schools. The enrolment ratio in higher education is far from the world average, not to speak of it being far below the ratio in the advanced countries. The quality of education at all levels is far from satisfactory; and issues relating to equity in access to education still pose serious challenges. The mean years of schooling of the adult population are hardly five years.

An equally, if not more, serious problem refers to the extent of inequalities in education. Although there has been a significant reduction in inequalities in education between different sections of the population, there remains the persistence of a high degree of inequalities. Inequalities in education include inequalities between lower caste groups (Scheduled Castes/Tribes [SCs/STs] and Other Backward Castes [OBCs]) and higher caste groups, between backward minority communities and other religious communities, between males and females, between the rich and the poor, and between regions—rural-urban and interstate inequalities. While there has been a remarkable improvement in gender parity and some reduction in inequalities by caste groups, rural-urban inequalities are quite marked, and inequalities between the poorest and the richest strata of the society are most striking. Another very important concern of all has been the levels of learning in elementary education. According to recent reports (Pratham Foundation 2012, 2013), the levels of learning of children in primary and upper primary schools are not only very low but more importantly declining over the years.

Likewise, higher education in India is engulfed with several problems, including low levels of access, stagnant and declining quality and standards and widening inequalities. The system is also characterised with poor governance, high levels of inefficiency in management, unemployment of the graduates and non-availability of sufficient funds. The structural adjustment reform policies introduced in the beginning of the 1990s had a brutal impact on higher education, in terms of severe cuts in public expenditure and introduction of cost recovery measures (Tilak 1996). The last two decades also witnessed a period of rapid growth of private education. It is widely recognised that major reforms are long over due.

The mean years of schooling of the adult population, a summary statistic of education development, are hardly five years, compared to the average of the developing countries which is 7; the corresponding figure is above 7 in Brazil and above 8 in China.

17.2 CHANGING STRATEGIES AND APPROACHES

The several attempts to reform education scene have to be seen against the backdrop of a few major trends in the strategies and approaches being adopted in recent years. There has been a significant shift in the development paradigm itself. It shifted from one based on welfare state to a neo-liberal one. The policies also resulted in weakening of the fiscal capacity of the government. All this has had its own influence on educational policies and strategies. The global campaign of Education For All also impacted the policies of the government.

17.2.1 National Programmes

Though the *Constitution of India* (1950) has placed a large part of education under the "state list", the 42nd Constitutional Amendment in 1976 has brought education into concurrent list. However, both before the amendment and after, the union government has been active in the area of education and has launched a few major national programmes.

Elementary Education: SSA

Much before the Jomtien Conference (1990) and the adoption of the World Declaration on Education for All at the same conference, the Government of India had resolved in the Constitution of India in 1950:

The State shall endeavour to provide within a period of 10 years from the commencement of the Constitution for free and compulsory education for all children until they complete the age of 14 years. (Article 45)

And as the goal has not been reached, the government repeated its resolve to universalise elementary education as early as possible, and also to increase the public funding of education to at least 6% of national income, so that education, elementary education in particular, does not suffer from paucity of financial resources. The National Policy on Education 1968 and the National Policy on Education 1986 have laid special emphasis on the fulfilment of the Constitutional Directive of universalisation of elementary education. Five-year plans repeatedly promised to take the nation towards achieving this goal. Elementary education was also included in the National Programme of Minimum Needs in the five-year plans, and this inclusion has significant implications for allocation of resources. This was expected to ensure favourable treatment in the allocation of resources and to protect it from reallocation of approved outlays away from elementary education. Education is also made an important component of the National Human Development Initiative in the union budget 1999–2000.

Following the end of the external assistance to primary education, in 2002 the government has launched a national programme of education for all called *Sarva Shiksha Abhiyan* (SSA) that promised to work on a mission mode to reach the constitutional goal. SSA was conceptualised as a comprehensive and integrated flagship programme. The programme implies massive provision of financial resources by the union and state governments for overall improvement of the schools, including for the construction of school buildings, provision of infrastructure facilities, sufficient number of teachers and improvement of management and delivery structures.

According to the umbrella scheme of SSA, universalisation of elementary education with respect to enrolment and retention was to be achieved by 2010. Quite a few components of SSA aim at improving access, quality and equity in elementary education. Of the many successes, according

to the government, the increase in the number of schools and class-rooms and rapid fall in the number of out of school children are attributed mainly to the ongoing SSA. However, not even a single target set by the SSA (listed in the Box 1) has been reached so far. Moreover, the SSA seems to have no significant effect on the quality of education and the school outcomes in terms of achievement levels of children. Alternative schools and non-formal education centres along with *para* teachers were formalised by the SSA and they are believed to have caused serious adverse effect on the quality of education. Further, SSA, like the externally funded project, the DPEP (Tilak 2008), created parallel structures sidelining existing government structures and systems in administration, possibly weakening the overall government administration.

Box 1: Targets of the Sarva Shiksha Abhiyan (SSA) (Target Dates as Originally Set)

- Enrolment of all children in the 6–14 age group in school/education guarantee scheme centres/bridge courses by 2003
- All children in the 6–14 age group complete 5 years of primary education by 2007
- All children in the 6–14 age group complete 8 years of schooling by 2010
- Focus on elementary education of satisfactory quality with emphasis on education for life
- Bridging all gender and social category gaps at primary education level by 2007 and at elementary education level by 2010
- Universal retention of children until they complete upper primary education by 2010

Source: Annual Report 2002–2003 (Ministry of Human Resource Development, Department of Education, Government of India)

Box 2: Midday Meals: Objectives

- To encourage enrolment and retention of children in schools until they complete 8 years of schooling
- To improve the nutritional status of children in grades I-VIII
- To encourage poor children belonging to disadvantaged sections to attend school regularly and help them concentrate on classroom activities

Source: *Annual Report* (Ministry of Human Resource Development)

Much before the launching of the SSA, a national programme of midday meals was launched in 1995 with the twin objectives of increasing enrolment in schools and improving nutritional status of school-going children. The programme covers all children enrolled in primary and upper primary levels of education (Box 2). Very positive and significant effects of the noon meals programme on participation of children in schooling were reported (Goyal and Drèze 2003). SSA and midday meals account for nearly the total union government budget for elementary education. In addition to SSA, a few other complementary schemes are also launched (see Tilak 2009a).

Secondary Education: RMSA

Secondary education was neglected in India for a long time. Public attention concentrated either on elementary education or on higher education and the link between the two, secondary education, was ignored. It is only recently that efforts are initiated to correct this anomaly, as it was realised that "it is unlikely that the country will significantly succeed in reducing poverty and creating a more equitable society without adequately focusing on improving secondary education" (Planning Commission 2012). Thus, partly recognising the need for expansion of secondary education for development and partly because of the pressures for expansion of secondary education are being felt with rapid progress in elementary education, during the Eleventh five-year plan period the government has launched a programme of expansion of secondary education, the *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA). The scheme is envisioned around four core objectives, viz., universal access, equality and

social justice, relevance to development context and structural and curricular aspects. The scheme envisages that no child is deprived of secondary education of satisfactory quality due to gender, socio-economic disability and other barriers. It also promises to improve quality of secondary education. The gross enrolment ratio in secondary education was 65% in lower secondary (grades IX and X) and 39% in higher secondary (grades XI and XII) in 2010–2011. Funded on the pattern of SSA—75% from the union government and 25% from the state government—the RMSA aims to provide universal access to quality secondary education (Box 3).

Box 3: Rashtriya Madhyamik Shiksha Abihyan (RMSA)

Targets in the Twelfth Five-Year Plan (2012–2017)

- Universal access to secondary education, gross enrolment ratio of 100%
- Enhancing retention of children at secondary level, so as to reach 100% retention by 2020
- Achieving the target of 75% gross enrolment ratio at higher secondary level by 2017
- Establishment of a secondary school within a radius of 5–7 km
- Provision of necessary physical facilities, teaching and non-teaching staff for every secondary school

Source: The 12th Five-Year Plan

Another important component of secondary education that was also ignored for long refers to vocational and technical education, though its importance was highlighted by several committees and commissions ever since independence, e.g., the Mudaliar Commission (1952). The *National Policy on Education 1968* and the National Policy on Education 1986 aimed at providing vocational and technical education to 10–25% of the students in higher secondary education. But little progress has been made in this regard. While some attempts are made to improve vocational and technical education provided in polytechnics and industrial training institutes during recent years, partly with the assistance from the World Bank, the government has launched a major programme

of skill development aiming at covering about 500 million youth in the Twelfth five-year plan period. While it may be welcomed for several reasons, there is an important problem. The massive programme is being planned not as a part of secondary or higher education, but effectively as another tier in the education system that can facilitate segregation of the students into vocational education and higher education, an approach that did not work in the past.

17.2.2 Legislative Measures

In recent years, government concentrated on strengthening legislative framework for the development of education. It has initiated quite a few legislative reforms both in school education and higher education. As the provisions in the *Constitution of India* (1950) and the compulsory education acts that existed in several states had not been very effective, a new act to ensure free and compulsory education was made. Similarly, to correct several inadequacies in the governance in higher education, a series of legislative proposals have been made.

The Right to Education Act

One of the landmark developments in elementary education includes the amendment of the Constitution of India in 2002 that explicitly recognises education as a fundamental right of every child in India. The amendment makes education a justiceable right. To operationalise the amendment, the Free and Compulsory Education Act was made in 2009, familiarly known as the Right to Education Act 2009 (RTE). Among the several initiatives taken by the union government, this is perhaps the most important one. The Act provides for free and compulsory education of satisfactory quality for all children in the age group of 6-14 years as a fundamental right. Free education means no child is required to pay any kind of fees or charges to the school. In addition, children are provided with free textbooks, stationery and uniforms. Special incentives including financial assistance are provided to girls up to grade X. The Act promises improved access to schooling facilities, by setting up schools in every neighbourhood. Besides construction of new schools and classrooms, the Act also provides for adequate infrastructure and adequate number of trained teachers (Box 4). The Act also provides for admission of students belonging to economically weaker sections in private schools to the extent of at least 25%. The RTE confers a permanent right to free and compulsory education of reasonable quality on the children of India. It also implies a long-term commitment to ensure that education is provided as a fundamental right to all children. The *Act* came into force with effect from 1 April 2010, and most states have developed state-specific rules for the implementation of the *Act*. It is too early to make an assessment of its impact and effectiveness. With the *Act*, one could expect that quality education will be available to all truly free.

Box 4: Salient Features of the Right to Education Act 2009

- Free education: no fees, no capitation fee
- All schools are to be recognised schools only
- Admission: no entrance test/screening processes; no detention; no punishment
- Provision of a school in every neighbourhood
- School infrastructure: all-weather school buildings; one classroom per teacher; library; head teacher office room, toilets; drinking water; barrier-free access; playground, fencing, boundary walls
- Teachers: Pupil-teacher ratio, trained teachers; no private coaching

Source: Free and Compulsory Education Act 2009. Government of India

However, it is clear that the RTE or even the SSA does not seem to be paying sufficient attention to the quality of education; at best they focus on provision of some inputs that can influence quality of education. Other problems relating to the RTE are the *Act* does not guarantee equitable quality of education; it promotes private education and with devolution of responsibilities to local levels of government, the role of the union and state governments has been diluted (Tilak 2010c).

The several parameters of the SSA are upgraded to equal the RTE norms, and additional resources are allocated to elementary education in the Twelfth five-year plan to implement the revised SSA. It is expected that by the middle of the Twelfth Plan a new modality of implementation of the RTE would replace the SSA, which was originally designed as a time-bound project only.

Bills on Higher Education

The higher education system has been characterised with a big policy vacuum for a long period (see Tilak 2010b). It is only towards the end of the Eleventh five-year plan period, the government set out for reforms in higher education; actually there has been a hasty rush for reforms, and a big paradigm shift in education policies could be witnessed. Most strikingly, this has been a period of speedy reforms intended to be brought forth through a series of legislative measures. There are currently half dozen major bills introduced in the national Parliament by the Ministry of Human Resource Development, relating to reforms in higher education and they are at various stages: some are approved by the Union Cabinet; some have gone to the Parliament Standing Committees; some have been passed by either house of the Parliament; and all require final approval by the Parliament. The several bills are: (i) The Foreign Educational Institutions (Regulation of Entry and Operations) Bill, 2010; (ii) The Prohibition of Unfair Practices in Technical Educational Institutions, Medical Educational Institutions and University Bill, 2010; (iii) The Educational Tribunals Bill, 2010; (iv) The National Accreditation Regulatory Authority for Higher Educational Institutions Bill, 2010; (v) The Universities for Innovation Bill, 2010; (vi) The National Commission For Higher Education and Research (NCHER) Bill, 2010; and (vii) The Research and Innovation Universities Bill, 2012. There may be many more bills in the pipeline.

The overall objective of these bills is rapid growth of higher education to reach higher gross enrolment ratio and to improve quality and standards in higher education. Ostensibly, the bills aim at checking corrupt practices, setting up tribunals for speedy redressal of grievances, ensuring accreditation of the institutions, promotion of autonomy, improvement in governance, opening of avenues for modern forms of internationalisation and improvement in overall quality. There is a bill that aims at setting up high-quality research universities or world class universities.

These bills together constitute a package of reforms that the government plans to make for the development of higher education (see Tilak 2010a). There are a few underlying assumptions and features that are common among all these bills. First, they reflect a new understanding of the government on the role of the State in the development of higher education. Traditionally the State has been an active player—in policymaking, planning and provision of higher education in India, like in most other countries of the world. The emerging assumption of

the present time is that the State can minimise its role in higher education, not because of lack of funds but because of the emerging conviction that higher education is not a sector that the government should be bothered about. Government can adopt a policy of laissez-faireism; and at best, it can confine its role to that of an enabler, which provides a loose framework of rules and regulations for those who wish to enter into the business of education. In a sense, the bills assume that higher education can be left to a large extent to the markets. Secondly, formulated in the neo-liberal environment, all the bills assume, either explicitly or implicitly, and even encourage, commoditisation of higher education and consequently privatisation and even commercialisation of higher education. Corporate sector is given an enhanced role in higher education. Thirdly, several bills perceive that higher education is to serve more global needs than to serve national social and economic purposes. The bills aim at making India a global education hub that serves global markets. Fourthly, the underlying assumption of all the bills is that the existing institutions cannot be reformed and they need to be replaced by new structures; or that even if they are restructured and revitalised, they will not serve the neo-liberal goals, as the existing ones were set up in a period characterised by an altogether different development paradigm.

Hence, it was assumed that better altogether new organisations are established in place of, or in addition to, the existing ones. Fifthly, while some of the bills (like the bill that prohibits unfair practices and the one meant to set up educational tribunals) are ostensibly very wellintended, they mark only a very small step in right direction and they are highly inadequate to solve the problems and innumerable unfair and corrupt practices that the Indian higher education system is inflicted with. Further, the several bills also highlight the lack of cohesion, if not presence of friction, between not only the union government and the state governments but also between several ministries/departments involved in higher education at the central level, as the coverage of some of the bills excludes institutions of higher education run by different ministries/ departments, like health and agriculture and even sub-departments of the Department of Education, like teacher education; and some ministries/departments have already proposed parallel legislations. Lastly, the several bills, together, are characterised with absence of a long-term perspective and a holistic vision of development of the society and the role of education therein.

Every bill looks like a quick fix solution—poor and inadequate—to a specific problem. For example, it is well noted that the present size of the system of higher education is highly inadequate and that the government may not have sufficient resources for large-scale expansion. The Foreign Educational Institutions Bill is viewed as a solution to this, the assumption being foreign universities will come to India and make huge foreign direct investment in higher education, an untenable assumption. The problem of quality of education and lack of autonomy is to be tackled with the setting up of innovation universities as proposed in the Research and Innovation Universities Bill. It is presumed that autonomy or no autonomy, it does not matter to the existing universities. The problem of inadequate and ineffective system of regulation by the existence of a large number of regulating bodies is to be tackled by the bill that proposes to set up a National Commission for Higher Education and Research that will replace some of the regulating bodies in higher education. That there are several unfair and corrupt practices prevalent in our institutions of higher education is acknowledged with the bill that prohibits unfair practices. The problem that our higher education system is vexed with numerous legal conflicts, over burdening the judicial system, is addressed by the Educational Tribunals Bill. The Bill for National Accreditation Authority is to ensure improved methods of accreditation and assessment and to make accreditation mandatory for all. The Educational Tribunal Bill and the National Accreditation Authority Bill are also expected to meet the requirements of the World Trade Organisation (WTO) and the General Agreement on Trade and Services (GATS) that insists on setting up methods of transparency and grievance redressal mechanisms before higher education is fully "committed". Thus, the several bills view higher education in small fragments, and not as a holistic process. Further, the solutions sought in the form of the bills are inadequate in some cases as they are not necessarily based on sound thinking. It is also noticeable that no effort relates one nill to the

Education is a "concurrent" subject according to the *Constitution of India*: both the union government and state governments have responsibility with respect to policymaking, planning and funding of education. In recent years, the union government has been more active than state governments in taking policy initiatives in education, though state governments have joined the consultation process with respect to some of these initiatives.

17.2.3 Reforms in Funding and Cost Sharing

Public funding for education has been under strain in India since the beginning of the 1990s. While during the 1990s, there had been severe cuts in the total public expenditure, the situation did not improve much in the following decades. Though in absolute terms the expenditure at current prices has increased remarkably, in real terms per student expenditure has declined. More importantly, the relative priority accorded to education registered a sharp decline. This is clear when one examines public expenditure on education in terms of percentage of national income or of total government expenditure. As a proportion of gross domestic product (GDP), it has declined from 4.3% in 2000-2001 to 3.8% in 2010–2011 (Fig. 17.1). It is important to note that the government has a goal of allocating 6% of GDP to education and during the last 10 years, the government has repeated its promise. Even as a proportion of the total government expenditure, the share of education declined from 14.6% in 1999-2000 to 13.6% in 2008-2009 and as per tentative (budget) estimates, it is likely to decline further to 11.7% in 2011-2011 (Fig. 17.2).

As a corollary to the declining public expenditure, there has been an increased emphasis on direct measures of cost recovery in education. In the beginning of the 1990s two government-appointed committees

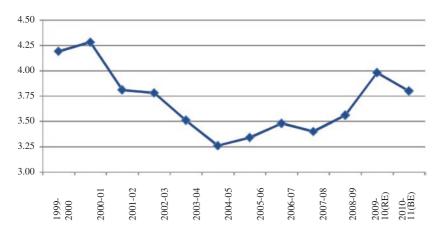


Fig. 17.1 Public expenditure on education as % of GDP (*Source* Ministry of Human Resource Development)

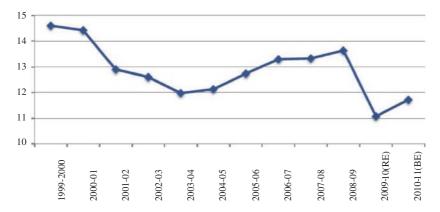


Fig. 17.2 Public expenditure on education as % of total government expenditure (*Source* Ministry of Human Resource Development)

(UGC 1993; AICTE 1994) have recommended increase in cost recovery through student fees and other sources to the level of about 20% of the total expenditure on higher education. The committees have also recommended restructuring of the education loan scheme. Ever since, these two proposals have been seriously acted upon by the government and the universities. Institutions, accordingly, have increased student fees erratically and randomly by several times during the last 15–20 years, many generating fee revenue accounting for much more than 20% of their budgets. Government approaches seem to encourage indiscriminate and steep increases in fees in education. In technical education, the fee increases have been very steep even in public institutions. For example, the fee in the Indian Institutes of Technology has been increased in 2013 from Rs. 50,000 to Rs. 90,000 per year—a steep 80% increase within 1 year. There was a recommendation by a committee to raise it to Rs. 250,000 per annum.

Student loan programme has been thoroughly revamped and it is now the responsibility of commercial banks. Almost all commercial banks nowadays offer educational loans with varying terms of conditions including interest rates and repayment periods. The role of the government is confined to offering interest subsidy for the study period to students from lower socio-economic status. The banks do not bother about merit or the need of the students. While the numbers of student borrowers are increasing, they are still small, compared to the total enrolments

in higher education, and the problem of access to loans for the weaker sections is still a major problem (Tilak 2009b).

The trend towards heavy reliance on cost recovery measures raises questions on their regressive effects on the demand for education of the weaker sections, neglecting non-revenue generating discipline of study and trading off educational considerations for financial ones by the institutions. In the absence of effective student aid mechanism on the one hand and low levels of living on the other, and given the overall low enrolment rates and lower enrolment rates among the lower socio-economic strata, it may be neither desirable nor feasible to aim at substantial cost recovery through increase in fees, unless welfare considerations are sacrificed. Scholarships or loans rarely counterbalance effectively the regressive effects of increase in fees.

17.2.4 Growth of Private Institutions

Though for a long time, it was strongly felt in India, like in many other countries, that education should be mostly in the State sector due to (a) "public good" nature of education, (b) externalities (and dynamic externalities) associated with education, (c) market inefficiencies, and (d) the State's intentions of expanding access to education to all, these aspects are ignored presently in the context of the global wave of privatisation, liberalisation and globalisation; and privatisation of education has been strongly advocated in recent years in India. Such an approach is not just confined to higher education. Even primary education, which was promised to be provided "free" by the State, according to the Constitution, is not exempted from attempts relating to privatisation. Privatisation became the buzzword and the public policies seem to be encouraging privatisation of all types of education at all levels.

