

Secondary Education in Maharashtra: Issues of Concern



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Universalisation of elementary education has been prioritised in India for more than two decades. More recently, the focus has broadened to include secondary education as well and India committed to ensure availability, accessibility and affordability of good-quality education for all young persons up to the age of 18. In 2009, Rashtriya Madhyamik Shiksha Abhiyan (RMSA) was introduced to enhance access to secondary education and improve its quality. This was in line with the fourth SDG which aspires to ensure that all girls and boys complete free primary and secondary schooling by 2030. It is in this context that we explore Maharashtra's progress towards universalisation of secondary education, both in terms of its achievements and the challenges that it faces.

Maharashtra is among the more developed States in India with the second highest per-capita income in the country. It is also a relatively urbanised and industrialised State.¹ It is the second largest State in India in terms of area and population. The literacy rate in 2011 was much higher than the national average (83% vis-à-vis 73%). Enrolment at elementary level is nearly universal, and the gross enrolment ratio (GER) at the elementary stage is also higher (89%) than for India (78%) as a whole in the year 2014–15.

However, the development is not even, either economically or educationally. Part of these variations can be explained by the fact that in 1960, the State of Maharashtra was formed by consolidating three sociocultural regions with different physical features and different histories of development—Western Maharashtra, Marathwada and Vidarbha. The Kelkar Committee Report points out that the variations have increased over the last decade. The State's geography also directly plays an important role in the variations. The narrow coastal regions in the west of the State lie

¹Forty-five percentage of its population live in urban areas (2011). Only 11% of its GSDP is contributed by the primary sector (Economic Survey of Maharashtra 2013–14).

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between the sea and the Western Ghats and get high rainfall. The inland areas in the State form part of the Deccan Plateau. Numerous rivers and streams flow from the west coast, towards the east, and the areas which lie in the river valleys are well irrigated. Areas of the plateau which lie in the shadow of the Western Ghats are very dry, as is much of the central part of the plateau. As one moves to the extreme east of the State, rainfall levels rise again. The general accessibility and the access to water, in particular, necessarily play a role in the variations in the levels of development across the State (Kelkar Committee Report 2013).

Maharashtra is largely Hindu (79.8%),² but also has a substantial proportion of Muslims (11.5%). A significant proportion is from disadvantaged communities. Scheduled Tribes are 14.6% of the population. These include a number of Nomadic Tribes (NTs) and Vimukt Jati (VJs) or Denotified Tribes. Scheduled Castes are 11.8% of the population.

This paper is based on a study of secondary schooling in Maharashtra done in 2015.³ Inputs for the study were taken from many sources. Secondary data provided the broad scenario at State and region level. Primary data through quantitative and qualitative methods was collected from schools and villages/wards in selected districts, to provide insights at school/habitation level. The data from the different sources has been useful in understanding the situation from various perspectives—the school providers, the administrators, the teachers, students and their parents. It has been triangulated to provide a picture of the secondary education system in the State.

The paper is structured in four sections. In the first section, some key features of secondary education in Maharashtra, emerging from secondary data, and documents are presented. In Sect. 2, we present findings from the survey of schools across the State. Section 3 focusses on issues that are important for the adolescents and parents. In the last section, we highlight some critical areas that have contributed to the present scenario.

1 Key Features of Secondary Education in Maharashtra

Secondary data (UDISE, SEMIS, NSSO, education budgets and Board examination results), available at the State, region and district levels, was analysed. Other government documents on secondary education were also reviewed. Interviews with senior education functionaries in Mumbai and Pune provided insights into the current scenario. Altogether, there are 59 lakh students enrolled in Grades 9–12 in a total of

²Census 2011.

³The study was done by Collaborative Research and Dissemination in collaboration with UNICEF (Maharashtra) and the Government of Maharashtra. The authors wish to acknowledge the contribution of all those involved and particularly to the critical inputs provided by Shruti Patil and Rahul Sapkal.

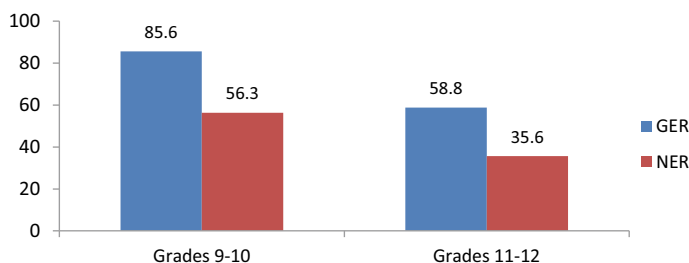


Fig. 1 Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) at secondary and higher secondary stages of schooling. *Source* Secondary State Report Card (2013–14)

nearly 24,000 institutions.⁴ Of these, 95% are co-educational, 4% are only girls' schools and 1% only boys' schools.⁵

1.1 Comparatively High GER at Secondary Stage, NER Much Lower

GER, at secondary stage, was 85.6 (and, at higher secondary stage, it was 58.8) in 2013–14 in Maharashtra, indicating that the State is quite within reach of RMSA targets,⁶ particularly for the secondary stage. However, less than 60% of those in the 14–15 age group are enrolled in age-appropriate grades (i.e. 9–10). The situation is worse for students in the 16–17 age group, when the age-appropriate enrolment is less than 36% (see Fig. 1).

1.2 High Proportion of Girls Enrolled in Secondary and Higher Secondary Stages of Schooling

In contrast to several States in India, gender differences in enrolment in secondary stage are not marked. Proportion of girls in secondary enrolment is high at 45.6% and is still higher at higher secondary level (46.4%) (see Table 1). The proportion of girls enrolled is similar to proportion of girls in the population as a whole.

⁴Based on Secondary Flash Statistics (2013–14) and (2014–15).

⁵This does not take into account the colleges which provide higher secondary education.

⁶These are participation rates at secondary stage to be 90% and at higher secondary stage to be 75% by 2017, and universal retention by 2020.

Table 1 Proportion (%) of girls in secondary and higher secondary stage in 2013–14

Grades	% of girls
Grades 9 and 10	45.6
Grades 11 and 12	46.4
Proportion of girls in 14–17 age group	46.6

Source Secondary Flash Statistics (2013–14)

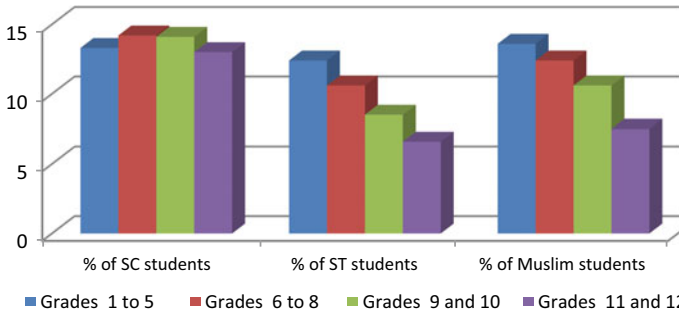


Fig. 2 Change in proportions enrolled over different stages of education among SC, ST and Muslims, 2013–14

1.3 Lower Proportion Enrolled from Disadvantaged Social Groups in Secondary and Higher Secondary Stage

If one looks at the enrolment of students from different social categories, a decrease in proportion enrolled is noted with increase in stages of education—mainly among the disadvantaged segments of population like the Scheduled Tribes (STs) and Muslims. The enrolment data of Scheduled Caste students, on the contrary, shows a more neutral picture—the proportion of SC students in total enrolment, at the primary stage, is similar to that in the higher secondary stage (Fig. 2). But the decline is very sharp among the ST students—a fall from 12.4 to 6.6%, and among Muslim students from 13.6 to 7.5% (Secondary Flash Statistics 2013–14).