There has been very rapid growth in private institutions at all levels of education during the last couple of decades. In 1993–1994, private schools (that do not receive any direct state funds) were small in number; they accounted for hardly 5% at primary level. The figure increased to 7.8% by 2005–2006. Similarly, private upper primary schools increased in proportion from 11 to 22% during the same period. Since primary and upper primary levels together constitute the compulsory phase of free and elementary education, these numbers are small and there was no significant growth. As the policy discussions on legislation on free and compulsory education took momentum, there was no further growth in them in

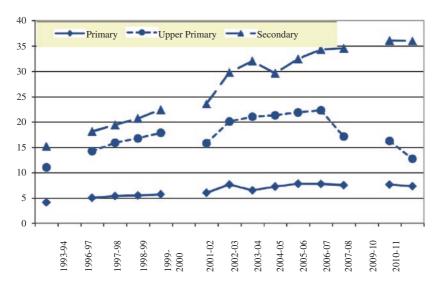


Fig. 17.3 Growth of private schools in India.

Data for some intermittent years not available.

(Source Selected Educational Statistics and Statistics on School Education. Ministry of Human Resource Development. Various years)

the later years; in fact there was a marginal decline in proportions, though there was indeed a marginal increase in the absolute numbers. But in secondary and higher education, the growth has been very high. Private secondary schools doubled in proportion, increasing from 15% of all secondary schools in 1993–1994 to 36% by 2010–2011 (Fig. 17.3).

The situation is more phenomenal in higher education. There has been not only a higher rate of growth in private universities and colleges than government institutions; the relative size of the private sector today excels that of the public sector, accounting for a majority in the number of institutions and in student enrolments (Table 17.3). Particularly the growth of private engineering and medical colleges has been very high. These institutions have actually displaced public institutions, as they account for about 90% of all the institutions. The tuition fees in these colleges are several times higher than in government colleges (Carnoy et al. 2013). On the whole, the growth of private education has been fastest in India during the last two decades. It seems that the higher education system in India is more privatised than most other systems of the world, with very few exceptions.

Table 17.3 Growth in private and public higher education during the Eleventh-five year plan (2006–2007 to 2011–2012)

	2006-2007		2011–201		
	No	% share	No	% share	% increase
Number of institutions					
Central government institutions	145	0.49	221	0.48	52.4
State government institutions	11,094	37.76	16,547	35.64	49.2
Total government institutions	11,239	38.25	16,768	36.11	49.2
Private institutions	18,145	61.75	29,662	63.89	63.5
Total	29,384	100.00	46,430	100.00	58.0
Enrolment (million)					
Central government institutions	0.31	2.24	0.56	2.57	80.6
State government institutions	6.03	43.54	8.40	38.57	39.3
Total government institutions	6.34	45.78	8.96	41.14	41.3
Private institutions	7.51	54.22	12.82	58.86	70.7
Total	13.85	100.00	21.78	100.00	57.3

Source Planning Commission (2012)

The limited evidence available indicates that private schools and colleges have grown largely in response to the prospects of making quick profits, and/or for political power, and are detrimental to all but few. The private institutions, particularly the fee-reliant private schools and colleges, practise exclusiveness through charging high tuition fee and alarmingly large capitation fees or compulsory donations and through selection of children on the basis of intellectual aptitude. There are strong disequalising forces inherent in private education system. It is widely acknowledged that private schools turn out to be socially and economically divisive; and that the government school system was not adequate to counteract these forces; as a result, the whole educational system was found to be a disequaliser accentuating income inequalities (Tilak 2011).

However, the government policy is highly in favour of the growth of private institutions (Tilak 2012). The government has stated its intentions of encouraging private sector in education clearly in the Eleventh and the Twelfth five-year plan documents (Planning Commission 2007, 2012). The government strongly feels that "private sector growth in higher education (including technical education) should be facilitated". It promises "removal of entry barriers to private participation"

in not only higher education but also in all levels of education, and in this direction, the present existing condition that private education institutions should be "not for profit" will be "re-examined in a more pragmatic manner". Further, the government proposes to encourage "innovative public–private partnerships (PPP)" in higher education. The Ministry of Minority Affairs proposes to set up five new "minority" universities under the PPP mode. The Ministry of Human Resource Development has already initiated such partnerships in secondary education during the Eleventh five-year plan period and many are in the pipeline in higher education.

17.3 CONCLUDING OBSERVATIONS

This paper presented a quick review of some of the recent major developments in education in India concentrating on the last couple of decades. India has made significant achievements in education: there has been a veritable explosion in numbers—students, institutions and teachers. Enrolments and enrolment ratios in every level of education have increased very fast. Secondly, the education system at all levels was made accessible to a larger number of people—rich, poor and middle income classes, men and women, rural and urban populations and backward and non-backward segments of the population. Thirdly, in recent years, there has been significant expansion in the number of institutions of excellence in higher education, producing highly specialised human capital, such as central universities, Indian Institutes of Technology, Indian Institutes of Management and other technical and general education institutions. On the whole, the quantitative progress has been impressive.

At the same time, the system is characterised by severe failures on several fronts (see Tilak 2006). Failures refer to universal elementary education, vocationalisation of secondary education and development of higher education for excellence. Despite substantial improvements, inequalities—gender, regional and religious/caste, though declining—are still high both in the education system and correspondingly in the labour market. Lastly, quality of education at all levels is depressingly low. On the whole, the system is found to be highly inadequate in terms of numbers, quality, equity and other dimensions for rapid economic transformation of the nation and to face new challenges of globalisation and development. With globalisation and liberalisation of the domestic economy, demand for skilled manpower increases significantly and education

sector has to respond to the increasing demands. It is being increasingly realised that success of socio-economic reform policies critically depends upon the human capital base created in the country. Without a large human capital base in the form of literate and highly educated workforce, major economic reforms might not be successful.

There have been a few significant initiatives that the government has taken during the last few years to reform education system at school and higher levels. Elementary education is recognised as a fundamental right and following a constitutional amendment in 2002, the Free and Compulsory Education Act has been made in 2009. Most of the existing policies, programmes and schemes are revised so as to meet the requirements of the Act. It is hoped that quality education would be made accessible to all free in the near future and the targets with respect to access, equity and quality, including learning levels of the children would be reached. A new programme of universal secondary education has been launched, along with a programme of skill development of about 500 million youth. While expansion at every level of education has been rapid, it has been more rapid in higher education. The rapid growth of higher education also necessitated the government to be concerned about quality of higher education, governance, graduate unemployment and other aspects. After all, few Indian institutions of higher education figure in the top 100 global university rankings.

To address some of the problems of higher education, the government has taken up judicial measures and introduced a series of legislations in the national Parliament for approval. While some of them may be well-intended, it is feared that they might not contribute much to reforming higher education. Some of the measures initiated in the recent past are in right direction, but many are not. On the whole, the recent initiatives in policy reforms mark a transition in the history of education in independent India—from a system embedded in the welfare statism to a system based on market philosophy.

17.3.1 What Needs to be Done?

Education needs to be transformed into a powerful instrument of social change and national development. Development of education—both quantitatively and qualitatively—requires more and more resources. Government should strive to allocate more than 6% of GDP to education. It would be desirable to fix certain short-, medium- and long-term

norms regarding the proportions of central and state budgets that should be allocated to education. Resource flow to education—to any level of education, including higher education—needs to be augmented, not retarded.

Heavy reliance on privatisation and on cost recovery measures for public goods like education might be counterproductive; it might hinder the growth of education and its equitable access. Correspondingly, it would affect growth and social justice. The limitations of private sector in education are well known. The most important limitation is that equity and welfare considerations go into oblivion, and commercial and profit motives dominate development of private education. The case for privatisation of education is extremely weak; the role of the private sector can at best be marginal. Given the public good nature of education and the externalities it produces, government should play an increasingly dominant role in education. Specifically, the government must finance 100% school education. In case of higher education, the government must play a dominant role, and resources from non-governmental sector may be generated to marginally supplement government efforts. In other words, development of education should not be hampered by the unavailability of resources. After all, there are several virtues of public financing of education.

It is necessary to aim at the development of education sector as a whole and not just elementary education or higher education or secondary education. To view primary education and higher education as competing alternatives is not proper. After all, all levels of education are interdependent on each other, and one level cannot be developed at the cost of another level. An integrated approach for the holistic development of education is essential.

If one were to identify the single most important long-term sector of human development, it figures out to be education. A cycle of educational process itself is of about 20 years, and if one were to include early childhood education and lifelong education, the span of the cycle is much longer, if not limitless; and the effects of an educational cycle can be felt over generations. Hence, there is need for a long-term perspective on the development of education. Further, the interdependence of education and other development sectors on each other on the one hand, and the diverse contribution of education to various sectors over a long period on the other, necessitate formulation of a coherent and responsive long-term social policy on education in a framework of inter-sectoral planning.

Finally, short-term financial compulsions should not lead to introduction of long-term policies that adversely affect the quality, equity and efficiency aspects relating to education and the overall egalitarian fabric of the welfare state. Inclusive growth has been the most important stated objective of the eleventh and the twelfth five-year plans. Development of education should be planned in such a way that it serves the goals of inclusive growth—social equity and economic growth over the long run.

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CHAPTER 18

Private Higher Education in India

The theme of private higher education is not only an unavoidable issue while debating on the current state of higher education in India, but also—and more importantly—is an extremely important theme when conferring on knowledge, equity and democratic rights, as private education impinges on all three aspects significantly. Drawing on my earlier research, a few important aspects relating to private higher education in India are highlighted here.

If one looks at public policies in higher education in India during the past quarter century, one necessarily feels that there has been confusion all over, in some sense. At the beginning of the 1990s, widespread laissez-faireism could be noted with respect to higher education policies. In fact, there was no policy on private higher education, because we were perhaps confused about whether it would be good or bad to go for private education on a large scale. This laissez-faireism, that is, non-intervention by the state and the absence of any policy, which had been the characteristic feature of the couple of decades beginning with the 1990s (Tilak 2004), helped in the rapid growth of private higher

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education and the emergence of large-scale markets in higher education. This period was followed by clear pro-private approaches.

18.1 SIMULTANEOUS 'YES' AND 'NO'

However, confusion remained as to whether privatisation was good or bad. From even a quick look at several documents of the government—plan documents, policy documents and other statements—one can note several confusing statements being simultaneously made. The government was found saying "yes" and "no" very often, almost simultaneously. For example, the government stated that privatisation was good, but not commercialisation; therefore, privatisation would be allowed but not commercialisation, although they are two sides of the same coin and are based on the same principle—of making and maximising profits. By definition, the private sector is for profit, and it is not possible, either theoretically or empirically, to make a distinction between the two.

Further observations then found that privatisation was not necessarily desirable, even from a market perspective; however, private participation had to be encouraged, without making any clear distinction between private participation and privatisation in education. At another point the government stated that private participation was also not desirable, but that we should encourage something along the lines of a public—private partnership. The confusing statements continued: privatisation of higher education was good and needed to be encouraged; commercialisation was not bad, but profit-making in higher education should not be allowed. Therefore, it was emphatically stated that profit-making private educational institutes were not to be permitted, that educational activities motivated by profit have no place at all in society.

Some courts announced in the same context that making "surplus" in private higher educational institutions is acceptable, but not profits, without clarifying the difference between the two. They did not note that, following Karl Marx, surplus means profits. It was later felt that profit might, after all, be tolerated, but not exorbitant profits. There was, however, no definition provided for "exorbitant profits". All of this shows just how confusing the state approach has been, with no proper understanding of the nature or the consequences of private higher education (Tilak 2005a, b). In more recent years, the government seems to

have gained greater clarity, and has come out with strong proprivate policies in higher education.

During the past three decades, some policies have been formulated and adopted out of compulsion (possibly the reason for the prevailing confusion), while others have been adopted out of conviction. There is a big difference between the two approaches. In the first phase of policy with regard to privatisation during the early 1990s, I believed that governments in various states and at the centre in India were not in favour of private education; however, neo-liberal forces have actually compelled them to adopt policies of privatisation. After all, it is well known that privatisation is an important component of the neo-liberal policies associated with the World Bank and the International Monetary Fund (IMF), which we adopted in the early 1990s. Compelled by these policies of the World Bank and the IMF on the one hand, and by the emergence of strong markets and the corporate sector in the country on the other, the state in India had no choice but to reluctantly accept privatisation as an important policy instrument in the development of higher education.

That phase is now over; so perhaps one can state that policies at present are being formulated out of a conviction that privatisation is good in itself. The state is convinced that privatisation is necessarily desirable: it would promote access, quality and equity in higher education, and is an effective solution to most of the ills plaguing our higher education system. It is because of this change in perception that the state began adopting clear policies that strongly favoured private education. As a result, today we note very dominant tendencies towards a high degree of privatisation of the higher education system in the country. A big nonviolent shift has taken place—from policies of welfare-statism in higher education to a market-based approach to higher education (Tilak 1999).

There are several myths around private education. I (Tilak 1991, 2009) have exploded some of them; and Dhanwanti Nayak (2014) did the same by focusing on the arguments concerning access, inclusion and quality in favour of private education. Yet, private education has become a dominant phenomenon in higher education in India. Occasionally, the government states that privatisation of higher education is irreversible, and all that it requires is a good regulatory framework (Basu 2012; Goswami 2012; Varghese 2012; Bortolotti and Perotti 2007); although it is also simultaneously argued that private higher education in India is over-regulated and needs to be relaxed (Sudarshan and Subramanian 2012). Such statements imply that discussing the pros and cons of private education is an exercise in futility.

Others view the public-private divide as pointless and argue that it does not matter whether it is public or private, as long as education is delivered to the people. They overlook the point that the division of public and private sectors is an abiding concern of the political economy (Kamerman and Kahn 1989). I believe these statements attempt to preempt any debate on private education; discussions on the regulatory framework brings about an abrupt end to any discussion on the consequences of private education.

In this context, I wish to describe a few major features of the growth of private education in India.

18.2 Unprecedented Growth

First, if we look at the trends in numbers with respect to higher education, we note that there has been a tremendous growth in private higher education from the beginning of the 1990s. This growth has been unprecedented; in fact, before 1990 there were very few private institutions. By private institutions, I do not mean the private-aided colleges and schools that have been in existence since before Independence, but private, self-financing colleges, which started emerging during the last quarter century. The growth of self-financing colleges has been phenomenal: the number of private colleges in several states grew from a few in the late 1980s to several hundreds, particularly in the case of engineering colleges, and management and medical institutions. In all, private, self-financing colleges grew to such a level that in relative size, the public sector became infinitesimally small.

In some specific areas like engineering and management, more than 90% of institutions are in the private sector. The private sector has also spread to arts and science colleges, and even to intermediate colleges and polytechnics. They are spread all over the country, from Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra and Kerala, to Odisha, Rajasthan, Punjab, Haryana, and Assam. In 2011–12, there were 191 degree-awarding (almost equivalent to a university) private, self-financing institutions in the country; 19,930 colleges (compared to 13,000 government and government-aided private colleges); and 9500 diploma-level institutions (compared to 3240 government institutions) (Planning Commission 2013). The corresponding numbers of private unaided institutions at the end of the 1980s were close to zero. Of late, attempts have been made to transfer public institutions to the private

sector under different modes of public–private partnership. This is already happening at a noticeable rate at the school, and even at the college level, in different states. For example, the Uttar Pradesh government was planning to transfer five government medical colleges to the private sector.¹

If such instances continue to occur on a large scale, we will soon end up with no public institutions of higher education at all. The unbelievably rapid growth of the private sector has resulted in crowding out or displacing the public sector in no time. Now, there is practically no space for the government to set up an institution—there is a dearth of physical space and no felt need for yet another institution, given the many private institutions in existence. Instead, the argument is to ensure that the existing (private) institutions work within a good regulatory and enabling framework.

Quite a few people argue that the simultaneous existence of public and private-sector institutions of higher education in our mixed economy poses no problem; rather, this would create competition, and competition in turn would produce efficiency. How correct is such an argument? There are a couple of aspects: first, there is no simultaneous existence of public and private institutions; what is found is a rapidly growing private sector and a fast declining public sector.

18.3 Different Forms of Privatisation

Second, there cannot be competition between public and private institutions, which differ in most respects, starting from the objectives and goals of setting up the institutions to the method of functioning and delivery of services. It is well known that the objectives and motives of the public and the private sectors are completely different with respect to higher education.

There are a couple of other forms of privatisation of higher education taking place in India. An important form of the privatisation of our public system of higher education is financial in nature—public institutions are being subject to financial privatisation, through the mobilisation of finances from students and other non-governmental sources. Student fees of different types have been on the rise in most public institutions, with several items that used to be provided free of cost—or for a nominal

fee—being charged heavily. Items in this category include application fees, examination fees, and fees for mark statements. These days, we have clear policy statements saying that we should increase the rates of cost recovery in higher education through student fees, much beyond 20% of the university expenditure. It may be recalled that a committee of the University Grants Commission (UGC) chaired by Justice Punnayya, and a committee (UGC 1993) constituted by the All-India Council for Technical Education (AICTE 1994) in the early 1990s recommended that about 20% of the university expenditure be generated from student and other sources. Going by the spirit of these two committees, the 20% was to be considered an upper limit; however, the argument put forth by the National Knowledge Commission (2009) is to consider 20% the minimum level.

The other instrument of financial privatisation being adopted vigorously is the educational loan programme. Education loans have replaced scholarships in policy discourses on higher education. It is argued that even needy students need not be given scholarships; instead, they can be asked to go for education loans. When the students' loan programme was restructured in the 1990s, the government argued that it should be developed in such a manner that a revolving fund could be formed out of loan repayments, which would be sufficient to finance higher education as a whole. This way, the government would not have to finance higher education from the public exchequer in the future.

A closely related form of financial privatisation of public institutions is the large-scale introduction of self-financing courses in public institutions. The resources so generated are being used for other university activities, for which state funding has been inadequate or even missing. Self-financing courses have been introduced in almost all departments in universities and colleges, both central and state-level ones, including some of the best universities. These courses are run more efficiently than others, with teachers taking a greater interest; administrators, too, are far more interested in these courses because they generate revenues that can be used without formal permission from the state, or bodies like the UGC. Thus, public institutions are being financially privatised on a large scale, because of which the "public"-ness of public higher education has seemed to disappear. The UGC once constituted an Expert Committee for the Review of Unaided and Self-Financed Courses in Central/

Deemed Universities (2002–04); however, it barely acted on the committee's report, which is not even available.

It is important to note that the higher education system in India is more privatised compared to other capitalist or market economies, for instance, the US, the UK, Canada and Australia. Currently, we have more than 100 private deemed universities, a large number of private-aided colleges, and an even larger number of self-financing colleges, in addition to very many unrecognised private institutions, which do not necessarily offer recognised degree programmes and are basically coaching centres of different kinds. Even if one ignores the unrecognised institutions, and takes into account only the private, unaided, self-financing colleges, the private sector in India is one of the largest in the world.

In the US, as described by Altbach et al. (2009), one-fifth to one-fourth of the total number of students in higher education, and about 30% of the global enrolment in higher education, are in private institutions; the remaining students go to public universities. On average, only 15% of the enrolments in the tertiary education system in Organisation for Economic Co-operation and Development countries, and a meagre 8% in the countries of the EU21 group, are enrolled in independent private institutions, with a vast majority everywhere studying in the public sector (OECD 2013). In contrast, in India, 66% of students in general education and 75–80% in technical education are enrolled in private, self-financing institutions (Planning Commission 2013).

Based on the number of students and the institutions of higher education, private higher education is measured in different degrees—predominantly private, moderately private, and insignificantly private higher education systems (Gieger 1987; Tilak 1991). Our system can be described as predominantly private. If one includes the vast number of private, unrecognised institutions, one can conclude that the size of the private higher education sector has reached alarming levels in India, with our higher education system being privatised at a level that is much higher than in many other parts of the world (including the most privatised systems). Contrary to the general impression that Western countries have large private higher education systems, they actually strongly advocate privatisation of higher education not for themselves, but for the developing countries. They have strong public higher education systems, while we are being encouraged to resort to private institutions.

18.4 Profits Replace Philanthropy

The third important feature of the higher education system refers a very significant decline in philanthropy in India (Tilak 2006). At the time of Independence, philanthropic and voluntary contributions constituted a reasonably good proportion of the total education funding; but they have dried up over the years, and have come down to negligible levels in recent years. People with some money in the 1950s and the 1960s used to donate to public institutions or set up philanthropy-based private schools and colleges; today, though, those with even a small fraction of that money prefer to set up a private, self-financing college or university. This is because investment in colleges and universities is found to be the most rewarding, yielding quick and very high pay-offs, with little risk. Philanthropy and charity have been replaced with greed for profit and narrow, selfish financial interests. So the growth of profit-oriented commercial institutions has been an important feature of the 1990s and beyond, compared to the philanthropy-based private institutions of the past.

Fourth, there is a strong misconception that the quality of private higher education is very high, compared to public education. Such an impression is based mostly on impressive buildings. If one goes beyond the outer walls, one will conclude that the superiority of private institutions is a sham. Most private higher education institutions have no libraries, laboratories, or research programmes; they concentrate on saleable courses of study, prefer short-term to long-term programmes, and have under-qualified and underpaid teachers. The teaching staff required to impart meaningful teaching is also inadequate.

Private educational enterprises are guided essentially by private demand, and prefer to concentrate on courses of study for which students are ready to pay heavily; in other words, those that are revenue generating and surplus generating, rather than those traditionally considered necessary for a good higher education system. As a result, some disciplines of study are sacrificed while some others are pampered. Subjects that currently flourish in India include engineering, management, and commerce, and disciplines like the social sciences, humanities, or basic sciences are ignored. This produces a distorted, unbalanced and unsustainable higher education system.

This is in addition to the values they inculcate, which revolve around selfishness and a lack of concern for social issues. It is precisely for this

reason that globally, the need has been felt to strengthen liberal higher education (Nussbaum 1997). Further, considering global rankings as indicative of the quality and standard of higher education, one would notice that very few private institutions feature in the global rankings. With the exception of a few in the US, no other private university in the world features in the top 300.

18.5 The Question of Equity

On the other hand, well-funded public institutions are indeed found to be performing well. The best examples we have are the central universities, the Indian Institutes of Technology, Indian Institute of Science, central medical institutions, and other specialised research institutions, including national science laboratories. Some of these institutions attract highly talented students and faculty, sometimes even from abroad, and feature in the global rankings of universities. So funding is a critical issue. The problem is that under neo-liberal policies, public funding for higher education has come under attack (Tilak 1996). Grants to the institutions have been slashed, and public institutions are not allowed to perform even basic functions satisfactorily. It is then misleadingly argued that as they are not performing well, there is no justification for continuing to provide public funds.

Even the champions of the private higher education system admit—while arguing strongly that private education would improve access and quality—that equity would be at stake. Equity in higher education is one aspect that will be seriously compromised. Private education widens inequalities not only in education, but also in economic and social spheres. After all, no private institution in India will be ready to promote equity on a satisfactory level, grant access to the weaker section, or provide liberal scholarships. The government's interventions in this regard, such as fee reimbursement schemes (which are similar to vouchers), access to loans, interest subsidy on loans, or even quotas in admissions to private institutions for weaker sections, would not help much; in fact, these misaligned initiatives would contribute more to strengthening the private sector than to reducing inequalities in higher education and in society.

Another important aspect is the argument relating to the regulation of private education. Those who recognise the problems with private education argue that the government should develop an enabling and regulatory framework, so that private educational institutions meet public standards

and adhere to public goals. Given all our experience, we can say that the government's ability to regulate these politically and economically powerful institutions is extremely limited. The market forces are so strong that the government can do little. In fact, as many argue, market forces dictate government action. That is particularly true in developing societies, where markets are indeed strong but very imperfect. So while the government can formulate effective regulations, ensuring their proper implementation and a fair performance from private institutions, is a tall task. Some of the bills introduced in Parliament, such as those aimed at checking corrupt practices in higher education, and the setting up of tribunals and proper accreditation authorities, have remained unapproved for a long time (although many of these bills have their own weaknesses) (Tilak 2010).

18.6 Return on Equity

The one important feature of private higher education institutions in India (as well as of those in other developing countries) is: they rely exclusively on students' fees. Student fees account for 100% of the total costs of higher education in these institutions. They invest little to nothing of their own resources; and whatever they do invest is recovered soon, in a couple of years' time, from the students. Also, private institutions make no attempt to generate any additional sources of money, in contrast to some major private universities in Western countries like the United States, where, according to available statistics, students' fees account for only a small fraction of the total costs of higher education.

In the United States, for example, in private universities that do not get support from the federal government or the state, the fees contributed by students constitute less than 40%, with the remaining 60% met by non-state and non-student sources. In Japan, the fees in private universities form 59% of their total expenditure; the remaining 41% comes from non-state and state sources.

In India, though, higher education is either financed by the state and students (in the case of public higher education institutions), or solely by the students (in the case of private universities). There are no other (either non-student or non-state) sources of funds available for higher education. Private management, or the rest of society, do not contribute any financial resources to education, except for the initial investment that is returned with profits.

In the same context, it may be underlined that the fees in private universities in India are about 50-80 times higher than those in public institutions. In contrast, private universities in countries with a sizeable private sector, like Japan, Korea, or the USA, charge a fee that is eight to 10 times higher than fees in public institutions. Therefore, there is a very significant difference between private education in India and private education in other parts of the world. In the United States, Harvard University and Stanford University were founded essentially on philanthropic and educational considerations, and on considerations of providing good quality education. They are not motivated by profit; in fact, it is widely known that about one-third of the Harvard University budget goes towards scholarships, compared to almost zero in many private universities in India. More than 60% of Harvard college students annually receive need-based scholarships towards the cost of tuition, room and board. As a result, approximately 20% of the families pay nothing, and many college students graduate debt-free.² Private universities in the United States use their autonomy to attract the best students and the best faculty from around the world, while private institutions in India use their autonomy mostly to breach state rules and regulations.

The private sector in Western countries grew historically, with a consideration to providing education to the people and complement public efforts. In India, however, the private sector is growing essentially because the public sector is not doing its job adequately; there is a public-sector disinvestment programme going on, and state withdrawal from higher education is becoming increasingly strong. The private sector is taking advantage of this situation; unlike in the West, private institutions in India are not set up to complement public institutions, but to capitalise on the public sector's inadequacy.

18.7 Public-Private Partnership

Government's one of the standard and common arguments in support of private education is: the government does not have enough money to meet the increasing demand for higher education. Yet, it seems to be aware of the problems that arise in the wake of private education—massive corrupt and unfair practices, unregulated expansion, and the production of low quality graduates. Hence, the government has proposed a few bills and

regulations to check unfair practices in private institutions, which include the setting up of a proper accreditation authority, mandatory accreditation, new rules and regulations for private deemed universities, etc. It is not clear, though, just how effective these would be.

At the same time, realising the need to generate more resources, the government proposes to rely on innovative methods of public–private partnership. However, as the experience of other countries has shown, public–private partnership models rarely succeed, particularly if their concerns are essentially financial. But in India, the government aims to mobilise 50% of the required funds in states from the private sector, through various methods. Public–private partnerships are associated with several inherent contradictions. The motives of the two partners are bound to clash; there will be an increase in commercial and other revenue generating activities on university campuses; an increased miserliness with regard to expensive academic programmes; markets will invade every sphere of the universities, and every activity would be seen as a cost-centre and as a source for generating profits.

This culture, which is alien to public higher education systems, will become a part of the systems modelled on public–private partnerships. The casualty will be the academic culture of institutions engrossed in the production and dissemination of knowledge, and imbued with principles of equity and excellence. If the considerations are related to improving the relevance of the curriculum, imparting practical knowledge, and enhancing the employability of graduates, certain models of public–private partnership, like the university-industry cells already in existence in most universities, might work to some extent (although their experience has also not been satisfactory). The models that the government has been proposing essentially involve a massive transfer of public resources to the private sector. This might lead to public pauperisation and the enrichment of the private sector.

The bottom line is: active participation of the private sector in higher education institutions is likely to create different kinds of problems. Even countries like the United States found that this might involve several compromises on core academic values, including distortions in the research agenda—and even the results of research—of universities, and might end in universities becoming endlessly preoccupied with money and competition (Bok 2003, 2013).

18.8 Contradictions and Clashes of Interest

The Eleventh and Twelfth five-year plans strongly argue in favour of privatisation of higher education. So far, higher education institutions are, de jure, "not for profit". The Twelfth five-year plan clearly proposes to remove the "not for profit" tag in the rules and regulations, stating that unless the private sector is allowed to grow, it will not become profitable. At the same time, the Ministry of Human Resource Development (2013), in the *Rashtriya Ucchatar Shiksha Abhiyan*, argues against allowing profits in higher education. This is an actual conflict of interest among two government bodies the Planning Commission and the Ministry of Human Resource Development.

Such clashes are not uncommon; we have seen a similar clash of interest between different ministries with regard to the commitment of higher education to the General Agreement on Trade in Services, with the Department of Commerce and Trade making such a commitment, and the Ministry of Human Resource Development asking for its withdrawal. Further, to stimulate the growth of private higher education, it is proposed that public funds be provided to private institutions, and liberal fiscal incentives be offered to the corporate sector to entice them to invest in higher education. Given that public institutions are severely starved of resources, there is no rationale for providing public resources to private higher education institutions. The objective is merely to encourage the private sector to grow. Unfortunately, privatisation of higher education has become a goal in itself, and is no longer a mere strategy for the development of higher education.

Lastly, a careful examination of the longitudinal data on enrolments and economic development in higher education in various countries, provided by the UNESCO Institute of Statistics (UIS), shows that no country—with the exception of Japan and Korea, which predominantly depend on the private sector in higher education—has progressed educationally in any significant way, or economically prospered; neither has it socially advanced nor politically flourished. Educationally, the total gross enrolment ratios in higher education show that higher education systems with a high proportion of private enrolments are still underdeveloped compared to other countries. In the familiar classification of the World Bank, many such countries, including countries in South America, which have a strong history of private higher education, are developing low or middle income—countries; they have not yet economically progressed to the level of advanced countries.

On the political front, too, many such countries are beset with severe problems, with political instability being an important feature of these countries. Only those countries with strong public higher education systems have prospered in all dimensions, economically, politically, socially, and culturally. The best examples are North America and Western Europe; in Scandinavian countries, private higher education is virtually non-existent. Countries like Sweden and the UK still do not have any sizeable number of private universities.

18.9 In Conclusion

Let me conclude with two final observations.

We need to expand our higher education system, as countries with small higher education systems—public and private—cannot progress at all. The best examples are countries where enrolment ratios are between 10 and 15%; most of these countries are economically underdeveloped, with high levels of poverty and inequality. A look at advanced countries shows that the minimum desirable enrolment ratio appears to be around 30–40%. India has set a target of reaching 30% gross enrolment ratio in higher education by 2020. At the same time, however, it should be noted that the increase is to be achieved mainly through the expansion of the public higher education system, and not through the private education system.

The most disturbing development pertains to the fact that the state is gradually abdicating its responsibility towards higher education, including planning for higher education, policymaking for higher education, and of course, the funding and delivery of higher education in favour of the private sector, under the guise of private participation, public–private participation and private initiatives.

For a long time, the government advocated private education by stating that it did not have sufficient resources to meet the increasing demand for higher education. Today, though, it is arguing strongly that private education is good in itself; it will improve efficiency, quality and access. In the present context of neo-liberal policies, privatisation is not seen as an instrument but as a goal in itself; it is not a strategy to develop higher education, but is itself seen as reflecting the development of higher education. This is another major shift in the approach of the state to the private sector, and I consider this the most unfortunate shift taking place in policy discourses on higher education in India.

The massive private higher education system in India has been detrimental to the character of education as a public good. Private education essentially views education as a private good, yielding benefits to the individual student, and is not concerned with social values or national concerns. The greater the extent of private higher education in the country, the faster the disappearance of the public nature of education. The social responsibility of higher education needs to be valued, protected and nurtured, and this is not possible in a system dominated by a profit-motivated private higher education system.

An education bazaar, no matter how big, is no substitute for a public higher education system. A strong, vibrant, high-quality public higher education system, accessible to all, is the solution to many of the ills plaguing the country. Along with this, a philanthropy-based private education ought to be encouraged. There is no place for a profit-seeking private higher education in a democratic society that aims to transform itself into a knowledge society and an advanced economy, with faster inclusive growth as its main maxim.

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Notes

- 1. http://zeenews.india.com/news/uttar-pradesh/up-to-transfer-fivemedical-colleges-to-private-sector_652189.html.
- 2. http://news.harvard.edu/gazette/story/2013/03/financial-aid-budget-increases-by-10m/.

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CHAPTER 19

On Planning University Development: Shibboleths *Versus* Stylised Facts?

I had the good fortune of being acquainted with Professor Suresh Chandra Shukla through his writings and also in person. I enjoyed long and engaging discussions with him on a variety of academic, social, institutional, and personal issues, including about the journal he was editing for the University Grants Commission, the Journal of Higher Education and the journal that I still edit, the Journal of Educational Planning and Administration, about institutions—the Indian Institute of Education, Pune, the Zakir Hussian Centre in Jawaharlal Nehru University, National Council of Educational Research and Training, Jamia Millia Islamia and the National Institute of Educational Planning and Administration, and how to strengthen them and make them vibrant institutions in the area of education, and about professional associations, particularly the Comparative Education Society of India that he founded, which I got an opportunity to revive a few years ago from deep and prolonger slumber. I learnt a lot from him. He was a great scholar, an educationist, a visionary, and a keen observer of social change in India. His contribution to the field of education and more specifically to comparative education was remarkable. He was associated with not only Jamia that is hosting this lecture in his memory, but also with my Institute (when it was known as Asian Institute for Educational Planning and Administration in the late

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1960s, though I was not there in the Institute at that time). That makes me to feel special about it. Above all, Professor Shukla was a humanist, dedicated his life to bring social transformation. I indeed feel it a special privilege and an honour to have the opportunity of delivering the lecture dedicated to his memory.

19.1 What is A University?

I chose to reflect in this lecture on the nature and pattern of development of universities in the contemporary period in India and abroad. I have also subtitled my lecture, Shibboleths versus Stylised Facts. The two terms find their origin, respectively, in Hebrew (the Hebrew Bible) and modern economics (a la Nicholas Kaldor). I will not go into the origins of these two terms. It is sufficient to note that 'shibboleth', is defined as 'an old belief or saying that is repetitively cited but untrue'. It is a widely held 'belief'. Oxford Dictionary defines shibboleth as 'a custom, principle, or belief distinguishing a particular class or group of people, especially a long-standing one regarded as outmoded or no longer important'. I use the term essentially to refer to misconceptions and fallacies or arguments which are no longer valid. On the other hand, stylised facts refer to 'empirical findings that are so consistent'. They are commonly accepted as empirical truths. Due to their generality, they are often qualitative. It is 'often a broad generalisation that summarises some complicated statistical calculations, which although essentially true, may have inaccuracies in the detail'. Stylised facts are also defined as those that 'can only be seen as starting points for further empirical and theoretical research'.

I believe these definitions will prepare you enough for the statements I make in this lecture. The facts that I refer to are 'stylised'—generalised, some supported by robust evidence, and some are yet to be subjected to further empirical verification. Many stylised facts are also well-known facts. So I may not necessarily be speaking something new today.

Let me begin with some understanding of a 'good' or an 'ideal' university. I take the help of two quotes—one from John Newman's classic work (1852) and another from Jawaharlal Nehru's speech delivered in Allahabad University in its convocation held in 1947.

According to John Newman:

A University is a place of concourse, whither students come from every quarter for every kind of knowledge... There you have all the choicest products of nature and art all together, which you find each in its own separate place elsewhere. All the riches of the land, and of the earth, are carried up thither; there are the best markets, and there are the best workmen. It is the centre of trade, the supreme court of fashion, the umpire of rival talents, and the standard of things, rare and precious. It is the place for seeing galleries of first-rate pictures, and for hearing wonderful voices and performers of transcendent skill. It is the place for great preachers, great orators, great nobles, great statesmen... In the nature of things, greatness and unity go together; excellence implies a centre... It is the place to which a thousand schools make contributions, in which the intellect may safely range and speculate, sure to find its equal in some antagonist activity, and its judge in the tribunal of truth. It is a place where inquiry is pushed forward, and discoveries verified and perfected, and rashness rendered innocuous, and error exposed, by the collision of mind with mind, and knowledge with knowledge. It is the place where the professor becomes eloquent, and is a missionary and a preacher, displaying his science in its most complete and most winning form, pouring it forthwith zeal of enthusiasm, and lighting up his own love of it in the breasts of his hearers. It is the place where the catechist makes good his ground as he goes, treading in the truth day by day into the ready memory, and wedging and tightening it into the expanding reason. It is a place which wins the admiration of the young by its celebrity, kindles the affections of the middle-aged by its beauty, and rivets the fidelity of the old by its associations. It is a seat of wisdom, a light of the world, a minister of the faith, an Alma Mater of the rising generation. ... Such is a University in its idea and in its purpose.

In his address to a special convocation of the University of Allahabad on 13 December 1947, Pandit Jawaharlal Nehru (1947) stated:

A University stands for humanism, for tolerance, for reason, for progress, for the adventure of ideas and for the search for truth. It stands for the onward march of the human race towards even higher objectives. If the universities discharge their duty adequately, then it is well with the nation and the people. But if the temple of learning itself becomes a home of narrow bigotry and petty objectives, how then will the nation prosper or a people grow in stature?

These two quotations help us in understanding what a good university should be; what it should stand for and what it should focus on. They also explain the value and functions of a university. Universities have an intrinsic value as they produce knowledge—knowledge for sake of knowledge, but they also have instrumental value, as they contribute to society's progress in multiple ways; the knowledge produced by them is very relevant for progress of humanity.

All this is well recognised by India, as several committees and commissions have repeatedly stated. According to the Radhakrishnan Commission (Government of India 1950) universities are "organs of civilisation" (p. 29) and a university "is a place of higher education where personality and capacities of students are developed to the utmost by teachers who should themselves be at work at the frontiers of knowledge in their respective fields. Universities are our national institutions" (pp. 74–75). The Education Commission (1966) further observed, "The function of the university is not only to preserve, disseminate and advance knowledge, but also to furnish intellectual leadership and moral tone to society. No less important is the role of universities in promoting national integration and a common culture, and in bringing about the social transformation that is desired....". More recently the P N Tandon committee (Government of India 2009b) constituted to review institutions deemed to be universities, emphatically stated that universities are meant to "facilitate and promote critical intellectual engagement with: (a) different traditions of thought and its great variety of expression, (b) modes of understanding the human condition and predicament, (c) the incredibly diverse inanimate and non-human living world. Such engagement obviously has many utilitarian and extrinsic values; but it is its intrinsic value that marks it off as a very special sort of human practice". (p. 6)

How do we contrast the growth of modern universities, particularly of the late twentieth and the twenty-first centuries in India and abroad with the nature of an ideal university or simply with the above normative statements? In a lecture titled, 'Universities: An endangered species' that I gave at the World Education Forum in Davos in 2010 (Tilak 2010), I referred to the shifting trajectory of the institution of universities and I described the growth in a typology of five generations of universities—the ancient universities such as Nalanda in India and the Academy or the School of Philosophy in Athens in Greece, founded by Plato in 387 BCE being of the first generation, and the modern market-oriented entrepreneurial or corporate university being of the latest generation. I have also

shown in that address that in the process over the years, we lost sight of some of the important virtues relating to the value and functions of a university described by Newman and Nehru. I do not wish to refer to them now. Instead, today I wish to focus in my lecture on a few shibboleths—fallacies, widely prevalent in the context of the planning of establishing and the development of universities.

19.2 Shibboleths And Facts

19.2.1 University Education is Not Important for Development

The most important presumption that was widely held for a long time was that university education is not important for economic growth and development. On the other hand, it is literacy and primary education that is argued to be important. Estimates on the internal rate of return, estimated by economists, particularly by the economists of the World Bank, also contributed to strengthening such a presumption. Returns to primary education are high and higher than returns to secondary and higher education, and this had led many to conclude that it is only primary education and literacy that matter for development—economic, social and even human development—and secondary and higher education do not matter. In the same context, it was also held that developing countries like India would not be able to fulfil their goals with respect to primary education, unless secondary and higher education are ignored or their growth capped. This was accepted for a long time by many developing countries, some out of compulsion, as the view primarily came from the World Bank (1994), and so the development of university education was neglected. This also misguided many planners to juxtapose one level of education against another, leading to a fragmented approach to educational policy, planning and development.

The contribution of basic education to development is widely recognised. Ever since 1985 when the World Bank set poverty reduction as an important agenda and highlighted the role of primary education therein, the attention of policymakers, planners and development thinkers has shifted very systematically in favour of primary education. Substantial research has established the strong linkages between primary education and poverty reduction—reduction in infant mortality rate, reduction in fertility rate, improvement in life expectancy and so on. Research also covered literacy and non-formal education and rarely secondary and higher education. All these contributed to the distorted fallacious argument that higher education is not important.

Later research has shown how erroneous this argument was. The fallacious argument was indeed exploded by a large amount of research that was conducted particularly in the late 1990s and after, including studies by the World Bank, UNESCO (e.g., the Task Force on Higher Education and Society 2000; The World Bank 2002) and others (Bloom et al. 2006; Tilak 2003; UNESCO 1998). Research that used national and cross-national data has demonstrated this. The modern growth theory developed by Paul Romer (1986) and Robert Lucas (1988) underlined the view that knowledge is a public good and that investment in knowledge produces avenues for limitless sustainable economic growth, it being one of the most important sources of innovations. It is true that primary education is necessary for not only education's development but also for social and economic development. At the same time, the experience also demonstrates that primary education is not sufficient for economic growth and sustainable development. Societies that have concentrated rather exclusively on primary education and ignored secondary and higher education could not achieve high levels of economic growth. In other words, it is not adequate for fast economic growth to exclusively concentrate on primary education. Voluminous research of recent years has clearly shown that higher education is important not only for economic growth but also for producing a wide set of externalities, as it contributes significantly to cultural advancement, political maturity, social progress and human development. The argument against post-elementary education also fails to recognise the interlinkages between different sub-sectors of education; after all, they depend upon each other.

In short, the simple stylised fact is: all levels of education are important; and higher education is the most powerful instrument for socio-economic transformation of societies.

19.2.2 University Education is Important for Development; So We Need Many More Universities

There are some who strongly and rightly believe that higher education is important for development; accordingly, they argued for a massive expansion of university system. There were 190 universities in India in 1990–1991. The number jumped by more than four times to 847 by March 2016, according to the latest statistics available from the University Grants Commission (UGC 2016). Globalisation, liberalisation

and privatisation have been the characteristic features of the development paradigm since the beginning of the 1990s, influencing every nation, and every sector of development, including higher education.

The National Knowledge Commission (NKC 2009) recommended, inter alia, that India should have some 1500 universities in the country. Taking the cue from the NKC, the Government decided to push for a sudden major expansion of higher education, setting high targets for the gross enrolment ratio, founding of new universities and other university-level institutions. A significant increase in the allocation of resources to higher education was also made in the Eleventh five-year-plan. During this plan period, as many as seventeen new central universities were set up (though the actual target was thirty-two), apart from doubling and trebling the numbers of many other institutions such as the Indian Institutes of Technology, Indian Institutes of Management and Indian Institutes of Information Technology. Many states have also set up new universities in the public sector and more under the private sector. The latest statistics state that as of today (in 2016), there are 46 central universities, 347 state universities, 235 state private universities, 123 institutions deemed to be universities and 96 institutes of national importance and others in India.