1.4 Dropping Out During Secondary Schooling—Peaks After Class 10

Figure 3 shows the drop-out rates after Class 9, Class 10 and Class 11. We find that the drop-out rate in 2013–14 is quite sharp between Classes 9 and 10 (8.5%), and still sharper between Classes 10 and 11 (16.6%). The same pattern was seen in the previous year.

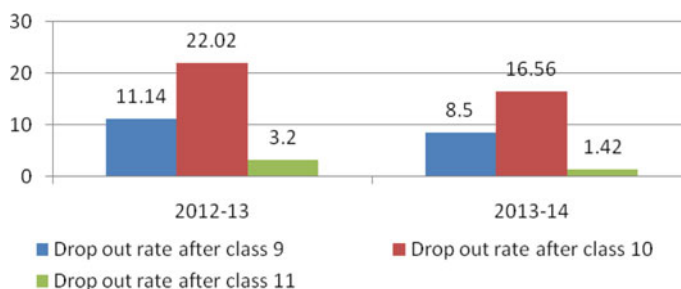


Fig. 3 Dropout rates after Classes 9, 10 and 11. *Source* Secondary Flash Statistics (2012–13) and (2013–14)

1.5 High Pass Percentages in the Board Examinations in Classes 10 and 12

Critically important for secondary education is the performance of students in the Board examinations⁷ at the end of Class 10 and Class 12.

UDISE data shows that the pass proportions are very high at secondary stage (90% in 2013–14) (see Table 2). The pass proportions were already quite high in the previous year at above 80%. But there has also been a sharp increase. In both years, promotion rates are higher for girls than boys.

The pass proportion in 2013–14 at higher secondary stage (see Table 3) was reported to be similar to that at secondary stage—very different from the previous year when only 60% of those who appeared for the Class 12 examination were declared to have passed. The sudden improvement in performances may indicate a positive change, but the reasons behind the change need to be further explored to

Table 2 Pass percentages in Class 10 Board Examinations

	Boys	Girls	Total
2012–13	82.2	84.6	83.3
2013–14	88.7	91.5	90.0

Source Secondary State Report Cards (2013–14) and (2014–15)

Table 3 Pass percentages in Class 12 Board Examinations

	Boys	Girls	Total
2012–13	54.6	58.5	56.4
2013–14	87.8	91.6	89.5

Source Secondary State Report Cards data (2013–14) and (2014–15)

⁷Not all children appear for examinations conducted by Maharashtra State Board. A considerable number of children, particularly from elite private and government schools, appear for CBSE or ICSE Board examination.

Table 4 Pass percentage of students from different social groups in Class 10 Board examinations, 2013–14

Social category	Secondary board examinations	Higher secondary board examinations
General castes	92.8	91.2
Scheduled Castes	86.1	89.8
Scheduled Tribes	84.5	92.8
Other Backward Classes	89.4	91.5
Total	90.0	91.2

Source Secondary State Report Cards (2014–15)

arrive at a conclusion. There may have been a change in the manner assessments were made, rather than reflecting an actual change in students' learning levels.

As Table 4 shows, the pass percentages in Tenth Boards are lower for children from Scheduled Tribes and Scheduled Castes as compared to children from OBC and 'general' categories. It is interesting to note that such differences are not noticeable for Class 12 Board examination.

1.6 High Proportions Enrolled in Government-Aided Private Schools

Maharashtra has had a history of private participation in the provision of secondary education from colonial times, particularly in Western Maharashtra (lower in Vidarbha and still lower in Marathwada where secondary schooling is reported to have traditionally been provided by the government).

In 2013–14, of the 15,820 secondary and 7834 higher secondary schools in the State, a major proportion (60%) were private schools which received financial support from the government on grant-in-aid basis. These private-aided schools had more than three-fourths of students enrolled in Grades 9–12 (see Fig. 4a,b). The government schools accounted for a very small proportion of enrolment primarily run by local bodies/Zilla Parishads. There were also schools run by the Tribal Development Department and by the Social Welfare Department, as well as schools aided by these departments. Enrolment in the government schools was a higher proportion at secondary level (7%) than at higher secondary level (3%) (see Fig. 4a, b).

It is worth mentioning that while government schools were run by various departments, the private-aided schools were run by non-profit trusts, which varied in their size and resources and management capacity. Within each category of school management, there were considerable heterogeneity in management and organisation.

There were also a substantial proportion of unaided schools, 32% among secondary schools and 36% among higher secondary schools. However, they accounted

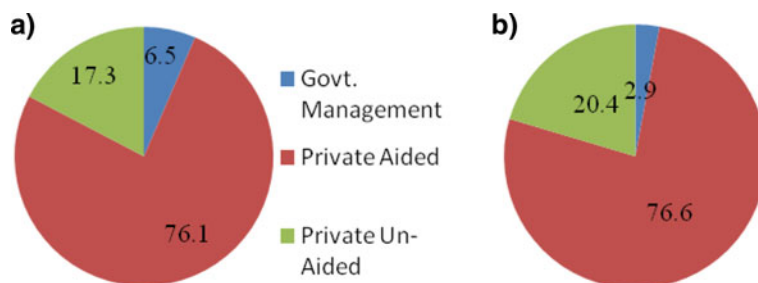


Fig. 4 **a** Distribution of secondary enrolment in Maharashtra by school management in 2013–14. **b** Distribution of higher secondary enrolment in Maharashtra by school management in 2013–14
Source Secondary Flash Statistics (2013–14)

for between 17 and 20% of student enrolment (see Fig. 4a, b). It is noteworthy that four-fifths of students enrolled in Grades 9–12 in Maharashtra are enrolled in non-fee-paying schools.

1.7 Cost of Schooling Increases Substantially at Secondary and Higher Secondary Stages

From the ninth grade onwards, parents have to cover the cost of textbooks, notebooks, stationery and uniforms in addition to other costs associated with schooling, though in the government and government-aided school, no fees are charged. Till the eighth grade, these are covered by the government (through Sarva Shiksha Abhiyan). Education department does not collect information on expenditure on education. But NSSO data, collected through reliable household surveys, indicates that average annual expenditure per student enrolled at secondary/higher secondary level in 2014 in Maharashtra was Rs. 13,053, of which more than half was being spent on private tuition (Table 5).