The growth in the number of universities and colleges has helped in enrolling more students in higher education. Today there are nearly 30 million students (excluding students in open/distance education) in higher education. The growth has also helped in bridging social gaps in participation in higher education to some extent. While I recognise some of these seemingly positive outcomes, I wish to raise a few basic questions on planning the growth of universities. The questions may be relevant not only for India but also in general for other countries.

The NKC strongly recommended that India should increase the number of universities from some 350–1500. The intention was to set up universities in every district/block/taluk, if not in every village. This, it is believed, would enable India to attain a gross enrolment ratio of at least 15% by 2015 from the then (incorrectly) underestimated ratio of 7%. Accordingly, the Eleventh five-year plan aimed at reaching a gross enrolment ratio of 15% by the end of the Plan, that is, by 2012. (The target was later revised to 25% by 2017 and 30% by 2020.)

In my view, the NKC's recommendation to expand the number of universities to 1500 is not based on any sound detailed analysis. It is based on a very simple logic that as there were about 350 universities in

the country with an enrolment of about ten million students; a four-time increase in enrolments to about 40 million would require a four-time increase in the number of universities. A detailed diagnostic analysis of the existing higher education system, if not a detailed manpower planning exercise, and a choice of sound criteria would have helped the Commission to come out with a more sensible recommendation. To argue that there should be a university in every district or block is based on an inappropriate understanding of the very concept of a university. Such a view makes no distinction between primary schools that are expected to be provided in every village at an easy walking distance to every child, and universities that are expected to provide knowledge at a much-advanced level and produce graduates for national and global society. Certainly, there is no case for 1500 universities in India in the near future. In fact, Pranab Bardhan (2017) in an article that appeared in The Indian Express recently felt that 'there should not be more than 50 (universities) in the whole country'. I will return to this issue shortly when I refer to similar aspects relating to diversity.

19.2.3 'Small is Beautiful'

The NKC in its wisdom argued that there is a need to set up 'smaller' universities, 'appropriately scaled and more nimble' universities which 'are responsive to change and easier to manage'. This view is very difficult to understand. Is small beautiful in case of universities? Why do we need small universities? What are the advantages of small universities visá-vis big ones, particularly in serving the main functions of the university relating to knowledge development and dissemination? There is no research anywhere that has shown that small universities perform better. Some may be doing well, but not because they are small, but because of some other important factors. Though the NKC seemed to be concerned about managerial problems, even with respect to managerial and other economies of scale, large universities may be preferred.

I argue that we must prefer having a small number of large universities, with sprawling campuses, and with excellent facilities in terms of teachers, libraries, laboratories, classrooms, playgrounds, other infrastructure, with large areas of student and faculty residences. Such large campuses may provide a better learning environment, attracting students, scholars and faculty from various corners of the country and

abroad to study in various disciplines. In addition, this will help in reaping economies of scale, and efficient utilisation of physical, human and financial resources.

Unfortunately, many Indian universities are very small in size in terms of enrolments; they are actually planned so. The best institutions in India, such as the Indian Institutes of Technology or the central universities, established in the last century have an enrolment of about 4000–6000, not to speak of several deemed and other universities, including recently established central and state universities and other university-level institutions, which have enrolments hardly in three digits. Many universities are much below any 'optimal' size that one can think of.

In this context, let me refer to a university of the past that we often speak about with great pride, namely the Nalanda University. The University of Nalanda, known during those days as Nalanda Mahavira, built in 4 BCE in India was one of the greatest achievements of ancient period in the field of education. According to available records,² it was one of the world's first residential universities and it had extensive dormitories and accommodated over 10,000 students and 2000 teachers on the campus in its heyday—that is, with a faculty-student ratio of 1:5. Considered an architectural masterpiece, the university was enclosed by a lofty wall and had eight separate compounds and ten temples, several lakes and parks alongside meditation halls and classrooms. The library was a nine-storeyed building where meticulous copies of texts were produced and preserved. Courses of study were drawn from every field of learning, Buddhist and Hindu, sacred and secular, and foreign and native. Students studied science, astronomy, medicine and logic as diligently as they applied themselves to metaphysics, philosophy, Samkhya, Yoga shastra, the Veda, and the scriptures of Buddhism. They like-wise studied foreign philosophy. Transcending ethnic and national boundaries, the university attracted pupils and scholars from Korea, Japan, China, Tibet, Indonesia, Persia, Turkey and other parts of the globe. This institution represents the concept of the university of the ancient period.

In fact, we do not have to go back to the 4 BCE. Look at the contemporary scene. The top ten public universities in the US in global ranking have an average enrolment of 34,000 students; the top ten European universities have an average of 29,000 students, the top ten universities in Asia-Pacific (mostly in Japan) have an average enrolment of 21,000 and the top ten British universities have 20,000 students enrolled.

Except for private American universities, most world class universities are relatively large, with the enrolment of students ranging mostly from 20,000 to 40,000 (i.e., 51,000 in the University of Minnesota and 10,000 in Australian National University). They have an average faculty size of 2400–3000 (1200 in Australian National University and Sheffield and 5000 in the University of Michigan), with a faculty–student ratio of 1:6–10 (Tai, n.d.). The average size of the top fifty universities in world rankings is around 25,000 students. When China is planning to set up a new university, it is said, it plans for 40,000–80,000 students to live on the campus.

Such large universities provide intellectually a rich vibrant environment for learning, and for creation and the dissemination of knowledge and would at the same time yield an immense magnitude of economies of scale, not only in terms of financial gains but also with respect to several non-financial aspects.

Probably there is hardly any university in India that has an enrolment of about 20,000 (excluding enrolment in affiliated colleges and distance education programmes). The average of size of a university was reported to be about 1000 a few years ago, much less than the size of a well-functioning secondary school, suggesting the need for the large-scale consolidation of universities. In contrast, universities are being split into smaller and smaller universities.

On average for every 1.3 million people, there is a university in India; and for every three districts on average there are four universities. If one looks at the state-wise picture, the pattern looks even more erratic: there are seventy-five universities in Rajasthan which has a population of 75 million, sixty-nine in Uttar Pradesh with 204 million people, fifty-six in Gujarat which has a population of 63 million, fifty-five for 64 million people in Karnataka, fifty-two in Maharashtra for 104 million people and fifty in Madhya Pradesh for 73 million people. There are ten universities in the tiny Northeastern state of Arunachal Pradesh which has a total population of 1.2 million. Apart from raising the issues of irrationality in planning universities (if we consider population as a basis for planning universities, even though that is not the best criterion) these numbers certainly raise questions on the sustainability of these universities—the academic, financial and managerial dimensions—in any meaningful way. If a good number of study programmes are to be offered in each of these universities, where do you get sufficient number of teachers, physical resources, funds and, above all, quality students?

There is a huge danger that such small universities will affect the very character of universities. By setting up universities in every district and in every small sub-national local region for different political and other reasons, not only is the growth of small 'unviable' universities—unviable economically, managerially and academically—being actually allowed, but we are also allowing them to be parochial in nature, producing closedminded graduates who know little beyond their given district. Their vision will be narrow and restricted and they might find it difficult to adjust in the larger society after graduation. As universities are available everywhere—in every district, students do not move out of their zones; these universities recruit teachers and administrators from within the region. Universities will become regional and localised, characterised by regional parochialism. Such universities will have a limited capacity to produce global citizens, and even citizens with a broad national understanding. It is desirable to have a smaller number of large universities than a large number of small unviable universities.

Certainly, universities should not be viewed as ones that serve mainly local needs; they are valuable national and global organisations producing national and global 'public goods'. Only large universities will have potential to deliver these.

19.2.4 Single-Discipline-Based Universities are Good Models for Knowledge Development

It appears that educational planners in many countries, including in India, strongly believe not only that 'small is beautiful' but also that single-faculty-based small universities are excellent models for knowledge management and development. After all, the principles of specialisation and theory of comparative advantage may justify setting up single, faculty-based universities. As a result, today we have a wide variety of universities in terms of their disciplinary focus. To name a few, in addition to the Indian Institutes of Technology, the Indian Institutes of Information Technology and National Institutes of Technology, a majority of which offer mainly engineering and technology courses of study; there are Indian Institutes of Management, and a big and growing number of universities of technology or engineering and technology; there are also law universities, medical universities, pharmacy universities, agricultural universities, forestry universities, languages universities, music universities, universities for culture, marine universities, petroleum universities

and so on-each variety in good numbers. Thus, a good number of universities are set up, each meant exclusively for a specific discipline, though some like the Indian Institutes of Technology are expected to devote 15% of their time to humanities. The mushrooming of single-subject universities is taking place often through the route of 'institutions deemed to be universities'—a unique kind of university-level institutions in India.

The desire to split and sub-split university disciplines and set up universities for each flows partly from the dissatisfaction with the performance of existing, 'normal' universities. But in the process, as Amrik Singh (2004) noted, 'grievous injury' has been done to the very concept of a university. Many find it difficult to adjust to the very idea of having a university, for example, of Information Technology, as 'the traditional idea of the university was that it would provide a home, within the confines of a single institution, for the cultivation of all significant branches of knowledge' (Béteille 2010, p. 173, emphasis added).

The kind of multiplication and proliferation of single-faculty/discipline universities that has taken place makes me to note that the cubicalisation of knowledge, a phenomenon that the Yashpal Committee (Government of India 2009a) lamented against, is actually inherent in the very approach being adopted in the designing and planning of universities in India in recent decades. None of the great universities of the world, as Amrik Singh (2004) observed, have been guilty of such a blunder. By erecting artificial walls between disciplines, we are going away farther from the very idea of a university.

Ideally, as the Yashpal Committee felt, all universities need to be necessarily multi-faculty, and comprehensive. It suggested that even the IITs should be made into comprehensive universities by adding medical schools and other schools of arts and sciences. Single-faculty universities have no place in a good university system. Highly advanced and specialised research centres though can be considered as an altogether different category. The approach should be to go beyond specialised knowledge and boundaries of disciplines.

A university by its very nature stands for a universe of knowledge, wherein all disciplines are seen as intrinsically and organically linked with each other. Hence, universities per se have necessarily to be multidisciplinary. The objective should be to produce not only skilled manpower but also skilled manpower who are at the same time critical thinkers. Universities have indeed a very unique role in producing and nurturing critical thinking abilities. After all, critical thinking is the only weapon and defence which people have against the dangers of life; and in this sense, university education empowers people with weapons against the dangers of life. This vital role can be performed by multi-faculty universities that have not only science, engineering, technology and other professional and technical education faculties but also the humanities, social sciences and liberal arts, and have a multidisciplinary approach in their education and research programmes; and this cannot be expected from single-faculty institutions. As, it is liberal education that helps in, 'total transformation and emancipation of the individual student' (Barnett 1990, p. 121) and it is liberal education that is necessary for 'cultivating humanity' (Nussbaum 1998), humanities and liberal arts may have to become a necessary part of all universities, including universities of science and technology. After all, humanities and liberal education have traditionally held an important place in university curricula. This is becoming more important, as with the progress of science and its application, there has been a rapid decline in the human element. In an interesting article titled 'Why Doctors Need Humanities?' in The Times of India recently, Anand Krishnan (2017) suggests the inclusion of humanities in medical education as the best way to bring back humanism to the profession. Even in case of technocrats, learning of human sciences like Sociology, Philosophy, Political Science, Psychology, Economics, etc., help in their holistic development. The strength of some of the best universities of the 20th century has been their focus on arts and sciences, which include disciplines such as philosophy, history, languages, mathematics, physics, chemistry and so on along with professional subjects such as law, engineering, and medicine. As the Kothari Commission highlighted 'all higher education should be regarded as an integrated whole, that professional education cannot be completely divorced from general education' (Education Commission 1966).

To further learn from other countries, I refer again to world class universities, most of which are comprehensive universities. For example, seven out of the top ten public and an equal number in private universities in America, all the top ten British universities, nine out of the top ten European universities, and the top seven universities in Asia and the Pacific region are comprehensive universities. Every university has a medical school, in addition to other schools. Some of the best universities in North America insist that the engineering students necessarily

take music and liberal arts as optional courses. For example, the Franklin Olin College of Engineering in the United States, is adopting a unique method of mixing engineering, entrepreneurship and humanities into one integrated course. Some US universities promote research in languages to such an extent that they have separate departments of almost every language in the world, including a number of Indian languages. The University of Chicago offers programmes in eight Indian languages. The schools of languages, linguistics and culture are regarded as essential for a good university system.

After all, societies require not only scientists, engineers and technocrats but also visionaries, critical thinkers and citizens with highest universal human values. So every university should offer teaching and research programmes not only in the areas of management, technology, engineering and sciences and other disciplines that are highly valued in the labour markets, but also in humanities, social sciences and liberal arts. Heavy neglect of the latter in Indian universities and also in many universities in advanced and emerging societies during the last quarter century, based on a misconception view that liberal arts education has become redundant, is widely believed to be the main source of several tribulations being faced by society. Comprehensive universities provide opportunities for holistic development of individuals.

Further, such universities have an important role at a time when disciplinary boundaries tend to become rigid, but interdisciplinary approach is becoming important for advanced studies and research. The cross-pollination of ideas that takes place when young minds and experienced teachers from different departments/schools interact formally and informally in comprehensive university campuses is a rich source of knowledge development in and across disciplines. Comprehensive universities that offer research and teaching at undergraduate and postgraduate programmes in a large variety of disciplines form, by expanding intellectual space, valuable fertile grounds for the creation of rich knowledge. Comprehensive universities provide excellent avenues for interdisciplinary research, drawing from social, scientific and technical fields, that is becoming increasingly important to solve modern society's complex problems. By 'comprehensive university', I do not mean one that has necessarily all disciplines, but one which necessarily has a large cluster of major disciplines covering a wide variety of areas.

19.2.5 Universities can be Good Either in Teaching or in Research but Not in Both

In principle, the well-cherished triad of research development, dissemination of knowledge through teaching, and community service is the common frame for all universities. This means that universities should aim at producing brilliant researchers, inspiring teachers and socially responsible citizens. They should 'both stir social progress and support the life and work of a bank of scholars sharing the expertise of the old and the creative imagination of the young' (Weber 2015, p. 165). This might require universities to offer not only high-quality teaching and research programmes, but also provide opportunities for holistic development of individuals.

But many universities in India tend to become largely teaching institutions and research is confined to a few universities and to institutions of higher education outside the university system. Not only funds for research, but also a good research-promoting environment is lacking in many universities. Some also argue that there is nothing wrong if some (or many) universities focus on teaching and be known as teaching universities and only a few concentrate on research and emerge as research universities, though the idea of a research university never really acquired roots in India. The bifurcation is also justified by the principle of comparative advantage. Some teachers are good in teaching and not in research and some in research and not good in teaching.

These tendencies and arguments overlook the point that research and teaching are related and mutually enrich each other. Teaching contributes to excellence in research and research to excellence in teaching (Charles 2017). It may be noted that research university, as defined by Clark Kerr (2001), is a 'multiversity', with a multiplicity of missions among which research is only one, but where research and graduate study dominate; it is not devoid of high quality teaching programmes. It is well known that many universities that are regarded as world's leading research universities are also having very high quality teaching programmes at undergraduate and graduate levels. So there is nothing like a pure 'research university' with no teaching programmes.

As A.M. Shah (2005) narrates, the early Indian universities remained affiliating and examining bodies for a long time; postgraduate teaching and research departments were set up in the early twentieth century;

and it was only after Independence that the functions of universities in India were reorganised and research was given impetus. Thus, research culture in Indian universities is hardly 100 years old, and with declining budgets and changing priorities, it rarely bloomed well in many universities (Patel 2016). The overall priority for research in universities is missing. With severely truncated faculty, universities struggle to complete the task of teaching, conduct examinations and award degrees, and find little scope for improving research culture to a significant level, even when interested. The government does not seem to accord much priority for research in university systems and it looks towards either a few research-focused universities, or more importantly specialised research institutions in public and private sectors for their research needs; much of the research activities are thus getting concentrated in government and private research institutions or non-government organisations, specialised laboratories, and think tanks outside the university system (Shah 2005). As a result of all this, research has languished in universities. A major part of the university community lacks interest in research activities and is content with teaching.

But it is important that every university is required to necessarily have a major research component along with teaching. Teaching and research together form the centrepiece of a university. The attempt should be towards developing a strong, vibrant and high quality research programme and equally high quality education programmes in universities. University is a 'school of higher learning combining teaching and scholarship' (Perkin 2007). Teaching, scholarship and research go together (Barnett 2005). After all, knowledge creation and knowledge transmission are two important functions of a good university and a good university should engage in both and balance both. As André Béteille (2010, p. 193) observed, 'An institution will scarcely deserve to be called a university if it undertakes only teaching and no research, or only research and no teaching'. Universities that offer research, and teaching at undergraduate and postgraduate programmes in a large variety of disciplines may form valuable fertile places for the creation and dissemination of rich knowledge in a grand way and emerge as great universities. Only such universities may have huge potential to become world class universities and figure high in global university rankings. Recall that the idea of Humboldtian university represents a holistic combination of research and teaching.

19.2.6 Segmentation of Higher Education will Increase Quality and Quantum of Output

Another kind of segmentation of the higher education system has been separation of undergraduate studies from postgraduate studies. A vast majority of about 40,000 colleges in India offer undergraduate teaching programmes only; very few of them offer postgraduate studies. Almost all universities get confined to teaching at the postgraduate level. Research is not a major activity in many universities, as already mentioned. Undergraduate students are taught by college teachers and postgraduate students in universities are taught by university teachers. While there are not many differences in eligibility and service conditions of teachers, university teachers in many states require a Ph.D. degree, while in many states postgraduates with M.Phil, (or without M.Phil but having qualified the National Eligibility Test) are appointed as teachers in colleges and to a less extent even in universities. This may have its own effect on the quality of teaching.

The Indian higher education system is dominated by undergraduate students—88% are enrolled at the undergraduate level and hardly 10–12% in postgraduate and research programmes. The ratio of undergraduates to postgraduates works out to be something such as 7.3:1 compared to almost 1:1 in the top ten American private universities and 2.8:1 in the top ten public universities. It is 1.7:1 in the top ten universities in Asia-Pacific and 2.5:1 in British universities (Tai, n.d.).

Further, in many places in India, university teachers are considered superior to college teachers. This has not only led to the university community looking down at undergraduate studies but also led to a truncated approach to university education as if there are no effective linkages between undergraduate and postgraduate studies.

Ideally, as Yashpal Committee suggested every university may offer undergraduate, postgraduate and research studies in the same university campus by the same faculty. This is also the practice in many Western universities. There are significant advantages in having composite campuses with all undergraduate, postgraduate and research studies, in terms of quality of instruction, availability of library and laboratory resources and higher transition rates from undergraduate to postgraduate levels and from postgraduate to research levels.

Is Diversity Important in a University? 19.2.7

In the recent past, some have raised this question, which I find really awkward. Most production units maximise their output by taking homogeneous inputs and tend to produce homogeneous outputs. Heterogeneity or diversity in inputs or outputs is not generally a practice. Equating university institutions to manufacturing units, some feel that in the university systems this would lead to efficient production, if the university takes less heterogeneous students, if not exactly students from homogeneous groups. Private schools are found often performing better than public schools, exactly for the same reason: many elite private schools admit only students belonging to a given socio-economic group. Teaching a group of students who belong to one social strata is easier than teaching a diverse group of students. Teaching students coming from diverse backgrounds is indeed a challenge, but many good university teachers, and even good school teachers, enjoy it.

Basically, universities are expected to be truly universal in their character. They should attract students and faculty from different parts of the country and even from other countries, from different social backgrounds, and different ethnic, linguistic, cultural backgrounds. Diversity in student and faculty composition is considered as an important essential characteristic feature of a strong university system. Diversity produces a variety of benefits (ACE 2012): it expands worldliness of students; it enhances social development through interactions and relationships with people from a variety of groups; it prepares students for the future labour market which has a diverse workforce in a national and global society; it demands and promotes creative thinking, expanding one's capacity for viewing issues or problems from multiple perspectives, angles and vantage points, rather than viewing the world through a single-focus lens; diversity enhances self-awareness, through learning from people whose backgrounds and experiences differ from one's own, sharpening self-knowledge and self-insight; it compels students to challenge stereotyped preconceptions; it creates curiosity and encourages critical thinking; and it helps students learn to communicate effectively with people of varied backgrounds. It enhances an overall knowledge base and offers an enhanced overall educational experience.

The civic benefits of diversity are also immense. Education within a diverse setting prepares students to become good citizens in an increasingly complex, pluralistic society; it fosters mutual respect and teamwork; and it helps build communities whose members are judged by the quality of their character and their contributions. Diversity benefits all;

it increases cultural awareness among all; and it provides a broader and complete perspective to all. Available research (Alger et al. 2012; Shaw 2005) shows that the overall academic and social effects of increased diversity on university campus are likely to be positive and significant, ranging from higher levels of academic achievement to a long-term improvement in social cohesion and harmony.

Hence, every effort should be made to have students and faculty in every university campus from different social, economic, cultural-ethnic, religious and geographical backgrounds. Universities have to be genuinely inclusive of diverse groups of population for ensuring a rich and challenging learning environment. For the same reason, many universities offer fellowships even to foreign students as it would enrich the learning environment in their campuses. Certainly, homogenous populations are considered not conducive for a good learning environment.

Universities should necessarily be designed to be universal in character, scope and jurisdiction, with students and faculty drawn from various socio-economic echelons, different cultural backgrounds, diverse ideological milieu, and from various regions of the country and even the globe. The habitat of the university should be inclusive of diverse groups of population. Diversity, not just in terms of social groups of students but also with respect to a variety of aspects, is necessary, so that learning becomes a rich experience in the university. As a simple thumb rule, if I can propose, to promote regional diversity it can made compulsory that say, about 50%, of students and a somewhat higher proportion of faculty in every university in India be necessarily drawn from states other than the state where the concerned university is located, similar to the provision that exists in institutions like the National Institutes of Technology. In fact, in central universities and other central institutions these proportions need to be higher. This will produce a multitude of externalities—better understanding of and respect for various cultures, ability to 'learn to live' together (one of the four pillars of education, highlighted by the Delors Commission 1996), contributing immensely to national integration, social harmony and global citizenship. Further, with respect to teachers in universities, it may be necessary to recruit quality teachers from various regions of the country and even other parts of the world, and also it is good to think of a nation-wide, all-India, recruitment of teachers, so that the best talented teachers are recruited, and transfers are allowed across universities within the state and country. This might result in better regional distribution of talented teaching manpower and thereby better production of quality graduates.

19.2.8 Segregate to Equalise!

I extend this argument of diversity to draw attention to another fragmented, if not sectarian approach, being adopted in planning development of universities. It is nowadays a little bit controversial too. As a form of protective discrimination and affirmative action, for long periods, some countries have had set up universities exclusively for some racial groups, or gender, or some other group, essentially with a view to advance the educational levels of the specific population on the presumption that these sections of society do not get enough opportunities to develop in integrated universities, and/or that they require special courses of study that are not relevant for others, and that the general courses of study are not relevant for these populations. Varsities for women, tribal population and minority institutions for specific racial (blacks and browns in the United States), ethnic (Asian or African, again in the United States), religious (e.g., Muslims, Christians and Sikhs in India) and linguistic groups—all belong to the same category. All these are categorised in the literature and public policy documents as, 'state-sponsored segregated minority-serving institutions'. It is believed that forward but minority communities do not need separate institutions; they anyhow participate and perform well in separate or common institutions, like for example, the students in Asian-serving minority institutions in USA whose graduation rates are higher than general and other minority-serving institutions; the problem is with weaker sections who may not participate or perform well in common institutions and hence special institutions. No doubt, their cause needs to be advanced. But such state-sponsored segregated minority institutions exist not only for weaker or backward communities but also for educationally advanced communities such the Asians in USA or Jains, Sikhs and Christians in India.

What is the best strategy? There is still an inconclusive debate among sociologists and legal experts on the principle of 'separate and equal' or 'segregate to equalise' and 'integrate to equalise', an issue that first came up in 1890 in the United States, and later in many other countries.

But how far these segregated institutions are good for the development of a healthy university system? Do not the students in these special institutions suffer huge losses in such contexts in terms of learning common values for the development of nations, and specific benefits of learning about other cultures and do the students even in other general

institutions not incur, to that extent, or forego huge opportunities of learning to live with others in the society? And does the nation as a whole not suffer from such losses incurred by different groups of population? Does such an approach of segregation help universities to perform the expected role of social integration and social harmony to help in developing a socially harmonious society? These questions are too important to ignore; but we tend to be confining to recognising only the narrowly conceived benefits of education that these institutions confer on them.

Some, though limited, research also shows that educational gains of minorities in minority institutions are not substantial; in fact, students in minority institutions seem to perform poorly—in terms of graduation rates, compared to students belonging to minority groups in normal non-minority institutions in the United States (Li and Carroll 2007).

While in case of a school system, state-sponsored segregate schools are still justified to some extent—but only to a limited extent, the need for the same at the university level is not found to be that high. Segregation is found to be not promoting equality and 'separate but equal' is not considered a valid doctrine anymore. Integrated universities with additional strong support mechanisms may serve interests of the minorities as well as national interests much better than having separate institutions for weaker sections or minorities. Integrated or composite universities with a high degree of diversity benefit all—not only the general population but also marginalised/minority groups.

Ideally, there is no place for such universities meant for a specific section of the society in a good national university system; every university must be for everyone; universities should be open to students of a very broad range of backgrounds. I have already described the immense magnitude of benefits that universities with high degree of diversity confer on the entire society.

19.2.9 Distance and Open Education Models are the Best Substitutes for Conventional Expensive Models of University Development

In the recent past, to meet increasing social demand for higher education, and to save scarce public resources and even to mobilise additional resources, an increasing emphasis has been laid on developing open universities and offer in other conventional universities distance education programmes. For the same reasons in the same context, use of information and communication technology is also advocated further in offering online and distance education programmes. Today in India, there are fifteen open universities, including one central and one private open universities, in addition to 118 universities which offer education through both conventional and distance modes. In all, about three million students are currently enrolled in these programmes.

The basic assumption of these modes of higher education is: knowledge is divisible and education can be imparted in packages. The online programmes and the more recent euphoria about the massive open online courses (MOOCs) underline this view that like in business, university experience can be unbundled and 'singles' can be made available for purchase by students; and consumers can purchase what they want or can afford (McCowan 2016), and it can be home-delivered. Much of the information communications technology that is being used, including, e.g., 'cloud computing' have good potential to facilitate information access, storage and transfer, but not to impart education per se. Second, these models also assume that teachers have no significant role in knowledge transmission. Third, they assume that the role of the university can be confined to knowledge dissemination; and that knowledge development and socialisation of youth are not important functions. Provision of short duration of contact hours does not satisfactorily address these issues. Fourth, peer learning or learning from peer groups, which educationists believe to constitute about one-third of total learning by students in regular universities, is not important. Lastly, physical learning environment is not at all important. The process of 'unbundling' knowledge into divisible micro units that takes place in these institutions represents, in the words of Tristan McCowan (2016, p. 517), 'an almost complete destruction of the idea of university as a place' of knowledge creation and dissemination along with providing a very valuable university experience. Finally, the resultant situation is described by Lange (2015, p. 95) as 'the rise of the digitised public intellectual [and] death of the professor' in the network-neutral internet age.

But unfortunately the same flawed assumptions also seem to guide planners in increasingly adopting semester and modular—fashionably known as 'cafeteria'—approaches in knowledge transmission in regular and open universities; and they have similar associated features that I have just described. Under the semester system, and also choice-based credit system, students get a chance to pick and choose different, not necessarily related and linked courses, in sequential semesters and each course is offered normally within a maximum period of 16 weeks, giving little time for an assimilation of ideas and for the generation of critical creative thinking on issues which actually require sustained interests for relatively longer periods. The underlying strong conviction is: knowledge can be 'delivered' in pieces and bits in small packages, and in short spells! This may be okay to some extent in training, but not in the area of education. Rather no distinction is being made in modern universities between higher education and training.

I argue that open universities are not effective alternatives for a good formal university. They could disrupt the fine fabric of higher education. Online and distance education programmes may be good for skill inculcation and provision of employment-related skills and education and certain other programmes, and they may serve some important purposes as well; nevertheless they are not good for the creation of knowledge, an essential function of universities; nor do they serve yet another important function of higher education, namely socialisation of the youth. They are conceived to be just appropriate for the poor who cannot economically afford or are not academically eligible for admission in regular university education programmes, creating through such an approach a dual system, causing new inequalities in higher education and in the society at large.

Basic limitations of these universities and programmes and the trade-offs involved have to be noted, and certainly, they should not be viewed as sound substitutes for formal public universities in the long-time horizon. They can at best be second-best alternatives in a short time period. There are few studies that demonstrate that graduates of open universities perform better in labour markets and in their lifetime, than graduates from regular universities. Lastly, except the Open University in the United Kingdom, no developed country has developed a large open university system. The online and other methods of distance learning in advanced countries are only used, wherever they exist, to supplement the knowledge and skill base with additional skills and knowledge required by the graduate manpower to adjust and readjust in the changing labour markets, while in developing countries like India these are viewed and planned as substitutes to formal university education system.

19.2.10 Private Universities Serve National Development Purposes as Efficiently as Public Universities

Presently, there are 235 private universities and 79 private institutions deemed to be equivalent to universities in India. Almost all of them have been set up after 1990. Private universities are encouraged as they are believed to be meeting social demand for higher education, capable of providing quality higher education and thereby improve the quality in the whole education system, and finally would promote equity in the system. It is also argued that private universities promote even national development, produce externalities and serve as public goods. They are argued to be as good as public universities, and they are the best option, given the scarcity of financial resources with governments.

I do not wish to discuss this at length, mainly because I have written and published quite a bit on private universities (Tilak 2006). To briefly note, there is no convincing evidence to argue that the claims made by proponents of private universities are valid. On the other hand, available evidence suggests that private universities, particularly profit-seeking private universities, can produce serious harmful effects on the education system, values and entire society. Rapid expansion, if not the massification of higher education has taken place in Western countries through public funding, but in developing countries like India, the attempt is to massify higher education through the massive involvement of the private sector. The evidence shows that result is patchy. The evidence also shows that with very few exceptions, countries that have predominant private higher education systems could not progress, economically, socially, politically or even educationally. Hence, it is certainly not a desirable strategy to develop profit-seeking private universities that too in place of public universities, while philanthropy-based private universities can be encouraged. But not-for-profit private universities are very few even in countries like the USA, and fewer in countries like India in the modern period. Finally, except in a few countries such as the USA, Japan and Korea, one finds no significant number of private universities in any advanced country, say in Western Europe, specifically in the Scandinavian countries, implying as if they are suitable only for developing countries like India. The often described 'successful' profit-seeking private universities that exist in countries like the USA represent actually the phenomenon of misapplied commercialism.

19.3 In Conclusion

I have described in the lecture a few major fallacies in planning university development, and contrasted them with some evidence. In conclusion, let us note that of late, the whole approach to planning university systems seems to be guided more by immediate, short term, narrow and pecuniary considerations and compulsions and by questionable presumptions and fallacious arguments rather than by long term and broad national and global considerations and theoretically sound and empirically valid research. Similarly, private, individual consumer (student) choices and market preferences, and not considerations for society seem to dictate the approach of the planners in education, like in many other modern sectors of production.

The fallacious approaches take us farther and farther away from the very idea of a university. In fact, I argue that the long-enshrined noble mission of the university is getting jeopardised. The ideal university that is described here may seem to be a utopian idea, but is real, though imaginary to some extent. As I have shown, historically, such ideal universities existed earlier in India and also in a few other countries and such universities are present even in the current modern period and it is not difficult to resurrect the idea of the 'ideal' university.

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Notes

- 1. I do not, however, necessarily agree with many other statements he made in the article.
- 2. See http://en.wikipedia.org/wiki/Nalanda.

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Database on Education

CHAPTER 20

Statistics on Education in India

20.1 Introduction

The nexus between education and national development is well established. As such, education figures prominently in the policy and programme planning agenda of most countries across the globe. Education is also an important priority area on the national agenda. There are several important goals and targets to be reached in education for it to contribute effectively to national development. This requires careful planning and formulation of effective programmes and schemes. Evidence-based planning and management of education has become important not only to justify higher investments in the social sector but also enhance the competitiveness of India in the global economy. Therefore, for proper planning and policymaking, very reliable and elaborate statistical base is a critical need. Given that educational planning has been recognised as an integral part of socio-economic planning, reliable and elaborate statistical base in education is necessary (UNESCO 1965). A sound statistical base in education assumes further importance because India is increasingly recognising the crucial role of education

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in socio-economic development. The availability of timely, relevant and reliable information on education at all levels (national, state, district, sub-district and school levels) makes a critical input for effective educational planning, administration, monitoring and evaluation.

Educational statistics system in India dates back to the pre-independence period. Annual Educational Statistics began to be collected since 1913-14, which was followed by quinquennial reviews. Before independence, the Directorate of Commercial Intelligence used to collect educational statics. It was only later, the Ministry of Education has assumed the responsibility for the same. Today several organisations are involved in collecting educational statistics. Educational statistics assume greater significance today than ever in view of the structural and systematic changes that are rapidly taking place in the social and economic sectors in India. Effective implementation of government plans and schemes obviously depends upon the powerful information base consisting of both quantitative and qualitative data in the international, national and subnational contexts. Not only that socio-economic planning requires convergence of strategic national development goals set in various sector plans but also defining the long-term development trajectory of the country. A sound and objective-oriented elaborate database in each of the sectors in the Indian economy, including education, therefore, becomes a non-negotiable enabling institutional requirement to place the country on the strategic development path.

Development policy interventions in India, of late, have been emphasising decentralisation in most of the sectors in general and in educational planning and administration in particular. The 73rd and 74th amendments to the Constitution emphasise decentralised decisionmaking for the development of the rural areas and also the urban local bodies, and make a pointed reference to education where decentralisation is considered highly desirable for the not only for purposes of efficiency and equity but also for effectively aligning programme planning to local contexts and needs. The Right to Education Act 2009 also outlines an elaborate role for decentralised planning and administrative machinery in making elementary education a fundamental right. In this context also, a strong database at subnational levels, particularly at the district and lower levels, would be essential. An education sector specific database would greatly facilitate not only educational planning but also provide inputs to planning of such aspects as manpower, labour market, demography, health, etc. Educational statistics are necessary for both short-term planning and extremely useful for perspective planning as well. In short, a sound information base relating to education can be considered to play an important role in educational planning, and overall economic planning in the country. Hence, long-term considerations should be borne in mind in deciding about reforming the statistical information systems.

While policymakers and planners experience the need for comprehensive database, researchers on education also experience in their research the need for latest, reliable and inter-temporally and interregionally comparable data and information. Research in education can be considered under two heads, namely, conceptual research and empirical research. Obviously, the two are not mutually exclusive; in fact, one feeds on the other. Empirical studies drawing certain generalisations for the purpose of conceptualisation, and the conceptual research trying to test the concepts—both require a sound information base. Educational research has to depend upon the information on many aspects, including intangibles. Demand of the researchers for data in this field is qualitatively of a different character. Researchers struggling to measure the phenomena, like human development, educational standards, performance levels in education, interface between educational status and health status, etc., require data on diverse aspects of these phenomena. In view of the difficulty in precise conceptualisation and definition of these phenomena, most often the phenomena are indicated by what are termed as the indicants rather than the variables in question themselves. Thus, the indicants of the social phenomena may be innumerable, some of which could be even intangible, and in whose case, once again, information on the 'indicants' may be felt necessary. Hence, the education researcher is actually engulfed by what may be termed as the need for 'information quagmire' or 'data labyrinth'. It depends upon the efficiency and expertise of the researcher in such a context to judiciously identify the relevant information and data and use them for the purpose of meaningful analysis.

One can identify four purposes for which educational statistics are important: (a) for making sound policies and effective plans, (b) for efficient administration and management, (c) for research, and (d) for information, and dissemination of information. For the purposes of proper policymaking, planning, and management and for research, very reliable and elaborate statistical base is critical. The various purposes for which education statistics are required by the planners, policymakers and researchers can be grouped into two broad categories, as shown in Fig. 20.1.

Large parts of data required for different purposes described in Fig. 20.1 might be common. In other words, same datasets could be put to different uses. One may require some additional details for a specific purpose. For a long time in the development planning process, the

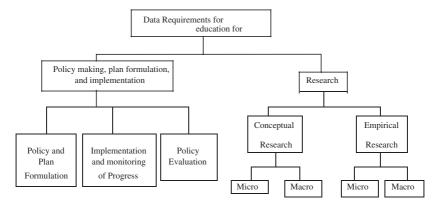


Fig. 20.1 Purpose for which educational statistics are required

information system, relating particularly to education in India, did not receive due attention.

Educational statistics divisions and statistical officers even today continue to remain marginalised. However, with the shift in the perceptions of the policy planners about the role of education in development, particularly education as investment, the development planning paradigm in the social sector has changed significantly during the last two decades. With the increasing awareness of the role of education in socio-economic planning, the nature, quality and scope of the system of education statistics, their collection processes, and publication have improved in the country, although much needs to be done to improve the existing information system on education for facilitating strategic planning and efficient management of the sector.

Concentrating on these aspects, the present paper attempts to:

- review the current status of educational statistics,
- identify and discuss problems relating to educational statistics including their reliability, comparability of data collected by various institutions, gaps in data and the bottlenecks in their timely processing and dissemination, and outline important strategies for streamlining and improving the whole system.

The unsatisfactory status of educational statistics in India did receive the attention of researchers and planners much earlier. There was a high-level committee constituted to review educational statistics in 1982 (Ministry

of Education 1982). The committees under the chairmanship of A.M. Khusro in 1983, the advisory committee constituted by the Ministry of Education in 1999 and many others highlighted the important gaps in educational statistics and made many recommendations. In addition, there were a few important accounts of the status of education statistics and several suggestions also have flown from those studies and reports.¹ Some aspects of the diagnosis and some of the recommendations made earlier are still valid. Since the turn of this century, the Government of India has taken several initiatives to improve the education management information system in the country that includes constitution of the Review Committee on Educational Statistics under the chairmanship of S. Sathyam in 2007 and an Expert Group under the Chairmanship of R. Govinda in 2011. The Review Committee on Educational Statistics constituted by the MHRD recommended adopting unified system for collection and dissemination of educational statistics to overcome difficulties arising from multiple sources of data. Subsequently, the expert group on unified educational statistics provided a road map to evolve the unified system for collection of school education statistics. While the Sathyam Committee came out with around 120 recommendations to improve the database for education sector as a whole, it suggested several major interventions for improving the current database in school education, which includes expanding the information infrastructure and staff at all levels, from national to state, district, block and cluster levels, going for an unified set of concepts and definitions in school education, a unified system of school education statistics, use of technology for improving collection, collation and dissemination of educational statistics and online access to raw data for deepening the use of educational statistics in research, planning and management of education and improving accountability through building public awareness and enabling wider participation of various stakeholders in education development debates (MHRD 2008).

Putting in place a unified system of school education statistics was the most challenging recommendation of the Sathyam Committee. While accepting the Sathyam Committee recommendations, the Ministry of Human Resource Development (MHRD), Government of India constituted an Expert Group headed by R. Govinda to prepare a road map for implementing the Unified District Information System for Education (UDISE) in the country. The road map recommended by the expert group on UDISE-included establishing a dedicated department at national, state and district levels to act as a nodal agency/point for collection and dissemination of school education statistics. The expert group suggested that the mechanism

to collect and disseminate school education statistics ought not to be tied to any education development schemes/programmes. Further, it recommended integration of existing databases on school education designed and maintained by NUEPA, i.e. the District Information System for Education (DISE) relating to elementary education and the Secondary Education Management Information System (SEMIS) into one single system in phases from the academic year 2012–13 onwards. It was also observed that proper maintenance of records in schools is a critical ingredient in the adoption and sustenance of unified system for collection of school education statistics. The expert group identified a set of core records to be maintained by each school and recommended its adoption across the country.

The attempt of the paper here is to present an updated view of the current status and highlight the needed improvements. While discussing the present status of educational statistics, the role of the various agencies in collection, processing and publication of the educational statistics like the MHRD, Central Statistical Organisation (CSO), National Sample Survey Organisation (NSSO), the National Informatics Centre (NIC), the National Council of Educational Research and Training (NCERT), National University of Educational Planning and Administration (NUEPA), etc., are also briefly described. The requirements of researchers and planners, and gaps in educational statistics are identified.

The paper is organised in four sections, including the introductory section. Section 20.2 proposes to make a critical assessment of the nature and quality of educational statistics collected and published by various organisations, mainly the Department of Education (DOE) of the MHRD, the NCERT, the NUEPA and the NSSO. Strengths, deficiencies and gaps in the data are also identified. It presents a panoramic view about the nature of the data requirements and availability for the purpose of research as well as policymaking and planning in education. Section 20.3 gives a brief account of efforts towards computerisation of educational statistics or the electronic management information system in India and Sect. 20.4 presents a short summary and outlines a few recommendations for the improvement of the status of education statistics in the country—in terms of the scope, converge, quality, reliability and timely publication.

20.2 Nature and Status of Educational Statistics

A large number of organisations collect and publish educational statistics that are used in one form or the other in educational planning and research in India. These organisations are broadly of two categories:

- Those which are directly involved in education decision-making or in providing technical support in decision-making and collect statistics as a part of their regular activities; and
- Those organisations which although are not directly involved in any education function, nevertheless collect statistical information from primary and secondary sources.

Some of the organisations of the first category include the Departments of School Education & Literacy (DSE&L) and Higher Education (DHE) of the MHRD, University Grants Commission (UGC), Planning Commission, NCERT, NUEPA, etc. The second category includes the Office of the Registrar General of India (Census of India), the Directorate General of Employment and Training (DGET), NSSO, etc.

Educational statistics can be classified as follows:

- Regular educational statistics, such as the ones published by the MHRD, NCERT, UGC, Office the Registrar General of India, etc.,
- Ad hoc educational statistics, collected and published by NSSO, National Council of Applied Economic Research (NCAER), DGET, International Institute of Population Studies (National Family and Health Surveys of IIPS), etc., and
- Purpose-specific educational statistics, such as the ones collected largely from secondary sources by the Institute of Applied Manpower Research (IAMR), Planning Commission, Indian Council of Medical Research (ICMR) (for information on medical education in India), All-India Council for Technical Education (AICTE) (for technical education), Indian Council of Agricultural Research (ICAR) (for information on agricultural education in India) and Indian Council of Social Science Research (for information on social sciences).

It may be useful to note the nature of educational statistics available from some of the above sources.

(a) Departments of School/Higher Education, Ministry of Human Resource Development

Obviously, the MHRD is the single most important official source of educational statistics, published by the Government of India.