Costs at secondary stage were found to be much higher at 1.6 times costs at middle stage. Costs at senior secondary stage were found to be 1.7 times that at secondary stage.

Summing up, we note how the picture we get from secondary data is mixed. There are many positives—high enrolment at secondary level and high pass percentages in Board results at both secondary and higher secondary levels. However, the costs of schooling are high at secondary and higher secondary level, particularly on private tuition, and there is considerable drop-out after Class 10. GER is much lower at higher secondary level (59), and NER is as low as 36, indicating that there is a long way to go for universalisation of secondary schooling. In the next section, we focus on the primary data collected in 2015.

Table 5 Average annual expenditure per student by items of expenditure in 2014 (in Rs.)

Item of expenditure	At secondary/higher secondary level
Fees in school (miscellaneous)	4637
Books and stationery and uniform	2370
Transport	1990
Private tuition	6808
Other expenses	877
Total	13,053

Source Calculated from NSSO (2014) 71st round

2 Key Findings from the Field Research

The findings from the primary data come from a Statewide survey of 192 secondary and higher secondary schools in urban and rural Maharashtra. These were government and government-aided schools⁸—unaided schools were excluded. Insights into the working of the system also came through interviews with DEOs and BEOs in the districts selected for the survey.

Sampling for the school survey

The sample was selected through a stratified random process. Maharashtra has nine divisions for education administration.⁹ Mumbai division was excluded (as schools were likely to be of a different character). Two districts were chosen randomly from each of the eight remaining divisions. Twelve secondary/higher secondary schools were chosen from urban and rural areas from each district and selected randomly from a list of all government and government-aided schools (offering Classes 9 and 10)¹⁰, through a probability proportional to size (PPS). The sampling strategy made it likely that government and government-aided school of different managements in the selected districts are included.

The surveyed schools varied widely. Most schools were functional and were well attended. However, several shortcomings were also observed.

⁸Schools with only Grades 11 and 12 (also called junior colleges) were also excluded from the sample.

⁹Konkan; Pune; Kolhapur; Nashik; Amravati; Nagpur; Aurangabad; Latur; and Mumbai.

¹⁰All schools with secondary and higher secondary classes were included in the sampling universe, but those with only Classes 11 and 12 (referred to as junior college) were excluded.

Table 6 Student-classroom ratio in secondary and higher secondary schools

	Secondary schools	Higher secondary schools
Minimum	22	23
Maximum	80	118
Average	49.3	60.1

Source: CORD survey 2015

2.1 *Large Class Sizes at Secondary and Higher Secondary Level*

The average student classroom ratio (SCR) in the surveyed secondary schools was as high as 49 and in higher secondary schools was 60.¹¹ However, the surveyed schools varied in size (Table 6). More than one-third of the schools were comparatively small—their enrolment in Grades 9–12 was not more than 200. At the other extreme, one-tenth of the schools were extremely large, with multiple sections in each class and more than 1000 children enrolled (in Grades 9–12). The higher secondary schools had higher enrolment per grade and were the ones more likely to have multiple sections. The maximum class size was 80 in secondary schools and 118 in higher secondary schools. Teaching such large classes was a difficult task and had implications on the level of engagement of teachers with students.

Enrolment in urban schools was usually much larger than in rural schools. The average enrolment in Grades 9–10 in secondary schools in the rural areas was only 65, while in urban areas, it was approximately four times that figure—257. The rural–urban differences were observed in higher secondary schools as well, but were less pronounced.

2.2 *Basic Infrastructure in Place, but Critical Gaps Exist*

Secondary data indicates that infrastructure and facilities in secondary schools are more than adequate. However, it is critical to find out how functional the facilities are, and whether they are sufficient for the students. Else, the problems the students and teachers face due to inadequate provision and lack of maintenance will remain invisible.

Some schools had well-maintained buildings. This was, particularly, in the case of urban schools run by large trusts. More generally, infrastructure was in need of maintenance. The availability and usability of facilities were, in general, greatly impacted by the availability of staff, or lack of it, to maintain the infrastructure and facilities that were in place.

¹¹Our data excludes institutions with only Grades 11 and 12 for which SCR was reported to be particularly high. This explains why SCR at both secondary and higher secondary stages from UDISE, 2013–14, was as high at 51 and 66.

Schools, usually in the rural areas, had small buildings comprising a few classrooms. One government secondary school was in urgent need of repair: 'water comes into the rooms during the rains. There are not enough desks for students. Most of them were broken. The drinking water was reported to be not safe to drink. There were fans only in the office, the staffroom and the laboratory. The entrance gate was broken'.

The classrooms were usually large, with adequate benches and long tables. In some cases, there was overcrowding, particularly when there was very high enrolment. And there were schools where students had to sit on the floor. In several schools, there was evidence of construction of new classrooms while the present classes were being held in tin sheds or by sharing the building with another institution during school hours.

While basic infrastructure was available in a large number of the surveyed schools, the schools were not safe and secure. At least half the schools had no concrete boundary walls, or the walls were such that they could easily be scaled. Many had only a wire fencing around the school. This is a major problem in that students could come and go as they wished. The problems are aggravated by the fact that even when schools had gates, they were not usually locked. During the school survey, it was observed that the gates were locked in only around one-fourth of the cases, and only on very rare occasions was there a person manning the gate.

It is surprising that in a substantial proportion of secondary and higher secondary schools (22.4%), there were no lights and fans at all. In a few schools, lights and fans were functional in some rooms like the office and staff rooms, classrooms of higher grades, but not in others. At the other extreme, there were schools with all rooms equipped with lights and fans, and even speakers and video monitoring facilities.

While most schools had arrangements for drinking water, these were not adequate, especially in those schools with high enrolment. Students were observed to bring water from home.

The situation was more problematic with regard to usable toilets. Almost all schools had at least one toilet each for boys and girls—very similar to the data available from UDISE. Only in approximately three-fifths of the schools were these toilets functional. This was due to lack of cleaning and maintenance. Running water in toilets was, particularly, scarce. In addition, in nearly half the schools, there were only one toilet for boys and one for girls, and this was a major problem where enrolment was high.

In only half the surveyed schools (52%) was there running water in toilets. This made the toilets difficult to use. The drought-ridden districts were especially affected. In Jalna, the survey team observed that though the majority of the schools surveyed had many toilets, with some of them newly constructed, they were not used because of lack of water. Young people had to relieve themselves in the open, a sad indictment of the facilities provided to them (Table 7).