The Departments of School/Higher Education of the MHRD publish a large set of statistics on education in a number of publications, some of which are annual publications, some are periodically produced, and some are produced occasionally. Some important publications are listed in Table 20.1. The list is selective and not exhaustive. There are quite a few publications, many of them being occasionally published, and some others discontinued.

A brief description of the most important among these publications is given below.

(i) Education in India

Of all, *Education in India* is the most important one; it gives comprehensive statistics on a variety of aspects of education, by levels and by

Table 20.1 Selected list of statistical publications of Department of School/Higher Education, Ministry of Human Resource Development, GOI

Sl. no	Name of the publication	Periodicity
1.	Education in India	Annual
2.	Selected Educational Statistics discontinued since 2007–08	Annual
3.	Statistics of School Education	Annual
4.	Statistics of Higher and Technical Education	Annual
5.	Handbook of Education and Allied Statistics	Occasional
6.	National Level Educational Statistics at a Glance	Annual
7.	Educational Statistics at a Glance	Annual
8.	Analysis of Budget Expenditure on Education	Annual
9.	Annual Financial Statistics of Education Sector	Annual
10.	Allocation of Plan Expenditure during FYPs	One for every five-year plan since 10th plan
11.	Results of High School and Higher Secondary Examinations	Annual
12.	Foreign Students Studying in Indian Universities	Occasional
13.	Indian Students and Trainees Going Abroad	Annual
14.	Annual Report of the MHRD	Annual

states every year. This is being published since 1946–47. For several years, it was published in three volumes: Volume I concentrates on enrolments, teachers and institutions; Volume II provides details on incomes and expenditures of educational institutions and Volume III is on examinations. Since 1984–85, each volume has further been split into two parts, one on school education, and another on colleges.

The present existing system of collection of educational statistics was introduced in 1976–77 on the basis of the recommendations of the Sixth All-India Conference on Educational Statistics, held in 1975. Under this system, it was decided to collect the basic minimum statistics on education from state governments with a staggering time schedule in different types of forms, namely, ES-I, ES-II, ES-III and ES-IV.² Further, it was also decided that detailed data on education would be collected on quinquennial basis to fill up the gaps under the annual system. It was also proposed that sample surveys would be conducted on regular basis to fill up other data gaps. In addition, it was also decided to collect certain important and basic statistics (data on number of students, institutions and teachers) quinquennially at the district level that would help in analysing regional disparities in education and to formulate plans and programmes for reducing disparities.

Statistics are collected from the individual education institutions, but they are consolidated at block, district, state and national levels. Statewise and national level data are finally made available in published form in *Education in India*.

Education in India, earlier used to be the principal source of information, provides a lot of useful statistics. The statistics provided therein enable one to build time-series data on a few select important dimensions of education situation, enables interstate, inter-temporal and intra-sectoral (interlevel) comparisons. It provides information for estimating enrolment ratios, pupil—teacher ratios, expenditure per student, and analysing income and expenditure aspects of education by levels. However, Education in India suffers from some major weaknesses. It lacks important information on: (a) unrecognised institutions; (b) non-formal education; (c) wastage, stagnation, survival and promotion rates; (d) socio-economic background of students; (e) attrition rate of teachers; (f) data on school attendance; and (g) enrolment by age groups. In fact, there are many more weaknesses and gaps, some of which are associated with other publications as well, and some of which are described in later sections.

Second, there has been a long time lag in the collection of educational statistics. It is 3–4 years in the case of some states in respect of Vol. I (on students, institutions and teachers) and more so in case of financial statistics (Vol. II) and still longer in case of Vol. III. The latest volume on *Education in India* is available for the year 1999–2000, dated by more than 12 years. Vol. III seems to have been discarded altogether. The major reasons for time lag are reported to be: the huge magnitude of the number of institutions from which the data is to be collected; delay in the printing and consequential supply of institutional proforma by the states; lack of sufficient and trained statistical staff, particularly at the district and block levels; and low priority given to collection processes in general. However, there is a long time lag in processing and publication as well. Latest volumes on college education [Vols. I, II and III (C)] refer to much earlier years.

For a long time after independence, *Education in India* was being published in two volumes, i.e., *Education in India* and *Education in States*. The later ceased its publication in the late 1960s. The MHRD seems to be attempted at reviving the same, and also published a similar one in the form of *Education in the States/Union Territories*. The first volume was published in 1998 and the second volume in 1999. It gives a few details in brief on several aspects of education situation in the several states and union territories.

(ii) Selected Educational Statistics/Statistics of School Education

Selected Educational Statistics, another important publication of the DOE, of the MHRD, is, in a sense, an answer to some problems of time lag. This annual publication contains the same data as are available in Education in India, but very briefly. More importantly, it is published until recently with very little time lag. It gives state-wise information on educational institutions, by levels, enrolments of total, scheduled caste and scheduled tribe population, by gender, teachers, pupil-teacher ratios, gross enrolment ratios, and a one-page information on state-wise plan and non-plan budget expenditure on education (totals). Obviously, the most important shortcoming of this publication is absence of many details, including specifically on income and expenditure. Second, when many of the statistics provided in it are provisional in nature, one occasionally finds differences in the statistics provided in Education in India and the Selected Educational Statistics. Moreover, since 2007/08, the publication Selected Educational Statistics seems to have been replaced

with the publication entitled *Statistics of School Education*: the latest volume of the Statistics of School Education is available for the year 2010–11.

(iii) Analysis of Budgeted Expenditure on Education

The Analysis of Budgeted Expenditure on Education published annually by the MHRD covers a three-year period, and gives several details on budgeted expenditure on education by levels and states. This publication provides information on actual, revised and budget estimates on various categories for three consecutive years. The latest year for which this publication is available refers to 2011/12 along with time-series data. There is also a cumulative one, covering the period from 1951–52 to 1993–94, prepared in 1995 (Department of Education 1995). Quite a few important details are available on budget expenditures on education, including by levels of education, and major items (heads) of expenditures. Data given in this volume and those in Education in India are not strictly comparable, but they are somewhat complementary.

The Analysis of Budget Expenditure concentrates on government expenditure only and follows a government budgetary classification and provides details on plan and non-plan expenditures and under revenue and capital accounts; but misses quite a few important details, while Education in India adopts a more functional economic classification of expenditures and incomes, such as recurring and non-recurring incomes/expenditures. Budget Analysis also does not give any idea of the income and related aspects of the education sector. Expenditures are disaggregated by certain items, but not exhaustively. Important details such as expenditure on salaries of teachers and others are not separately given.

Another annual publication titled *Annual Financial Statistics of Education Sector* was started by the MHRD since 1996. It presented summarised details of the budget expenditures on education, given in the *Analysis of Budget Expenditures*. This publication also seems to have been discontinued by the MHRD. In fact, hardly a few additional details were available in the *Annual Financial Statistics* that were not available in the *Analysis of Budget Expenditure*.

(iv) Other Publications of the MHRD

The MHRD also publishes quite a few other important statistical volumes. For example, it publishes A Handbook of Education and Allied

Statistics. The first publication in this series was brought out in 1980 and the fourth in 1996. Though it is a handbook giving information in nutshell over a time period—continuously or often at regular intervals, yet, it is a very useful publication and provides information collected from various sources. Besides, the MHRD is bringing out the publication entitled Results of High School and Higher Secondary School Examinations since 2007/08, Educational Statistics at a Glance since 2008, and Statistics of Higher and Technical Education since 2006/07.

As described in Table 20.1, there are quite a few other important publications of the DSE&L and DHE, MHRD on a variety of aspects of education in India—at the national level and at state level. Most of these publications are useful, when these focus on aspects that are not covered in other volumes. But some publications are drawn from some other equally popular publications of the MHRD that are produced almost around the same time.

It may be mentioned that, recently, the MHRD has initiated a survey, i.e. All India Survey on Higher Education (AISHE) to create a database to assess the status of tertiary education in the country. A Task Force headed by the Additional Secretary (HE), MHRD with representatives from UGC, AICTE, MCI, IASRI, CSO, Universities, State Higher Education Departments oversee the survey. The first (2010–11) survey report provides a profile of higher education institutions, including profiles of teachers, non-teaching staff, academic programmes conducted by school/centre/department/faculty, intake/enrolment in higher education institutions, examination results and receipt and expenditures of higher education institutions. The survey is an annual feature and the latest report of the survey (provisional) is available for the year 2011–12.

The survey covers the entire country. In the survey, institutions of higher education have been categorised into three broad categories—i.e. universities, colleges and stand-alone institutions. A list of 621 universities, 32,974 colleges and 11,095 stand-alone stand institutions was prepared during the first survey for the year 2010–11. In the absence of the data on the total number of institutions of higher learning in India, the core list of institutions to be covered in the survey has been prepared by consulting the websites of the state governments, ministries and institution and consulting the central ministries, councils and state governments for providing the list of institutions under their control. Therefore, the list of institutions of higher learning prepared for the survey is not exhaustive. The first survey (report published in 2012),

however, could cover only 554 universities, 17,023 colleges and 5713 stand-alone institutions. The survey is conducted online for which a dedicated portal (http://aishe.gov.in) has been developed. The survey uses an e-DCF for collecting data, which can be expanded according to the structure/size of the institution. Once data are uploaded by all the institutions covered under the survey, data compilation is done automatically in predesigned report formats. One unique feature is that the filled in DCFs are always available on the portal, which can be accessed by the institutions and related departments and authorities. So far, the survey has not been successful in covering all the institutions of higher learning in the country as it collects data online using the portal, http://aishe.gov.in. It will take some time to institutionalise the survey process and create a reliable database on higher education in India. As of now, this—a large sample survey, seems to be the only source of information on higher education in India.

In addition to some of the problems described above, there are two important problems associated with the several publications of the MHRD. First, many a time, statistics published in different publications are not consistent with each other. For example, there are differences even in the case of enrolments given in the Education in India and Selected Educational Statistics. Secondly, how far are the educational statistics published by the MHRD reliable? It is widely opined that the statistics on enrolments given in the MHRD publications and also a few other publications (e.g., NUEPA) that rely on data collected from schools, could be over-biased, as schools tend to over-report enrolments with a view to (a) get more teaching posts, (b) get more other enrolment-dependent grants and incentives under various education development schemes such as the Sarva Siksha Abhiyan (SSA) and the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and (c) give a false idea of rapid progress in enrolment drives and towards reaching the goal of universalisation of elementary education. As a result, the statistics on not only enrolments, but also on pupil-teacher ratios, wastage/dropout rates, etc., are subject to suspicion.

(b) National Council of Educational Research and Training

(i) All-India Educational Surveys

All-India Educational Surveys are another important source of educational statistics in India. These surveys were launched in the beginning

with a view essentially to provide critical inputs into the formulation of the five-year plans, by providing information on schooling facilities and other related aspects. These Surveys give a clear picture of the nature and quantum of educational facilities available in the vicinity of every habitation in the country and help to properly plan and locate primary, middle, and high/higher secondary schools in the plan period. After all, this is one of the earlier stated primary purposes of the surveys.

The All-India Educational Surveys, among others, provide information on:

- rural and urban habitations by population slabs served by primary, upper primary; secondary and higher secondary schools within a defined distance from the nearby habitations;
- villages according to the facilities for non-formal education;
- villages according to the facilities for adult education and functional literacy;
- primary, middle, secondary and higher secondary schools with various types of facilities available, including infrastructural facilities, such as type/quality of buildings, number of classrooms, space, playgrounds, instructional and learning material, quality of teachers, etc.;
- class-wise and gender-wise enrolment of children by age in urban and rural areas:
- number of teachers by gender and by qualifications (of science and mathematics teachers);
- attrition rate of teachers in primary, middle, secondary and higher secondary schools;
- schools offering vocational courses, enrolment in vocational classes, availability of workshop facilities and qualification of teachers, etc.

Thus, the information provided by these surveys is indeed unique, because it is not available otherwise from any other source. This refers particularly to the quantity and quality of schooling facilities available across the nation. Such information was extremely useful for launching programmes, like 'Operation Blackboard', proposed in the National Policy on Education 1986⁴ and the implementation of various provisions of the Right to Education Act relating to establishment of schools

in neighbourhoods. Further, the strength of these surveys is that they are a census counts rather than a sample survey, implying that facilities and the related aspects about each school are enumerated. Normally, the *All-India Educational Surveys* do not collect any data on finances and related aspects.⁵ Also except in case of the third survey, higher education is deliberately kept outside the scope of these surveys. The surveys are confined to school education only.

So far, eight surveys have been conducted. The first survey was conducted in 1957 by the Ministry of Education and Social Welfare.⁶ It provided valuable inputs for the formulation of the Third five-year plan that focused on the expansion of schooling facilities on a large scale. The periodicity of the surveys was decided in such a way that they provide inputs for the five-year plans. However, it could not exactly happen in case of subsequent surveys and the subsequent five-year plans, due to inordinate delays in launching and conducting the surveys and processing the information.⁷ The seventh in the series was renamed as 7th All India School Education Survey (7th AISES, with the reference date of 30th September 2002) to specifically indicate its scope i.e., School Education. The 8th AISES with 30th September 2009 as the reference date focuses on collecting relevant data for monitoring implementation of the SSA.

The overall objective of the 8th All-India Educational Survey was to develop the database to estimate and analyze a set of educational indicators for:

- Describing the current status of school education system at different levels with respect to access, enrolment, retention, participation in school process and achievement,
- Assessing the progress of educational development and indirectly the success of policies, programmes and project interventions by tracking the direction and magnitude of change in the values of the indicators over time, and identifying problems or deficiencies in the system for necessary intervention, and
- Assessing equity in educational opportunities and achievements across relevant levels and subpopulations of the education system for possible interventions needed to remove disparity by administrators, policymakers and researchers.

The coverage of the data collected under the 8th survey is as follows:

- Availability of schooling facility for primary, upper primary, secondary and higher secondary stages within the habitations (including SC/ST) in different population slabs. In case the facility is not within the habitation, the distance at which available.
- Availability of basic facilities in the recognised schools, such as building, classrooms, drinking water, electricity, urinals, lavatories, incentive schemes and beneficiaries, medical check-up and vaccination/inoculation of students.
- Class-wise enrolment (all categories, SC, ST, OBC, Economically backward minority communities—Muslim) and children with disabilities by sex) in primary, upper primary, secondary and higher secondary stages of recognised schools.
- The subject-wise enrolment at higher secondary stage, availability of laboratories and library, physical education teachers, librarian, guidance counsellor, non-teaching staff in the recognised secondary and higher secondary schools.
- The position of teachers (by sex and SC/ST/OBC/) with academic and professional qualifications at different school stages in recognised schools.
- Distribution of recognised schools in regard to languages taught and languages used as a medium of instruction.
- Enrolment and teachers in primary/upper primary classes of unrecognised schools.
- The position of enrolment and instructors in schools/centres under the Education Guarantee Scheme & Alternative and Innovative Education (EGS&AIE).
- Number of children and teachers by sex in pre-primary schools.
- The position of enrolment and teachers in oriental schools, viz., *Maktabs, Madrasas* and *Sanskrit Pathshalas*.
- Class-wise enrolment by single age, new entrants, promotees, and repeaters in the context of UEE (NCERT 2016).

The second survey was conducted in 1965, the third survey in 1973, the fourth in 1978, the fifth in 1986, the sixth in 1993, the seventh in 2002 and the eighth in 2009. Except the first one, all others were conducted by NCERT. Except the fourth survey, all other surveys were conducted with a gap of more than five years. In view of differences in periodicity,

a systematic comparison of the progress in respect of education during different five-year plans would be difficult. It is desirable to have such educational surveys at specified fixed intervals. These surveys should immediately precede the starting of the five-year plan so that information is available for plan purposes, as originally anticipated. Also, the gap between two successive surveys should be strictly five years; this will facilitate the assessment of progress for a uniform period of five years.

The reference date for different surveys also differed. For the first survey, the reference date was 31st March 1957. With regard to the other surveys it was decided to have reference date when enrolment in schools gets stabilised. For the second, third and fourth educational surveys, the reference date was 31 December of the respective years of survey, and for the fifth and the sixth surveys, the reference date was 30th September 1986 and 30 September 1993, respectively. For this reason also, precise comparison of the information between surveys becomes difficult. However, by and large, the information may be taken to refer to the year in which reference date falls.

More importantly, because of the erratic periodicity of the surveys, the results of the surveys could not provide timely inputs into the formulation of the five-year Plans, and in general, their utility in planning gets reduced. That many operations involved in the survey were manual in nature posed quite a few other problems in addition to delay in their production. The surveys could not provide required details at micro decentralised levels, including at district levels. The focus had been on the national and state level results and the records of the results at district and below district levels were not maintained. In fact, raw data were lost. The surveys are conducted by the NCERT with the assistance of state education departments. That there is no permanent structure and machinery to conduct the surveys on a regular basis is found to be an important problem. It is for the sixth survey that NCERT collaborated for the first time with the NIC. Though the arrangement did not reduce the time lag much, it was envisaged that (a) decentralised level data would be available, and (b) data would be available to the planners and researchers in electronic media.⁸ Since then the quality of AISES has improved significantly. However, the large time lag in making the survey data available for use in policy planning and programme management is making the data obsolete and less useful.

In addition to the problems relating to time lag, retrieval and other aspects, another major problem relates to incompatibility of the survey

data with the data collected by the MHRD. Substantial differences are found between the two with respect to enrolments and several aspects. Attempts to reconcile the two datasets were not found to be easy.⁹

From the above, it is clear that *All-India Educational Surveys* are very useful sources of educational statistics. The last three surveys have compiled comprehensive information, all of which is computerised. Unfortunately, school-wise and village-wise information from all the surveys is not available at all in a systematic way. Since these data were not computerised, such inter-temporal comparisons of the details about education are unfortunately not possible. It is alarming to learn that some data are even destroyed after every three years because of difficulties in storage.

Table 20.2 presents survey-wise details in a summary form. Apart from the year, reference date, scope, status of computerisation, the table gives brief comments on whether the survey data are comparable with those from other sources, and on other aspects.

(c) National University of Educational Planning and Administration (NUEPA)

(i) The District Information System for Education (DISE)

Since the turn of the twenty-first century, the NUEPA has been playing a critical role in revamping the information base both for school and higher education in the country. With the implementation of the externally funded primary education programme in India [i.e. the District Primary Education Project (DPEP)] in the mid-1990s, the need for creating and/or strengthening decentralised/district level database for planning and management of elementary education was felt. NUEPA (the then NIEPA) took the lead role in developing a system for data collection and management called the District Information System for Education (DISE). Initially, the coverage of DISE was limited to elementary education in project districts in India, i.e. districts covered under the DPEP. With the implementation of mostly the nationally funded country-wide education for all programme called the Sarva Siksha Abhiyan (SSA) since 2001, the coverage of DISE expanded to ultimately include all the 640 districts and all the schools in the country. The State and District Project Offices were made responsible for collection and management of data under the DISE; the same arrangement still continues today. The point here is that such an initiative for creating a district level

(continued)

Table 20.2 All-India Educational Surveys—survey-wise details and comments

Survey and responsible agency	Year and reference date	Scope	Status on computerisation	Reconciliation of data with other sources and other comments
(1)	(2)	(3)	(4)	(5)
First survey Ministry of Education and Social 1957 Welfare (MOE) 31.3.	31.3.1957	School education Census enumeration of schools, teachers, enrolment, etc. Only recognised primary schools as the first enumeration unit. Village as the second enumeration unit. All habitations in the village considered	Not computerised	These data are not reconciled with the Census enrolment figures or figures published by the MOE
Second survey MOE and NCERT	1965 31.12.1965	As above	Not computerised	These data are not reconciled with the census figures or figures published by the MOE
Third survey MOE, NCERT, IAMR and UGC	1973 31.12.1973	School education, college education and university education For the first time enumeration of unrecognised schools was attempted Teacher training institutes at pre-primary, elementary and secondary levels Professional profiles of teacher educators developed. Hostels for SCs and STs also covered Data on financing of education including the financing of private schools were also collected Information about school buildings, playgrounds, laboratories was also part of the survey Sampling frame as in the case of the first and second surveys	Partially computerised	Reconciliation of these data with the data from other sources not attempted

Survey and responsible agency	Year and reference date	Scope	Status on computerisation	Reconciliation of data with other sources and other comments
(1)	(2)	(3)	(4)	(5)
Fourth survey	31.12.1978	School stage		Report brought out in 1980
Fifth survey	1986 30.9.1986	School stage, Educational facilities at various school dot be stages Distance of the school from the habitation particutory of SC and ST population Availability of physical facilities, like school buildings, playgrounds, drinking water, urinals, lavatories, furniture and other facilities like medical check up of students, incentive scheme, etc. Position of inputs like blackboard, chalk, library, laboratory, book banks etc. Three schedules, viz, village information form, urban information form and school information form were developed	Most of the data not computerised	Preliminary report of brought out in Feb. 1989 Data are not comparable with the data collected by other agencies

(continued)