Less than half the schools had any ramp built for ensuring ease of access for CWSN. Nearly 40% of school buildings were double or triple-storeyed, but no provision was made for them to be accessible to CWSN. Accessibility of toilets was

Table 7 Availability and usability of toilets in surveyed schools

Toilet facilities	Proportion of schools where the following facilities are	
	Available	Usable
At least one separate toilet for boys	94.1	59.9
At least one separate toilet for girls	94.7	58.2
Running water in toilets	–	51.7

Source: CORD Survey 2015

Table 8 School infrastructure in urban and rural schools

Proportion (%) of schools with	Rural	Urban
Usable lights	61.0	86.3
Usable fans	50.4	72.5
Running water in toilets	39.0	78.4
Usable toilet for boys	49.6	78.4
Usable toilet for girls	46.8	82.4

Source: CORD Survey 2015

even more restricted. Only in less than 10% of the schools were the toilets accessible to CWSN.

Infrastructure and facilities were much better in the urban than in the rural areas. The table below compares schools on several parameters and indicates the enormous variations that exist. In general, urban schools were larger and better funded. They were, more often, run by the larger trusts. Among the surveyed government schools, those managed by the Zilla Parishads and the Tribal Development Department had poor infrastructural facilities, and these were more likely to be in rural areas (Table 8).

In urban areas, about one-fourth of schools had poor infrastructure on the selected parameters whereas in the case of the rural areas, this applied to at least half the schools.

2.3 Important Gaps in Library and Laboratory Facilities

Secondary schools are expected to have a library for the students, a laboratory for science classes and a computer laboratory. Secondary data indicates that there is a shortfall in facilities like availability of library, science laboratory and computer room. The survey confirms this and gives additional information on functionality of these facilities. It revealed that while nearly 70% of the surveyed schools reported having a designated library room and 78% a designated science laboratory, only in less than 50% of the schools were these rooms functional. In particular, the schools which had a shortage of rooms were seen to use the same space for multiple purposes.

In many schools, field investigators noted that science laboratories did not have adequate equipment and also were in no state to be used. Some examples indicating students' lack of access to these facilities are given below.

- In a school in Gondiya, the same room doubled as a science laboratory, computer room and sports room.
- The library or science laboratory was seen to be used as staff meeting rooms.
- In many schools, the library books were stored in the staff room or the principal's room.
- A school in Bhandara (Nagpur division) had no separate laboratory or library. Instead, the laboratory equipment was stored in cupboards located in a corridor. The library books were stored in a cupboard in the headmaster's room.
- In a poorly maintained Zilla Parishad school in Osmanabad, the students complained that even though the school had a science laboratory and a computer room, they were never used.

Overall, students were disappointed about the limited opportunity they had to do any science practicals as well as to make use of library facilities in their school.

The situation was more positive regarding computer laboratories. A large majority (83%) of surveyed schools had a computer room, and most of these (77%) were reported to be functional. Irrespective of whether the school had a separate computer room or not, more than 90% of the schools had computers, and they were observed to be used. This was a recent phenomenon, as in 60% of the schools, the computer room was built in 2010 or later. In several schools (24%), the computers were purchased with RMSA funds.

There were problems for students in this area too. The number of computers usually varied between 6 and 12—and, given the class size, this meant limited access for individual students. Nearly half the schools also did not have separate computers for staff. There were some schools where computer classes were not being held at all. In one such school, there were computers in all the classrooms but no teachers for the subject. The computers were also not in working condition and had not been in use for two years.

Overall, here too we found urban schools comparatively well equipped, with more than 70% of them having a usable library, a usable science laboratory and a usable computer room. In rural areas, only 37% of schools had a usable library and only 39% of schools had a usable science laboratory.

It is important to note that the usability of the library facilities and the science laboratories, in particular, was affected by the lack of sanctioned posts in both government and government-aided schools for this work. In their absence, the work fell on the teachers.

2.4 More Teachers Needed for Specific Subjects

During the school survey, very few principals talked of shortage of teachers as a major issue, with PTR being low in most schools. But in one-third of the surveyed schools, they did report a shortage of teachers for specific subjects like science, mathematics and English.

The grant-in-aid norm in Maharashtra is to finance salaries of all teachers and non-teaching staff in sanctioned posts. It was reported that schools faced a problem when additional teachers were required because of increase in enrolment or introduction of new subjects or on account of retirement of the earlier staff. The candidate chosen by the school management needed to be approved by the District Education Officer. The whole process was quite time-consuming. In the interim period, teachers were funded by the school management in aided schools.

The District Education Officers confirmed the difficulties brought up by the school with regard to lags in sanctioning of additional teaching posts. The DEOs spoke of many vacant teaching posts and said that no new posts had been sanctioned in the government and government-aided schools in recent years. Some schools had surplus teachers (specifically those in which enrolment had declined), while there were vacant teaching posts in other schools. Progress in rationalising teacher appointments was reported to be slow.

The schools dealt with these shortages in different ways. One was to allot more classes to each teacher, giving them less time for preparation, corrections and so on. The other was to appoint teachers on contract.¹² Four secondary schools had employed contract teachers.

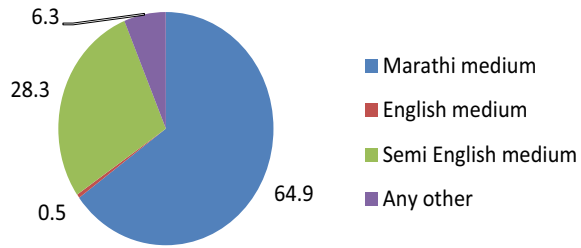
At the higher secondary level, the difficulties in recruiting teachers were aggravated further, particularly for commerce and science teachers. When schools had only one section of a stream in Classes 11 and 12, with numbers too few for a full-time regular teacher's post to be sanctioned, teachers have to be recruited either on part-time or on contract basis. Qualified teachers, particularly in the commerce and science streams, were reported to find the approved rates for contract teachers too low. Several higher secondary schools had, however, employed contract teachers for some of the subjects taught only in Grades 11 and 12.

2.5 Language Issues: Introduction of Semi-English Medium Schools

The schools covered in the survey were primarily of Marathi medium (65%). There were a few Urdu medium schools. A significant development noticed was the significant number of semi-English medium schools (28% of the surveyed schools), where

¹²Teaching posts in government and government-aided schools are reported to be highly valued. The government has now put in place a policy where contract teachers will be regularised after three years, which is likely to make even contract teacher jobs very attractive.

Fig. 5 Distribution of schools by medium of instruction



science and mathematics were taught in English, and other subjects in Marathi (or Hindi or other Indian languages).

This development was introduced by the Education Department in 2009.¹³ Marathi medium secondary schools were encouraged to have at least one division in which science and mathematics would be taught in English in Grades 5–10. This would help the existing schools in two ways. First, it would stem the outflow of students to English medium schools, which had been rapidly increasing,¹⁴ to the extent that an absolute decline in enrolment in Marathi medium schools had been reported.¹⁵ Second, on account of this reported decline in enrolment, there were surplus teachers in many schools and these teachers could be retained if they were able to teach in the new semi-English sections (Fig. 5).¹⁶

2.6 Working Days and Working Hours Need Monitoring

While secondary schools are expected to function 230 days in a year, during the fieldwork, it was seen that apart from the official holidays declared by the State government, the schools in different locations were closed for various reasons. Besides, there were days when the schools were officially open but had very low attendance of teachers and students. These included days when local body elections were held in some districts—schools were disrupted for a week, as the teachers had to attend the training, and then make arrangements to hold elections in school. During Ganesh Puja, though only three to four days were officially declared as holidays, it was difficult to find students and teachers in school on the days preceding the official holidays

¹³Government Resolution SANKRIN 2009/(576/09)/MASHI-1, *ibid*.

¹⁴The state government allows the setting up of schools by private trusts or societies on a self-financing basis. This, along with parents' increasing interest in English medium education, has encouraged the setting up of fee-paying English medium schools.

¹⁵This is in spite of the fact that the government responded to parents' interest in their children learning English by introducing English as a subject in Class 1 in government and government-aided schools from the year 2000. See Government Resolution Supra 1099:180/99/PRASHI-5, cited in 'Policies of Maharashtra Government regarding English Teaching', at http://shodhganga.inflibnet.ac.in/bitstream/10603/9412/12/12_chapter6.pdf.

¹⁶Thakare (2012).

Table 9 Distribution of surveyed schools by number of shifts

Type of schools	Proportion of schools with	
	One shift	Two shifts
Secondary schools	80.4	19.6
Higher secondary schools	33.7	66.3
All schools	57.0	43.0

Source CORD Survey 2015

as well as some days after. There were considerable variations in the number of days the schools were actually functioning (Table 9).

There were also variations between schools in the number of working hours. A major reason for this was whether the schools were single-shift schools or double-shift schools. A study of the school timings showed that while a single-shift school, on average, functioned for around six hours, the hours were shorter for both the shifts in the double-shift schools. The morning shift, in particular, functioned for five hours or less.

There was a great difference between the secondary and the higher secondary schools. The majority of secondary schools were single-shift schools (80.4%). Only those with high enrolment and limited infrastructure functioned in two shifts. However, two-thirds of the higher secondary schools (66.3%) were functioning in two shifts. In these schools, Grades 11 and 12 were more commonly held in the morning shift and the secondary grades in the afternoon shift. The reason why the higher secondary sections, with larger curricular workload, are kept in the shorter morning shift is not clear. It is possibly related to norms that are required to be met at secondary and higher secondary stages of schooling.

2.7 Board Examination Results Good, but not Explained by School Quality

The results of the Class 10 Boards in the surveyed schools were very positive in the previous year—where more than 85% schools had a promotion rate higher than 80%. The average promotion rate was 90%. This appears to be an unusually high performance, given the variations in school quality and considering that not all schools were functioning well.

In several schools, it was noted that though the promotion rates were high in the Class 10 Board examinations, the promotion rates after Class 9 were quite low.¹⁷ It is likely that this is done in order for schools to show better results in the Board examinations. This trend was observed particularly in the Zilla Parishad and other government-managed schools. However, it is reported to be an issue in

¹⁷In some private-aided schools, on the contrary, it was seen that the schools which had low promotion rates in the Board examination had a very high promotion rate after Class 9.

secondary schooling across the State, and the government is considering monitoring the examinations in Class 9 so as to avoid this phenomenon.

The very high pass percentages in the Class 10 Board examinations can be partly explained by the high marks scored in the internal assessment. Thirty per cent of all subjects are assessed internally by the school teachers. Thus, a student who scores high in the internals may pass the Boards even if she scores poorly in the external examinations. Further, students were reportedly being given high marks in the internals.

The Class 12 Board results were even better. This can be due to the fact that there is a selection process when admitting students to Class 11. First, all the students who had failed or had compartmentals in the Tenth Boards are likely to drop out from formal schools. Some drop out on account of this transition between schools. Choosing streams at the higher secondary level allows for further selection (and filtering out) to happen. The schools which have a better reputation have the option of getting students with higher marks. This process of gaining access to schools and streams of choice is not a smooth one, and some students, particularly from disadvantaged socio-economic backgrounds, do end up falling through the cracks and dropping out of formal schooling altogether. Here too, the Board results are impressive even though the schools vary in quality.

2.8 Critical Role of DEOs and BEOs: Multiple Responsibilities and High Workload

The district- and block-level education administration was organised differently. At the district level, separate District Education Officers were in charge of primary and secondary education. But at block level, the Block Education Officers are responsible for primary and secondary education as well as adult literacy. The BEOs, thus, have limited time to focus on secondary schools and to coordinate with the DEO of secondary education. Non-teaching duties, such as elections and the data collection during the decadal censuses, curtail their time further.

There were many vacant posts of DEOs and BEOs in the 16 districts covered in the survey. Often, they have to take on the responsibilities associated with more than one post. Recruitment to these posts is reported to occur extremely slowly. As these administrative posts serve as an important link between the schools and the Education Department, vacancies slow down the normal functioning of the education system significantly.

The DEOs and BEOs had multiple responsibilities. Their daily routine was reported to involve large amounts of bureaucratic paperwork. They are the government authorities at ground level who have to take forward the policies and schemes adopted at the State level by the Directorate of Education and the Board of Secondary and Higher Secondary Education. There are a large number of schools under their supervision, and in addition, there is the need to deal with applications for recognition

and/or aid by new schools. Much of their working time is spent on forwarding documents sent by the schools to the Directorate of Secondary Education and, similarly, forwarding to the schools the responses received from the department. Examination times are particularly busy for them as the Secondary Board of Education does not have its own staff below regional level.

All the DEOs and BEOs reported that they have to deal with problems related to litigation¹⁸ on an ongoing basis. There are several hundred cases pending in each district, and the DEOs and BEOs have to spend a considerable amount of time being present at court proceedings. They also reported that responding to RTI queries takes up a good deal of their time.

While one of the main duties of the education officers is to ensure that quality norms are met by the schools under their jurisdiction, very limited time is available for school inspection. With large number of schools under the jurisdiction of each officer and the rapid expansion in the number of private unaided schools, only select schools could be visited. Apart from the new schools, much of their limited time was spent in visiting schools with low enrolment or poor results, or schools against which complaints had been received. The fact that the conveyance costs for these school visits have to be met by them was reported to act as a disincentive. To facilitate the process of monitoring, the schools are expected to submit regular reports of their activities and grade themselves. But the education officers said that this was not done by many schools.

3 Some Challenges Reported by Adolescents and Their Parents

A smaller qualitative study, involving visits to households in urban and rural sites in four selected districts, provided data on the experiences of adolescents during secondary schooling, as well as factors in their home environment which facilitate or impede their efforts to access secondary education. Interviews with parents and adolescents were conducted using a semi-structured schedule.