Table 20.2 (continued)

sarvey ana responsiote agency	Year and reference date	Scope	Status on computerisation	Reconciliation of data with other sources and other comments
(1)	(2)	(3)	(4)	(5)
Sixth survey	1993	Present position of educational facilities at various	Planned to be	Census codes and Education
NCERT, NIC, and State/UT	30.09.1993	school stages, distance to be covered by child to	computerised	surveys codes are the same.
Govts.	Canvassing	reach the school, enrolment in general and of SC	Database availa-	Hence reconciliation with
Tools:	made to all	and ST and girls in particular with special reference	ble on NICNET	1991 Census possible.
Village Information form (VIF)	villages,	to UEE	Provisional	Reconciliation not done
Urban information form (UIF)	All urban	Physical facilities like playground, furniture etc.	tables released	Reconciliation with the
School Information form	areas	Basic Amenities like medical check-up, drinking	on 19th	data from the Ministry of
(SIF-2) of Education meant for	Selected	water, urinals, etc.	December 1995	Education not attempted
compiling information about	schools	Educational inputs like blackboard, library labora-		Teachers are supposed to
languages and media of instruc-	through SE	tory, textbooks bank etc. Selected school incentives		give information to both
tion, school buildings, sports	All teachers	for enrolment. Pre-primary educational facilities		DOE and NCERT and
and other facilities, medical	in selected	Habitation as unit of data collection along with		the reference date for both
check-up, incentive schemes for	schools	school as unit		also is reported to be 30th
students, class-wise	Schools and			September. The actual data
Enrolment by age and sex, for	districts			compiled for the MHRD has
all, SC and ST	All degree			the purpose of facilitating
Class-wise repeaters	colleges with			determination of grants
Teacher Information Form	classes XI and			to institutions, and hence
(TIF)	XII			may possibly refer to the
Educational Finance Form	All CD			beginning of an academic
(EFF) Income and expenditure	blocks/urban			year. Hence, the two sets
of the schools	areas			of data are not comparable.
College Information Form				Further probing regarding
(CIF)				this question is necessary
Educational Statistics: A Flash				Incomplete data; not published
(ESF) 2% data entry error				Data are available on
provided for				CD-POMe

(continued)

Table 20.2 (continued)

Survey and responsible agency	Year and reference date	Scape Status on Computer	Status on computerisation	Reconciliation of data with other comments
(1)	(2)	(3) (4)		(5)
Seventh survey conducted in 2002 (reference date 30th 8 Sixth Survey with minor modifications with similar covera data on access, participation, teachers, etc. were collected Eighth survey conducted in 2009 (reference data 30th St the Seventh Survey with minor modifications with similar detailed data on access, participation, teachers, etc. were c towards UEE due to implementation of the SSA. The tim the survey redundant from the point of view of their ise in NCERT on NIC is perceived as the main reason for huge	2002 (reference da ations with simils chers, etc. were or 99 (reference dat modifications with tion, teachers, etc ation of the SSA. oint of view of the the main reason f	Seventh survey conducted in 2002 (reference date 30th September 2002) using more or less the same tools as that of the Sixth Survey with minor modifications with similar coverage. No attempt was made to collect finance data, while detailed data on access, participation, teachers, etc. were collected Eighth survey conducted in 2009 (reference data 30th September 2009) using more or less the same tools as that of reading available on the Seventh Survey with minor modifications with similar coverage. No attempt was made to collect finance data, while detailed by major limitation detailed data on access, participation, teachers, etc. were collected. The survey was somehow focused to monitor progress towards UEE due to implementation of the SSA. The time lag in making available the processed data has almost made the survey redundant from the point of view of their ise in policy and programme planning. Too much dependency of the	hat of the detailed at of while progress made cy of the	Data available both in hard copy and in CD-ROMS. Huge time lag in making available processed data is a major limitation Flash statistics available on the web portal; data are being processed

database on school education was undertaken in a project mode, and it is yet to be mainstreamed into the official education management information system. It is only recently attempts are being initiated in this direction. Although the statistics generated under the DISE were extremely useful, in fact, extensively used for policymaking, district planning and monitoring elementary education in the country, these were not formally given the status of official statistics. However, the existence of the DISE was critical for promoting evidence-based planning and management of elementary education in the country.

The DISE (NUEPA 2011a), for the first time, collected offline data from the school using structured Data Capture Format (DCF) and computerised the same at the district level. Data computerised at the district level were then transmitted to state and national levels for further processing and dissemination. NUEPA acted as the nodal agency both for implementing DISE and analysis and dissemination of data collected under the DISE. It may be noted that primary and upper primary sections rather than the school were the unit for data collection under the DISE, which means that in secondary schools having primary and upper primary sections, for example, information about the secondary section and other related aspects were not collected under the DISE. Because of this segmental approach to data collection, schools were finding it difficult to provide reliable data on common facilities, for example, infrastructure, equipments, teaching and non-teaching staff. The DISE prior to becoming the part of the Unified-DISE (U-DISE) in 2012-13, was collecting information on a few key aspects of elementary education and was providing the following:

- *School profile*, including their location, management, type, size of school funds, staffing pattern, medium of instructions, number of instructional days, mode of evaluation of learning achievements, etc.:
- Availability of physical facilities and equipments in the school, which included information on status of school building and related infrastructure like drinking water and toilet facilities, playgrounds, boundary wall, library, IT infrastructure and computer-aided learning facilities, rooms for extracurricular activities and teaching staff, disabled friendly infrastructure, etc.;

- *Mid-day-Meal information*, that included data on availability of noon meal, related infrastructure and staff for effective implementation of the scheme at the school level;
- Profile of teachers and part-time instructors, including information on social background of teachers, their employment status, educational and professional qualifications, teaching experience, training status, classes and subjects taught providing a rich database on teachers in elementary education sub-sector; and
- Enrolment, attendance and repeaters by location, age, grade, sex and social category.

Till 2011-12, the DISE database served as the basis for developing the district elementary education plan formulated under the SSA as well as for monitoring and reporting progress in the SSA. With the enforcement of the Right to Education Act since April 2010, the DISE database assumed further importance in planning and monitoring progress with respect to several provisions of the Act Besides efforts by the state governments, NUEPA made concerted efforts to improve the quality, use and reach of DISE data. Apart from sample checks at the school level to improve the reliability of data, DISE was put in the public domain to facilitate extensive use of both published and raw data, which provided timely feedback from the users on the reliability of the database. A website of the DISE (www.dise.in) was created to increase access to its database and reports, which is maintained by NUEPA. However, till its merger with U-DISE (NUEPA 2012), the DISE database was perceived relatively less reliable and states did not sincerely consider accepting the DISE data as their official statistics (see, e.g., Mehta 1996). However, the reliability and comparability of DISE data had improved significantly since 2005-06. Discrepancy in the data for several variables reported under the DISE with that of other sources was a major problem. Some of the major publications (either in soft and hard copies) available under the DISE are:

- Flash Statistics (annual);
- Elementary Education in India (annual);
- Analytical Reports on Elementary Education in India, separate volumes for rural and urban India (annual);
- State Report Cards on Elementary Education (annual);
- District Report Cards on Elementary Education (annual);

- School Report Cards (annual, more than 1.3 million, generated online only); and
- Analytical Tables on Elementary Education in India.

(ii) The Secondary Management Information System for Education (SEMIS)

Mid-way through the 11th five year plan (in 2009), the Government of India went for implementing a country-wide development programme for secondary education in line with the SSA, called the Rashtriya Madhyamik Siksha Abhiyan (RMSA). The overall objective of the RMSA is to provide equitable and affordable quality secondary education for all. It aims at improving significantly access to and quality of secondary education by 2016-17, i.e. increasing GER in secondary education to 90%, improving in-school infrastructure, staffing and teaching-learning facilities and making secondary education relevant. It may, however, be noted that the experience gained from the implementation of the SSA formed the basis for designing the RMSA. One of the important lessons learnt from the SSA was that absence of comprehensive school-level data severely affects the quality of planning and monitoring of large-scale programmes like the SSA. In fact, the SSA had to struggle hard during its initial years of implementation to gather data and information for taking policy decisions and effective programme planning ant the district level. Keeping this in view, the MHRD, Government of India desired to create a district-level database on secondary education prior to designing and launching the RMSA. Subsequently, NUEPA in consultation with the state governments designed and implemented a data collection and management system for secondary education called the SEMIS in 2007. Data collection under the SEMIS started from 2008-09 and it continued till 2011-12. The SEMIS and the DISE were then merged to create a unified system for the entire school education called the U-DISE in 2012-13 that considered school and not section/level as the unit for data collection.

Like the DISE, the SEMIS was also implemented through the project mode and formed the basis for planning and management of secondary education under the RMSA. Right from the beginning, the MHRD's emphasised on evidence-based planning taking school as the unit for most interventions under the RMSA. It gave a fillip to the implementation of the SEMIS. The unique feature of the SEMIS was

that it was designed as an online system for data collection and management, and as such, states had no option but to adopt the SEMIS database. NUEPA served as the nodal agency for implementing the SEMIS and www.semis.in was the platform for managing the database. However, the SEMIS had a brief existence and became an offline system in 2011-12, and in 2012-13, formed a part of the U-DISE. The policy decision to make the SEMIS offline was, in fact, largely regressive as it made offline data less reliable and prone to manipulation. However, on the other hand, the decision to create the UDISE also took into consideration the school's access to ICT infrastructure, particularly the internet, that compelled the authorities to take such a decision. Like the DISE, the SEMIS had also faced problems relating to reliability and comparability. Coverage of secondary and higher secondary level institutions, particularly privately managed institutions was a major challenge of the SEMIS. Lack of IT infrastructure at the school and district levels could not take the SEMIS to its intended level, i.e. the school.

The scope of the SEMIS (NUEPA 2011b) was fairly broad to include all key variables on which data are required to plan both at school and district levels. The SEMIS collected information on several aspects of secondary education and provides the following:

- *School profile*, including information on location, management, sources of funding, size of the school in terms of lowest and highest grades, school type, language of instruction, stream-wise courses offered at higher secondary level, composition of SDMC, etc.;
- *Enrolment and repeaters* by grade, study stream, age, sex, social category and minority status, and enrolment and repeaters of physically challenged children;
- *Teacher provision*, including data on sanctioned posts and teachers in position by sex and subject specialisation, distribution of teachers by their highest educational qualifications and training status, etc.;
- Infrastructure and teaching-learning facilities, including information on condition of the school building its classrooms and other rooms and ancillary facilities like drinking water and toilets, other infrastructure like boundary wall, playground, common rooms for teachers and staff, activity rooms, science and computer labs, electricity, telephone and internet connectivity, furniture for teachers, staff and students, etc.;

- *Provision of non-teaching staff*, particularly office staff, lab and library attendants and c watchman;
- Examination results, including data on number of regular students appeared and passed out board exams at secondary and higher secondary levels; distribution of secondary and higher secondary level graduates by range of marks secured in the exam, etc.; and
- Receipts and expenditure at the school level, which included data on civil works, annual school grants, minor repair/maintenance grants, grants for sports equipment, expenditure on excursion trip for students and study tours outside the state and remedial teaching.

Besides, the online report generation facilities, SEMIS data was disseminated through publications like Flash Statistics of secondary Education (Annual) and State Report Cards on Secondary Education (annual) by NUEPA. NUEPA also brought out an exclusive publication entitled, *Statistics on Secondary Education in India* (based on SEMIS 2009–10 data). The important shift in the design of the DISE and SEMIS was that they were much more user friendly, and end-use focused. These two systems were designed to support decision-making in education.

(iii) The Unified District Information System for Education (U-DISE)

Following the recommendations of the Sathyam Committee (2008) and the Expert Group headed by R. Govinda (2011), both the DISE and the SEMIS were merged to create U-DISE, which has been implemented since 2012-13. The major difference between the DISE/SEMIS and UDISE is that while the former used to take a given level/section of school education as the unit for data collection, viz., primary, upper primary, secondary and higher secondary, the later took the school/institution as the unit for data collection. U-DISE thus overcame the major issue encountered in the DISE and SEMIS, i.e. how to divide the common infrastructure, TLM facilities and staff between primary, upper primary, secondary, and higher secondary levels in a given school/institution? Besides, the U-DISE also aims at streamlining the school records for improving reliable database in the sub-sector. The U-DISE, it is expected, would facilitate strategic planning in school education in India, which takes the school as the unit for planning of most development interventions. Like DISE and SEMIS, U-DISE is IT savvy though it is yet to

become an online system. It covers almost all variables covered under the DISE and the SEMIS for data collection, except the common core facilities and staff of the school, which are not reported under U-DISE by level of school education. Computer software with reporting facilities developed by NUEPA facilitates management of U-DISE. Currently, the U-DISE data for the year 2012–13 are being processed to be disseminated through publications in line with that of the earlier publications of DISE and SEMIS. At this stage, therefore, it is difficult to comment on the quality and reliability of educational statistics generated under U-DISE.

It is important to note that the available database on education hardly fills the gap in the education finance statistics, and such resource allocation decisions in the public sector are often least supported by empirical evidences leading to avoidable mistakes and inefficiencies.

(d) National Sample Survey Organisation

NSSO regularly conducts Social Consumption Surveys based on a large national sample of households and some specific surveys focus on education and health. Table 20.3 provides information on specific NSSO surveys which focus more on education and related statistics.

The data collected on education in the 35th (1981–82), 42nd (1986–87), 47th round (1991), 50th (1993–94), 52nd (1995–96), 61st (2004–05), 64th (2007–08) and 66th (2009–10) rounds were found to be very important. Other rounds also provide important details on education and related characteristics of population. The data collected in the 35th round could not be finally made available due to technical problems. The 47th round focused on literacy. The report giving all-India figures for the 42nd round on participation in education has been published in *Sarvekshana*. The 52nd round was a repeat survey of the 42nd round after a decade. These surveys and the 53rd round helped in estimating literacy rates in India for the period after 1991 and until 1997.

In the 61st round (Report No. 517), apart from the information on education collected in earlier rounds, information on some new items such as type of institution for those attending educational institutions, particulars on vocational training received by household members were collected. Besides, information on current attendance in educational institutions was collected for persons of age below 30 years. For formal vocational training received, information on field of training, duration of training, source of degree/diploma/certificate received were also

Table 20.3 NSSO reports and data sets on education available on CD-ROM

Reports	
No. 412:	Economic Activities and School Attendance by Children in India 1993–9
No. 439:	Attending an Educational Institution in India 1995–96
No. 517:	Status of Education and Vocational Training in India, 2004–05
No. 532:	Participation and Expenditure in Education in India: 2007–08
No. 551:	Status of Education and Vocational Training in India, 2009–10
Data sets	
Round 42:	Participation in education
Round 47:	Literacy and culture
Round 52:	Participation in education
Round 61:	Status of education and vocational training
Round 64:	Participation and expenditure in education
Round 66:	Status of education and vocational training

Note These are in addition to reports and data sets on other aspects of consumer expenditures and others

collected (NSSO 2006). In the 64th round (Report No. 532), important information on household profile, distance to various levels of schooling facilities, status of current enrolment and attendance, type of institution attended, students getting free education and educational incentives, average annual private expenditure per student on education by level and type of education and major components of private expenditure and their shares in the total expenditure, major reasons for non-enrolment and major reasons for dropping out of the school were collected. The 64th round on participation and expenditure in education was broadly similar to that of the 52nd round (1994–95). However, some of the key new additions to the 64th round are as follows:

- Detailed information on education for persons in the age group 5–29 years were collected compared to data on 5–24 years in the 52nd round;
- Besides general and technical education covered in 52nd round, the 64th round covered vocational education;
- Information was collected on distance to various schooling provisions rather than distance to primary, upper primary and secondary schools as was the case in 52nd round;
- Information on expenditure on education was collected for at least two courses instead of one course;

- Relevant data for estimating repetition rates were collected; and
- For class X and below, questions on grade completed before dropping out/discontinuance and type of school last attended were introduced (NSSO 2010).

In the 66th round that focused on assessing the status of education and vocational training in India, information on literacy, attainment of general and technical education, current attendance in educational institutions, vocational training received, etc. was collected. In this round, information on 'whether receiving/received any vocational training' was collected for persons of age 15-59 years instead of age 15-29 years as it was in 61st round (NSSO 2013).

The NSSO surveys on education provide valuable information on a number of characteristics:

- Children currently attending schools in various age groups,
- Children who are never and ever enrolled in schools,
- Data on working children,
- Reasons for non/never enrolment and drop-outs,
- Population by the status of literacy,
- General and vocational educational attainment of population,
- Educational attainment of workforce,
- Workforce participation by educational levels,
- Employment/unemployment status of educated persons,
- Household expenditure on education,
- Socio-economic profile of students, etc.

An important feature of data provided by NSSO is that many educational characteristics of the population are available not only by gender and social background (caste), but also by economic levels of households (household expenditure levels). Such information at national level is very scarce and in this sense, the NSSO fills a major gap. Since many such dimensions of education and related aspects are not available from other sources, NSSO data complement other datasets.

In contrast to the data collected by the MHRD and also the NCERT, the data generated by the NSSO are based on the household surveys (like the Census reports), and hence, they are generally believed to be yielding more realistic estimates of enrolment/non-enrolment status of children and other aspects of education situation in the country.

An important problem with NSSO data on education is its periodicity. It is important that surveys, like the 42nd round, the 52nd round, and 64th round are made a regular activity of NSSO, to be launched at regular intervals, so that data would be available at regular intervals for inter-temporal analysis. Second, access to original datasets of the NSSO is not regarded to be easy by the educational planners and researchers, though efforts are on recently to make the data available to the users through electronic media. The datasets and reports on education that have now become available on CD-ROMs are given in Table 20.3.

(e) Planning Commission

Planning Commission does not actually collect much data. However, one of its statistical publications provides important data on plan allocation and expenditures on education in the annual and five-year plans. The publication entitled *Analysis of Annual and Five-Year Plan: Education Sector* provides details on progress in plan expenditures on education during a given five-year plan period, outlays and actual expenditures under major heads by states, and also progress in enrolments and other important targets of the Plan.

Though it concentrates largely on plan expenditures only, the publication is useful as it provides some important details like approved and revised outlays and actual expenditures by sectors of education, by states and by years in a five-year plan period.

So far, very few issues of this publication were brought out, though one expects them to be published every year, corresponding to every annual plan. They are brought out more as occasional publications rather than as regular annual publications of the Education Division of the Planning Commission, though the intention of the Planning Commission seemed to be to bring it out as an annual publication regularly.

(f) University Grants Commission

For a long time, the UGC used to publish *University Development in India* on an annual basis, which used to give several details on universities, enrolment, teachers, etc. Only limited data on expenditure on higher education were provided. It used to be confined to grants made by the UGC. The publication altogether ceased in the early 1980s.

Further, in the mid-eighties, it was decided that *Education in India* should be published separately for higher education. Consequently, the

UGC was entrusted with the responsibility of collecting and publishing statistics regarding higher education institutions. However, UGC has not been able to publish data until now. Subsequently, it was decided that the DOE of the MHRD would resume publication of Education in India covering both school education and higher education. But volumes on higher education are yet to be resumed. All this has created a total gap in statistics on higher education, particularly on expenditure and income aspects. Special efforts are needed to fill the vacuum.

Second, in case of higher education, it would be useful to collect and publish statistical information university-wise. Except for a few random publications of the Association of Indian Universities (AIU) and NUEPA, which also concentrated on a few universities only, no information is available at the national level on each university. Attempts are now being made under the All-India Survey of Higher Education for improving the coverage of the database on higher education and its time lag.

(g) Office of the Registrar General of India (Census of India)

The population census is the most comprehensive source of information on a few important educational aspects of the population. The census is based on a national survey conducted once every 10 years of all the households in the country, and information is available at village, district, and state levels. Nowadays, the data are also made available through electronic media and hence even data at different disaggregated levels could be accessed, 11 important aspects on which information is available in census reports include the following:

- Distribution of population by single year age,
- Number of literates and literacy (and also illiterates and illiteracy) rates.
- Levels of educational attainment of population,
- Workforce participation of educated manpower,
- Participation of children in schooling (and other activities),
- Selected data on number of schools (and other amenities) by villages, etc.

Data on educational characteristics of population are available by gender and caste/religion categories as well. In addition, the survey of degree holders and technical personnel, processed by the Council for Scientific and Industrial Research (CSIR) provides valuable information on the size and characteristics of scientific and technical manpower in the country and its utilisation in various activities of the economy.

Sizeable differences in the estimates of enrolments based on census and those provided by the MHRD are also noted.¹² It is regarded that the census provides most reliable data, as it collects data from each and every household in the country. However, frequent changes in the concepts and terms are found to be causing problems of inter-temporal comparisons.

Processing and publication of the census reports involve a lot of time and as a result, many reports are released with considerable delay. Some of the census data are computerised and are being made available in computer disks, which should help planners and researchers the timely use of the data.

(h) Institute of Applied Manpower Research

The IAMR used to publish *Fact Book on Manpower*, giving a good compilation of data on a variety of aspects of scientific and technical manpower. This publication was discontinued and in the recent years another title, *Manpower Profile of India* is published. It is largely a compilation of statistics from different sources, with a focus on technical manpower, giving details on the size of the manpower, the activities the manpower is employed in and other aspects. Department of Science and Technology (DST) also compiles such statistics and publishes them regularly in their annual statistical handbook and pocket book.