Selection of districts: Four out of the 16 surveyed districts were chosen for the qualitative research. To ensure geographical coverage, one district from each of four different education divisions was selected, based on district-level indicators such as male–female literacy rates and proportions of SCs, STs and minorities in the surveyed districts. Amravati, Nashik, Solapur and Jalna were the districts selected.¹⁹

¹⁸These are cases in which teachers have taken the trusts (which own private-aided schools) and the government to court on salary and appointment-related issues.

Selection of sites: Within the selected districts, one urban and one rural school from those surveyed were selected, and for household survey, a site in the vicinity of these schools was finalised. Between 15 and 20 households, with at least one child in the 14–18 age group, were selected purposively to ensure that households with adolescents who have dropped out, and those with adolescents enrolled in Grades 9–12, can be interviewed. As exclusion from secondary schooling is likely to be concentrated in lower income groups and/or marginalised social groups (Dalits/tribals/minorities), selection of such households was prioritised.

The household interviews were supplemented by discussions with groups of adolescents, where possible. The triangulation of information from different sources in each site has given an in-depth understanding of the situation with regard to secondary education in that context for children from different socio-economic backgrounds. This phase of fieldwork provides rich information on how, in spite of a relatively developed secondary education system, children from disadvantaged social and economic background struggle to complete secondary education.

3.1 Access to Secondary Schooling Is an Issue

In the rural areas, at the secondary level, young people had limited or no choice since there was mostly only one government or aided school in the vicinity which they had to select even if they were not particularly in favour of it. Urban areas, generally, provided more options to parents and students to choose from.

Respondents reported that higher secondary schools, in particular, were often not at convenient distances from their homes, and they had to spend a fair amount of time in travelling to get to school. This problem was acute in rural sites of all the four selected districts. In three of the rural sites, all the students needed to travel to the nearest town/city if they wanted to continue their education beyond Class 10. In one site, there was a higher secondary school, but it offered only the arts stream.

Students and parents often complained that transport facilities, which did exist, were not tailored to facilitate their reaching school in time or getting home at the end of the school day.

¹⁹Amravati is part of the Amravati division (Inland Eastern) and has a high Muslim population. Nashik is part of Nashik division (Inland Northern). It has a large Scheduled Tribe population which is as high as 40% in rural Nashik. It also has a high proportion of Muslims, in one of its urban blocks. Solapur is part of the Pune division (Inland Western). It has a high Scheduled Caste population of 15%. Jalna is part of Aurangabad division (Inland Central). It is economically poor and extremely drought-prone. Gender differentials in literacy rates are high (males 81.5% and females 61%) Maharashtra Human Development Report (2012).

- Irregular bus services, sometimes, meant that students missed their first classes. In the rural site in Amravati, students had to travel for an hour to get to their school where they were enrolled in Classes 11 or 12.
- Students from Jalna complained that they spent 2–3 h travelling to and from school, while accounting for the delay caused by waiting for buses.

In some cases, students had to walk substantial distances to get to the bus stop and this was a cause of concern for adolescent girls, especially during the evening hours. There were some costs associated with this travel though most students were availing of the discounted travel pass²⁰ provided by the government.

The need for setting up of more schools also comes through from the interviews with DEOs and BEOs, who reported that in the last five years, no new government or aided schools had been sanctioned in the areas in which they worked. Neither had any government and government-aided schools been upgraded to higher secondary stage.

3.2 Costs of Schooling Increase Substantially at Secondary and Higher Secondary Stages

Secondary data from households surveyed showed increased cost of schooling at this stage. The families interviewed for the study reported that this spike in expenditure after Class 8 posed a substantial burden. At this stage, expenditure on books and transport was high. Expenditure on private tuitions added to the expenses. Among our respondents, the amount spent per month on tuitions was reported to vary from Rs. 200 to Rs. 1000. Parents were apprehensive about the teaching in schools.²¹ This fuelled the reliance on tuitions, study guides, model answer sheets, notes, etc. The problem was acute for families with more than one child in these stages of schooling.

3.3 Issues Related to Teaching and Learning Activities in School: Students Struggle to Cope with Curricular Demands

Students shared their views about different subjects taught in school. They needed a lot of preparation for the annual examinations in Classes 9 and 11, and the Board

²⁰The pass needed to be renewed every 3 months. Getting the pass made and renewed was reported to be quite cumbersome. If there was any waiting period for the renewal, students reported that their costs increased substantially.

²¹Some parents are keen for their children to excel to increase their opportunities to get better employment opportunities. Some parents are apprehensive that their child may fail. They are concerned about the amount they spend during the Board examination years and are reluctant to spend this amount second time.

examinations in Classes 10 and 12. It appeared that much of this consisted of rote learning.

Most students enjoyed studying Marathi because they found it easy to understand and follow. However, English was difficult for a lot of students. While they expressed eagerness to speak English fluently, they experienced difficulties in comprehension as also grammar.

Students in Classes 9 and 10 reported struggling with the level of difficulty of the curriculum in mathematics and science, in particular. These were the subjects for which students resorted to tuitions and extra coaching. Many parents and students thought that this was imperative to get good marks in these subjects. One parent in Nashik was very worried that her son refused to take private tuitions because she thought that he could not do well without the extra help. An important concern for students was the way in which science was taught. Students reported that teachers demonstrated the experiments rather than allowing students to carry them out themselves. When asked how they cope with their practical examinations, students said that they either get some help during the examinations or simply manage somehow.

Computer education was of great interest, but students and parents complained that students were not given functional computer skills. Students get very little face time with the computer and said they were asked to use this little time to explore programs like Paint which they did not see as holding much value. From the responses gathered about computer education given in school, it appears that it might be difficult for students to complete the basic tasks listed in the Class 10 ICT textbook.

Most students were unaware of vocational courses. In schools where vocational education was available, it did not appear to be taken seriously. These courses required higher fees which made them unaffordable for many. The classes were often held at a centre close to the school, but not in school. This travel out of school meant that students often missed parts of their first or last class. Apart from this, students said they found little value in these sessions as they hardly got a chance to do any practical hands-on work. Instead, much of their time was spent in journal completion and in making drawings.

3.4 High Opportunity Costs of Schooling

As students move on from early adolescence, the opportunity cost of their time goes up, with expectations that they will contribute to the household economy in some way, whether through earning and/or household chores. There was a large proportion of students who were overage for their class (higher proportions in rural areas compared to urban areas). Being older made them more vulnerable to dropping out of school—boys would be under greater pressure to earn, and girls would be under greater pressure to get married as they turned 16 years and above. There were also pressures on girls to earn but far less than that on boys. The overage problem was particularly acute among those in rural areas.

Boys from poor families in urban areas are seen to be the most vulnerable to dropping out of school at this stage. It is likely that they are responding to pressures to earn coupled with opportunities to earn. In general, motivation for education was high among SC families, compared to other disadvantaged groups.