(i) Others

As mentioned earlier, there are several other organisations that collect and publish education statistics. Among them, two organisations that have recently conducted extensive household surveys at the national level and collected data on education (and health) may be mentioned. The International Institute of Population Studies (IIPS) has conducted in the recent past three rounds of National Family and Health Survey (NFHS) which yielded valuable data on education to estimate enrolment/non-enrolment rates of children in schools and educational attainment of population in major states and India as a whole. ¹³ The first survey was conducted in 1992–93. Encouraged by the success of the efforts and the usefulness of the data generated, a second round was conducted in 1998–99, and the third survey in 2005–06. Similarly, the NCAER conducted a human development survey in rural India and produced valuable datasets on education status of rural children in India, and repeated

 $\begin{tabular}{ll} \textbf{Table 20.4} & \textbf{Important organisations (other than MHRD) and their important statistical publications on education \end{tabular}$

Sl. no.	Organisation	Publications
1.	National Council of Educational Research and Training (NCERT)	All-India Education Surveys
2.	Planning Commission	Analysis of Five Year Plan and Annual Plan:
	n	Education Sector
3.	Registrar General of India (RGI)	Census Reports
	Institute of Applied Manpower Research (IAMR)	Fact Book on Manpower (discontinued) Manpower Profile, India
	National University of Educational	Surveys of Educational Administration in States
	Planning and Administration	District Information System for Education (DISE)
	(NUEPA)	Secondary Management Information System (SEMIS
		Unified District Information System for Education
		(UDISE)
	National Sample Survey	• 35th Round
	Organisation (NSSO)	• 42nd Round
		• 47th Round
		• 50th Round
		• 52nd Round
		• 53rd Round
		61st Round 64th Round
		• 66th Round
		Most of the statistics are generally published in
		Sarvekshana
		Other important reports are:
		• Report No. 394: Literacy in India (47th Round)
		 Report No. 412: Economic Activities and School
		Attendance by Children of India (50th Round)
		• Report No. 439: Attending an Educational
		Institution in India: Its Level, Nature and Cost (52nd
		Round)
		• Report No. 517: Status of Education and
		Vocational Training in India, 2004–05 (61st Round) • Report No. 532: Participation and Expenditure in
		Education in India: 2007–08 (64th Round)
		Report No. 551: Status of Education and
		Vocational Training in India, 2009–10 (66th Round)
.	University Grants Commission	University development in India (discontinued)
	(UGC)	annual report
	National Council of Applied	Human development profile of rural India (Oxford
	Economic Research (NCAER)	University Press, 1999)
).	International Institute of Population Studies (IIPS)	National family and health survey
0.	Directorate General of Employment and Training (DGET)	Employment exchange statistics

in 2004–05. UNICEF has recently launched a major sample survey of primary and upper primary schools and households in as many as eight states. The data, when available, are expected to provide valuable insights into quite a few important dimensions of participation and non-participation in schooling. Since the survey covers schools as well as households in the same villages, one may be able to make in-depth analyses of several closely related dimensions. Besides, NGOs like *Pratham* Foundation also bring out sample-based survey reports annually on school education. The latest survey of *Pratham* entitled, *Annual Status of Education Report* is available for the year 2012–13. Table 20.4 gives a short list of important organisations and their publications.

The status of some of the major educational statistics can be summed up as in Table 20.5.

Table 20.5 Important education statistics, sources and major gaps

Statistics	Source	Major gaps
Education statistics		
Enrolments	MHRD	Receipts and expenditure at
	NCERT	the school/institution level
	NSSO	learner's achievement levels
	Census	
Institutions: schools, col-	MHRD	Unrecognised institutions
leges and universities	NCERT	_
	Census	
Teachers	MHRD	Teachers by educational qual-
	NCERT	ifications and experience (now
		collected under UDISE)
Expenditures	MHRD	Opportunity costs
Public expenditure	NSSO	Private costs
Household expenditures		
School facilities	NCERT	Age of the institution/
		buildings
Related statistics		o de la companya de
Demography	Census	
Labour market	DGET	
Scientific and technical	Department of Science and	
manpower	Technology (DST)	
Economy	Central Statistical	
•	Organisation (CSO)	
	Reserve Bank of India (RBI)	

20.3 Computerisation of Educational Statistics

With the widespread use of computers, several efforts are being made for computerisation of educational statistics. MHRD had initiated efforts to partially computerise educational statistics first in 1986. The NIC is actively involved and NICNET services are being used. First, a project called Computerised Planning for Education (COPE) was launched for the collection of data through a computerised system necessary for planing and implementation of universal elementary education. Later, it was felt necessary to develop a broad programme of computerisation of educational statistics. Since mid-1990s, steps have been taken to computerise educational statistics and substantial progress has been achieved in projects like DISE, SEMIS, UDISE, AISES and AISHE that aim at creating database in school and higher education sub-sectors. However, the status of computerisation of officially accepted educational statistics is very poor in the country.

With the launching of the District Primary Education Programme (DPEP), extensive computerisation was attempted. The DISE was launched in all DPEP districts. Subsequently, DISE was expanded to cover all the districts in the country. Besides, SEMIS was launched in project mode in 2007-08 by NUEPA. Currently, U-DISE is being implemented by NUEPA to create database in school education subsector. These systems were highly successful in using IT applications for creating and managing database in school education. Besides, IT applications and platforms have been used to disseminate data and information and making raw data accessible to users, particularly researchers and personnel engaged in planning and management of education. For example, NUEPA has developed its own software for DISE (www.dise.in), SEMIS (www.semisonline.net) and U-DISE (www.udise.in) and maintains exclusive web portals for managing the database. Similarly, the NCERT has also created its own web portal for managing and disseminating survey data on school education (www.aises.nic.in and http://www.ncert.nic. in/programmes/education survey/index education.html). These organisations also make available data on CD-ROM. Nowadays, most of the publications on educational statistics by the MHRD, NSSO, Planning Commission, etc. are available online. But some of the titles relating to earlier years are being removed from the website.

It may be underlined that the online reporting systems need to be further improved under the DISE/UDISE, AISES and AISHE. Besides,

putting in place the IT infrastructure at the school/college, sub-district and district levels continues to be a major challenge in the computer-isation of educational statistics in the country. While NIC in playing a key role in promoting computerisation of educational statistics, it alone would not be able to address the concerns of the educational institutions and sub-district level organisations. The need is to strengthen district education office in terms of IT infrastructure and personnel for collection, analysis, storage and dissemination of school education statistics in the country. In the same fashion, the state education department should play a key role in collecting and managing database on higher education, where institutions of higher education play a key role in participating in the online system of data collection and management. The key to the slow progress in creating computerised database in education is the rigid institutional perspective on the use of such statistics, i.e. for reporting progress.

20.4 Summary and Recommendations

20.4.1 Summary

The importance of a reliable and sound statistical base in education for sound policymaking, effective planning and strong research in education needs no emphasis. The need for a sound statistical base increases in the rapidly changing socio-economic conditions of the country. To assume that the requirements of the researchers and policymakers/planners are totally different is erroneous. The needs of the planners and researchers are not altogether mutually exclusive. There are lots of common statistics that are required by both the groups. In fact, it is difficult to imagine a set of statistics that would be exclusively useful to either the researchers or the planners, and not useful to the others. The statistical base in education in India is vast and diverse; and it is also associated with a few major strengths and weaknesses. The paper briefly reviewed the current status of educational statistics in the country, identified major gaps and shortcomings and stressed on the need for measures for improvement.

Some improvements have been initiated in the recent past. But some of them have also caused a few problems. To reduce the time lag in production and to make the statistics concise, some of the important details have been sacrificed, which was realised only later. For example, income by sources and expenditures by items, grade-wise learning achievement

levels of students by location, sex and social category, etc., are some such statistics. Some more problems also arose relating to time-series comparisons. Certain data are available for the earlier years but not for later years. Details on private schools, for example, were available for earlier, but not for later years. Some of the concepts have also changed. For example, the concepts like 'direct' and 'indirect' expenditure were replaced by 'recurring' and 'non-recurring' expenditure, etc., though the new classification does not conform to the standard terminology in economics like 'variable' and 'fixed costs'. But exact time-series comparisons become difficult. Whenever there has been a change in the definition and scope of terms, an attempt may have to be made to reconstruct the whole series for the earlier years according to the changed definition, to the extent they are available in records, just as the CSO does with respect to national economic indicators, whenever the base year of the price index is changed.

The description of current status of educational statistics attempted in the paper, may be summed up as below:

- Vast data relating to education are available.
- Most of these data are collected by different agencies. 16
- Data collected by different agencies are not strictly comparable due to definitional problems, differences in reference dates, different purposes for which data are compiled, etc.
- There is no coordination between different organisations involved in collection and publication of statistics.
- Inter-temporally also, these data are not strictly comparable even though collected by the same agency, because of different reference dates and changes in definitions and concepts.
- In recent years, educational data, particularly micro-level data are getting gradually computerised.
- The gaps in educational statistics are many, some of which can be listed as follows:
 - Age-specific entry rates of children;
 - Mobility/migration status of students both in rural and urban areas;
 - Educational institutions and pupils affected by civil strife;
 - Educational institutions by location in terms of specific areas like those dominated by tribes, scheduled castes, ethnic minorities, religious minorities, characterised by geo-physical difficulties and frequent natural calamities;

- Key variables on socio-economic background of pupils;
- Levels of learning achievement of pupils;
- Age of the educational institutions, including age of the buildings;
- Working days of institutions, particularly at the post-compulsory level of education;
- Private institutions, including self-financing recognised and unrecognised institutions, coaching institutions, etc.;
- In-service training facilities and coverage;
- Income and expenditures at institutional/school level;
- Private sources of finance:
 - household expenditures on education by items;
 - community contribution to education at different stages, regions, etc.; flow of funds from industries and others;
 - private costs of education, opportunity costs of education at different levels;
 - Other private investment in education in setting up private aided and unaided institutions.
- Time-series data about brain drain, by qualification and by age group;
- Waiting period of educated job seekers, by the level of education, etc.;
- There is a huge time lag in the availability of statistics—time lag between collection, processing, publication and availability to public.
- Three are a good number of missing years for which data, which otherwise were available for continuous years, is missing.
- Besides, there is a need for documenting qualitative information mostly in terms of best practices in planning and management of the school and higher education. A repository of such case studies would certainly guide policy planning and programme management in education.

It would be clear that though vast data are available relating to education from different sources, most of these data are not comparable. Also, data for many aspects of education are not available at all. With regard to the status of computerisation of the available data, it would be obvious that the position needs greater attention. Data on education are compiled by the individual state governments also. They are published in their official

publications like Annual Reports, State Plan documents, State Statistical Abstracts, etc. The data supplied by these and those in the Government of India publications are also not reconcilable. The state governments memoranda submitted to the Finance Commissions for the purpose of getting central assistance contain yet another type of numbers relating to education, but they are rarely published and are rarely available to researchers. Besides, as a part of programme management information system of several large-scale education development programmes like the SSA and the RMSA, data on several important variables particularly process-related variables are collected and managed. However, such data are hardly accessible and shared with the key stakeholders in education sector and sub-sectors. Thus, the current position regarding educational database is fairly unsatisfactory and highly confusing, calling for significant efforts for improvement.

20.4.2 Recommendations

The current system of educational statistics requires significant improvement. Some points of action are outlined below 17:

- 1. There are several agencies collecting the educational statistics, the most important among them being, apart from the DSE&L and DHE in the MHRD (Government of India), the NCERT, the NUEPA, the NSSO, the Census Organisation, the NCAER, the IAMR, the University Grants Commission, ¹⁸ etc. There is need for coordination between the several agencies that collect educational statistics. Coordination should be made by a nodal organisation as recommended by the Sathyam Committee, i.e. by establishing a National Commission on Educational Statistics/ National Centre for Educational Statistics. This would not only resolve several problems relating to coverage, comparability and relevance of educational statistics currently collected by multiple agencies but also make available educational statistics official.
- 2. As the experience so far reveals that the efficacy of the government in collecting, processing and publishing the statistics has not been very satisfactory, it is necessary to examine the factors responsible and improvements needed. The main responsibility of collecting the statistics should lie with the Government, but the responsibility of collating the available (once published) information, and

- constructing the time-series information, etc., could be given to research institutions.
- 3. When statistics are being collected by different agencies, it is necessary that:
 - uniformly defined terminology and common classifications of various items, are adopted, so that discrepancies between the data collected by different agencies are minimised, and they are made comparable;
 - there is not much duplication in the data collected;
 - quality and reliability of data are of high order and comparable in nature; and
 - to the extent possible, they become additive.
 - Uniform formats of the several forms being used need to be developed for various state governments, and other agencies.
- 4. A 'core information framework' should be developed, on which there cannot be any compromise in the quality, reliability, and timely publication. The core information is, however, not the minimum, not of course, the maximum. We should not end up with just the 'basic' statistics. The core framework should include almost all details that are essential for efficient planning and for good policy relevant research. It should provide micro-level specificities, along with macro level aggregate picture.
- 5. Such core information may consist of two parts: one kind of information may have to be collected every year, and from every institution on a census basis. Such core information should be collected from the education institutions, though if such information is available, it can be collected from the Block/District/State offices. The second kind of information (e.g., socio-economic profile of students, household expenditures on education, and levels of achievement of pupils) may have to be collected on a regular basis, not necessarily every year, maybe on a sample basis, and the source of information may be households/education institutions.
- 6. Government should take the responsibility of collecting, processing and publishing at least the statistics relating to the core information framework efficiently in time. A filtering system in the use and dissemination of educational statistics from district to state and national levels may be adopted in system for data management, particularly in school education, While the district and sub-district level units would be making extensive use of school education

- statistics, the state and national level organisations would focus on the data on those variables that directly influence policy planning and resource allocation decisions in school education.
- 7. One can adopt a somewhat flexible approach with respect to 'noncore' information, which is also crucial for planning, but which can be collected not every year, but at regular intervals, which can be collected on a sample basis and not necessarily on a census basis, and all of which need not necessarily be published, but should be available for the planners and researchers as well. Some of the non-core information can also be 'aggregate' information, and not necessarily institution-wise information.
- 8. In view of the importance being given to decentralised planning in development, it is also necessary that detailed data should be made available at district and sub-district levels for the planners as well as researchers.
- 9. The most important gaps identified in the present educational statistics, that may fall into the 'core information framework' are:
 - attendance of the students,
 - income and expenditures and related information of government, aided and unaided private schools,
 - statistics on utilisation of financial and physical resources in education,
 - learning achievement levels of students by management and location of the school, and by grade, sex, social category, etc. of pupils,
 - socio-economic background of the students, and
 - students '/households' expenditure on education.
- 10. When collection of statistics from certain institutions (e.g., unaided but recognised institutions) becomes difficult and time consuming, such statistics may be brought out as a separate publication, rather than delaying the publication of all the statistics.
- 11. The NSSO may be required to collect statistics on socio-economic background of the students, household expenditure on education, etc., as it does now, but on a more regular basis, at regular intervals, and in more details.
- 12. One of the important items on which information needs to be collected, though it may form a part of the 'non-core' category, is information on 'formal' unrecognised schools/institutions for higher education, as after all, they also impart education, and the database on the 'total' education system in the country will

- not be complete without such information. Other items refer to non-formal and adult education, open schools, etc., on which systematic data are not collected.¹⁹
- 13. Another important set of indicators on which data need to be collected refers to quality in schooling facilities, availability of text-books to the students, including the time of availability, number of textbooks available in each class, availability of teacher-guides, etc. Such information may, however, be collected by the NCERT in its *All-India Educational Surveys* and by the MHRD through its designated Technical Support Groups of large-scale school education reform programmes.
- 14. Care should be taken that if the data collected by different agencies, if they are incomparable in nature, quality, and reliability, are not aggregated together to arrive at the 'totals.' Otherwise, the overall quality and reliability of data may be subject to question. But efforts should be made by every organisation to collect reliable and accurate information.
- 15. To reduce the gap in the collection of statistics, system level improvements have to be made. First, institutions may be required to maintain records giving detailed statistics (as they maintain statistics on enrolment of Scheduled Castes/Tribes), for the latest 2–3 years. This will help prompt provision of statistics as and when required, and also help institutional planning. It may be mentioned that the Expert Group on UDISE headed by R. Govinda has made detailed recommendations for improving school levels records, which are supposed to be implemented in schools across the country from 2012/13. Other measures of system level improvement include provision of incentives in terms of making school improvement planning as the basis for resource allocation, provision of training to the machinery at the grassroots levels, besides ensuring timely supply of forms, timely release of funds for printing the forms, etc. The government may take necessary initiatives in this regard, including increased financial assistance.
- 16. To reduce the gap in processing the statistics, computer and network facilities should be made available to the block/district/state level statistical offices in the Departments of Education and to all educational institutions at all levels. Effective coordination between several layers of administration and organisations may reduce the time gap in the various stages of collection, processing

- and publication of statistics. Putting in place an online system of data collection and management would reduce time lag drastically besides promoting effective and sustainable decentralisation including fiscal decentralisation in education.
- 17. With respect to publication and dissemination, it may be necessary that hard (paper) copies are made available, along with CD-ROMS and online data files in dbase and EXCEL. CD-ROMS and online data files cannot replace the hard copies, as the latter requires the users—both researchers and planners—to have easy access to computers with adequate hardware facilities.
- 18. All the collected/processed (and not necessarily published) statistics need to be made accessible to the researchers and planners. Researchers may, in fact, be encouraged to use the collected statistics, by providing easy access to the data tapes, rather than compelling the researchers to make their own surveys, thereby saving scarce resources.
- 19. One should not have a myopic view of the needs relating to educational statistics. After all, statistics are important for short term, medium term and perspective planning. Short-term considerations, including resource constraints, urgency, reduction in time gap, etc., should give place for long-term considerations. It should be noted that it might be impossible to collect certain statistics relating to the past. Hence, while pruning and revising the information formats, care should be taken to see that crucial information is not traded off.
- 20. All principal agencies involved in collecting/processing/publishing/disseminating educational statistics need to be represented in the high power Standing Committee on Educational Statistics.
- 21. It may be desirable to organise, at regular intervals, meetings of educational data suppliers and educational data users. Since the government itself is the data supplier and data user in respect to many aspects of educational policymaking, it would be useful if concerned departments reveal how actually the data are used.
- 22. Large amounts of data at the micro level, collected by individual researchers in their research projects, M.Phil/Ph.D. studies, etc., remain scattered, though they might prove to be useful in the ultimate analysis for policymaking. It is desirable to initiate steps to establish a data bank to compile and critically edit such scattered data systematically in one place according to major issues of

- education and bring out trend reports at regular intervals. This would make large amount of data collection efforts by individual researchers really fruitful for micro-level analysis and policymaking. Such a data bank may provide at one place easy access of the datasets to various researchers and planners.
- 23. There is a need to integrate planning and data collection. Unless data collection is made an integral part of planning process, the procedure for collection may not improve. The complexity of the formats for data collection and the existence of weak machinery for data collection at the state level delay the flow of information. Provisions for training on a regular basis can improve the collection of educational statistics.

Above all, the general approach to statistics needs to be changed. Statistics are not just numbers; they speak volumes. They are numbers, but meaningful statistics provide valuable analytical insights, besides being critical inputs into planning and management. If they are just numbers, they cease to be of any great value. Hence, due importance needs to be accorded to statistics. Further, the importance of statistics gets enhanced if they are actually used for decision-making. Now, while governments at national levels increasingly realise the importance of statistics in policy planning, programme planning, resource allocations, monitoring and evaluation of programme interventions in education, they are yet to shed their stereotyped behaviour directed towards using data primarily for reporting purposes thereby hiding critical information that explain failures in programme implementation. It is high time that the government should make the result-oriented policy and programme planning in the country much more evidence based and accountable.

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Notes

- For example, see Kamat (1977), Srivastava and Hiriyanniah (1977), Pandit (1976), CSO (1977a, b), Dhar (1978), Saraf et al. (1980), Kwatra (1978), Bose (1978), Department of Education (1977), IAMR (1981), Tilak (1985), NIEPA (1993) and Aggarwal (1997).
- 2. (a) Form ES-I (Numerical Data): This form covers information on number of institutions, enrolment, and teachers by sex and type of

institutions, enrolment by stages/courses and enrolment by classes (grades) with sex-wise break-up also. (b) Form ES-II (Financial Data): Under this form important statistics relating to income of different educational institutions by source and expenditure incurred by items and type of expenditure break-up in the recurring and non-recurring is also collected. (c) Form ES-III (Examination Data): Information is collected through this form on the examination results (Matriculation and above standards) of different courses run by the universities and boards. Information is collected in respect of a number of students appeared and number of students passed. (d) Form ES-IV (Numerical Data in respect of Scheduled Castes and Scheduled Tribes): This form is similar to Form ES-I, the only difference being that this form is meant for Scheduled Caste and Scheduled Tribe students only. Information is collected in respect of student enrolments and teachers belonging to Schedule Castes and Scheduled Tribes. All the Forms are canvassed annually to collect the statistics at state level only.

- 3. Until the middle of the 1970s, they were classified into 'direct' and 'indirect' incomes/expenditures.
- 4. That the operation blackboard programme was planned on the basis of the fourth survey conducted in 1978 (and not the fifth survey conducted in 1986) is a different matter. The fifth survey results were not available at the time of the designing of the programme.
- 5. Occasionally, the surveys attempted at collection of some financial data; but could not obtain reliable and comprehensive data and detail; hence the meagre data collected are not published.
- 6. All the subsequent surveys were conducted by the NCERT.
- 7. That the five-year plans also could not be initiated at regular intervals (of five years) is a different matter.
- 8. Datasets are now made available on CD-ROMs by the NCERT.
- 9. See, for example, Mehta (1993) for similar details relating to the sixth survey.
- 10. The quinquennial surveys are based on about 120,000 households and annual rounds on about 40,000 households. See CSO (1987).
- 11. See Premi (2001) for more details.
- 12. For example, see Agricultural Economics Research Centre (1972) and Kurrien (1983).
- 13. See several papers in the *Economic and Political Weekly* (October 16–29, 1999) for a detailed discussion on the survey.
- 14. A major report was published giving a large set of state level data. See Shariff (1999). Complete dataset is available on CD-ROM.
- 15. The project was based in NIEPA.
- 16. Nature and limitations of data collected by individual researchers and research organisations are not reviewed here.

- 17. This section is partly drawn from Tilak (1993).
- 18. Though presently the UGC does not collect/publish much educational statistics, it is important that UGC assumes this responsibility, as this would be useful to the Commission for efficient planning of higher education systems.
- 19. However, care should be taken to see that mere collection of information on such schools does not automatically bestow recognition on them, nor does it lead to any legal complications.

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