3.5 Demand for Secondary Education for Girls Varied

While secondary data did not show a major gender difference in enrolment, the household interviews indicated that the demand for secondary education for girls varied. There were some who wanted their daughters to take up a professional degree. Parents in the SC community²² were particularly keen on educating their daughters. A parent from Nashik told us that their daughter had done her graduation, and they would insist that after marriage, her husband would let her continue her education. They were very keen that their child takes up a job and be self-reliant. Such sentiments were reflected in the fact that there was, generally, no marked gender differential in school participation. School participation was, in many cases, slightly higher among girls.

Pressure on girls to drop out to do household chores does exist even while parents and young girls are keen on education. Sunita, an 18-year-old girl from the urban site in Solapur, had to drop out of school to take care of household chores. She had an elder sister who carried the load, but, after her marriage, Sunita had to take up the responsibility of looking after the house and the her family livestock. Her parents spent most of their time on the farm and refused to allow her to study and attend school.

There were parents who were not keen on girls continuing their education after the 10th grade. An important concern for those who did not want their girls to study further was safety. Related to this were accepted community norms with regard to education. In some cases, these norms seemed to suggest that if a girl is educated beyond a certain grade, she would find it difficult to find an appropriate match for marriage. Community norms were also important because they indicated the appropriate age for girls to get married. Parents' aspirations for their daughters were tempered by these norms as much as by what was financially viable. There were instances wherein girls had dropped out because they were already married or were soon to be married. Some girls told us how their parents either were already looking for matches or had arranged for them to be married soon.

In general, the parents interviewed were reluctant to aspire for their daughters to go out to work and earn money. Some felt that it was wrong to take money from daughters, and that in any case their earnings should go to their husband's family. However, several parents were keen on seeing their daughters' learning skills to be

²²SC and ST students were supposed to receive scholarships. Some students did report that they were accessing scholarships like Savitribai Phule for girls. However, not all adolescents from SC and ST families reported receiving these scholarships.

more independent. They were eager to enable them to fend for themselves after their marriage. Several parents had got their children enrolled into sewing classes because they felt this would enable them to earn money from the comfort of their homes.

3.6 Failure in Examinations a Critical Reason for Dropping Out

All these factors (lack of access to a functional school in their vicinity, high costs of schooling, curriculum-related issues, pressures to work, social norms) contribute in different ways to young people dropping out of school, particularly for those from disadvantaged groups. These students were also most likely to have difficulty in clearing the Board examinations.

Vishesh

Vishesh from Pandharpur had to quit school after he failed in the 10th grade because the family was too poor to allow him to continue with his education. His father had been jobless for 4 months because of the drought and could not pay for his schooling. Vishesh had to take up odd jobs to support his family. Vishesh, who is 18 years old, works as a farm labourer and does other manual tasks like digging wells. Vishesh also works on the family farm, looks after their cattle and sells milk to a dairy. He works for over 8 h apart from the time he spends in housework.

Out of our sample of 96 adolescent respondents, 24 had dropped out of formal schooling at some point after Class 8. The last straw in nearly all cases appeared to be failure to clear the annual examinations. Often, children were not even allowed to write the examination externally. Some parents asserted that if the child had not failed, she would have been allowed to study further. A corollary to this is that when parents were asked how far they would like their child to study, we frequently heard parents assert that they would keep the child in school as long as she did not fail. Girls were, particularly, vulnerable to being taken out of school as demand for schooling for them was weak and more so among Muslim families.

Sana

In a Nashik family, when a young girl failed in one subject in the Class 10 Boards, her father decided she should drop out. Neither the mother nor the daughter was in a position to go against his decision. This was in spite of the fact that the girl in question was extremely articulate and outspoken, and harboured dreams of joining the civil services. Her mother reported that she

had undertaken a lot of financial hardships to put her daughter through school. Now they were under pressure to finalise the girl's marriage.

3.7 Limited Information About Pathways to Better Employment Opportunities

The study involved discussion with students who were to pick their stream in Class 11 either in the next couple of months or in a year. However, most students were clueless about what they wanted to pursue. Often, they were confused about which stream they would have to select to secure a job of their choice. For instance, a Grade 10 respondent thought it best to choose the science stream to become a chartered accountant. This respondent was studying in a highly reputed private school in Solapur. This example provides an insight into the even greater need for information for students who were in less fortunate situations.

Students often did not know where to turn for advice about career choices and options, other than older siblings and parents. Students' aspirations also seemed to be restricted by their lack of information about possibilities. The problem is more acute in rural areas. A reason for concern is that many students believed that education up to Class 12 was enough to get them a job.

One restriction is that many options and subjects are not easily accessible to students. Children from rural areas seem to be very eager to move out of their village, one, out of necessity and two, to realise any possibility of fulfilling their ambitions. In urban areas, one heard of more varied choices of profession than in the rural areas.

4 Factors Which Play a Critical Role

In spite of major achievements, the challenges are many. Several systemic factors appeared to be at the root of these challenges and prevented their resolution. These are highlighted in this section.

4.1 Lack of Sufficient Resources

Much of the negatives in the schooling system have emerged from lack of sufficient resources. The overall government budget on secondary education has been increasing, but at a slow pace, while enrolment at this stage has increased rapidly. This has impacted the secondary schooling system in two ways. First, it is possibly the main

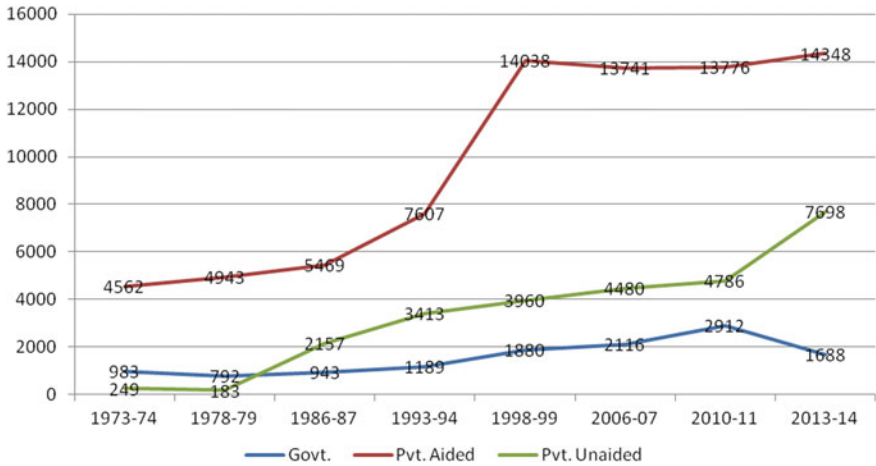


Fig. 6 Growth in the number of schools: government, private-aided and private-unaided. *Source* Data of 1973–74 to 2010–11 calculated from statistics of School Education; data for 2013–14 calculated from Secondary State Report Card

reason behind the variations in school quality. The composition of the budget shows that most of it is spent as a grant-in-aid to the private schools, and that too to cover primarily their salary expenditure. Very small amounts remain for other heads of expenditure.²³

Second, the limited investment by the government in secondary schooling has led to expansion of the private unaided sector. In Fig. 6, we map the changes in proportion of government and private schools over the last 50 years. The number of government schools has remained more or less constant, and even declined in the last five years. Private-aided schools have dominated throughout. There was a huge spurt in aided schools between 1986–87 to 1998–99. However, over the last five years, the growth has levelled off. It is the private-unaided school sector which has been increasing since 1978–79, and in the last five years, there has been a huge spurt in these schools. All these changes are very much in keeping with the policy changes with regard to recognition and aid.

Third, the administrative set-up for secondary education is overstretched, with a surge in the number of schools and enrolment. At ground level, the administrative staff has not increased proportionately, and there are a large number of vacant posts. This has led to multiple duties for the district- and the block-level education officers, with very limited time allocated to inspection and monitoring of schools. A major part of their working hours goes into routine work, resolution of disputes and attending court cases.

Additional resources are available from the central government which has been providing finance for non-salary expenditure to cover several activities in government schools through RMSA. But the State was able to make only limited use as its schools

²³ Analysis of Budgeted Expenditure on Education (2010–11) to (2012–13).

were usually private-aided.²⁴ Over time, rules have changed and more RMSA funds have been allotted to private-aided schools but they are still quite limited.

Interviews with headmasters and education officers indicate that there have been frequent changes in the provision of aid to private schools. It is, thus, seen that aid for different private schools (which receive grant-in-aid) was not uniform and changed according to current government policies. At the two ends of the spectrum are those getting 100% aid (which includes those set-up decades ago) and those which get no aid and are entirely self-financing. Among the rest, there are schools with varying proportions of salary costs covered at different points in time. There are also some schools which can access a grant to cover non-salary expenses. Resource constraint is one of the important reasons behind these changes. This has led to a complex system in which identities of private schools change over time. Thus, schools which are unaided at a given point in time may be partially aided at another point in time. In addition to the fact that the identity of schools varies over time, we have variations within the same school even at a given point in time. Part of the school may be aided, partly unaided.

4.2 Multiple Institutions Involved in Secondary Schooling

Multiple departments are involved in administration of secondary schools, and lack of coordination among their activities has added to the variation in school quality. Apart from the State Education Department, the Tribal Development Department (TDD) and the Social Welfare Department (SWD) are actively involved in setting up and financing secondary schools, setting up hostels for students studying at secondary and higher secondary levels, and providing pre- and post-matric scholarships. At district, block and school levels, the Directorate of Secondary Education is responsible for all schools that are managed by the Department of Education, but has little to do with schools run by TDD, SWD or any other departments. The survey indicated that there is a need to have some level of uniform standards and norms across all schools to be monitored by a single body.

The Ministry of Human Resource Development plays a very important role through various centrally sponsored schemes, including RMSA. The Board of Secondary and Higher Secondary Education also plays a critical role in the secondary level, and all schools, run by different management, are under the Board to comply with guidelines on academic issues. While the Directorate of Secondary and Higher Secondary Education, the Board of Secondary and Higher Secondary Education and SCERT all have separate jurisdictions, there is some overlapping as well. For example, these bodies have introduced their own quality improving initiatives such as teacher training and monitoring and inspection activities. These different interventions are not coordinated by the directorate. The impact would be much greater

²⁴The impact of RMSA contribution was not visible in the government schools covered in the survey.

if the initiatives were part of an overall and clearly defined plan to maximise their impact on the system. This is, particularly, important in the context of the crunch on resources.

The State has taken several steps to strengthen the system, but these need to be better coordinated. While GPS mapping has been successfully completed, new schools have not come up according to the plan. A new database, quite similar to but more comprehensive than UDISE data, was set up by the State government to help education administration in planning and monitoring. But there is little evidence that either data set is used at school level for actual planning and monitoring.

4.3 Variations in Quality of Education at Primary and Upper Primary Levels

The quality of schooling the students have had before the secondary stage plays a critical role in how students are going to fare at this stage. At the beginning of secondary schooling (in Class 9), there are students who are reported to have low levels of learning, and the curricular demands for the Board examinations are quite high. While education officials and teachers are very aware of this problem, there are no provisions in the current schooling system to deal with it in any way. Additional effort to bring these children up to the desired level of competencies is needed from the beginning of Class 5 itself and, at the very least, from the beginning of Class 9.

5 Concluding Remarks

As we have seen, the present education system has achieved a lot, but has not been able to provide good-quality secondary schooling for all. Children from tribal communities and Muslim families have the lowest participation in secondary schools. The schools, set up by the Tribal Development Department and the Social Welfare Department, or the Urdu medium schools set up for the Muslim children, are expected to address this exclusion, but they all face different issues, arising from lack of resources and lack of coordinated and focussed attention. While targeted interventions are required in order to address the problems of adolescents from these groups, there is also a need to ensure that the school system facilitates their integration into the mainstream, rather than marginalising them further. Major changes in policy and interventions are required to provide good-quality non-fee charging secondary education to students from disadvantaged groups that are falling through the cracks.

Whatever the shortfall in provision of secondary schooling, whether it is an issue of access or quality, the impact is felt particularly by adolescents from disadvantaged

groups. Their personal circumstances do not allow them to compensate for the deficiencies in the system, and they are the ones who are most vulnerable both to having low learning outcomes and to dropping out of the system without completing even Class 10.

Students' school experience differs with schools they get enrolled in. There are variations within the aided schools which form the majority of the secondary schools in Maharashtra. Run by trusts of different sizes, they vary enormously in their infrastructure, facilities and functioning. Similarly, there are major differences between urban and rural schools, and secondary schools and higher secondary schools. The few government secondary schools are mostly in specific regions in the State, are run by different departments and are generally underfunded and functioning poorly. The stratification is more acute at the higher secondary stage, where the unaided sector has grown in importance in recent years. Among the marginalised groups—SCs, Muslims and STs—it appears that students from SC families appear to be coping with the system and are most likely to complete secondary education. However, they may not be able to follow a pathway with good prospects. The choice of streams in Class 11 is determined by the students' learning competencies developed in earlier years. It is likely that many students from socially disadvantaged groups select arts because their marks were not good enough or the school they join does not offer any other stream or they themselves lack the confidence that they could cope with more difficult subjects. This works to their disadvantage in the long run.

Universalising secondary education in Maharashtra requires action from the multiple stakeholders involved—various government departments/trusts/teachers, parents and students. The government appears to be veering towards improving the prospects of those at the top of the social ladder by allowing for a greater role for the private-unaided sector. Such actions have grave consequences for those at the margin.

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