



Reimagining Prosperity

Social and Economic
Development in
Post-COVID India

Edited by
Arash Fazli · Amitabh Kundu

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Reimagining Prosperity

“The COVID-19 pandemic has highlighted a number of vulnerabilities in our economic system and the policies that underpin it. ...*Reimagining Prosperity* does an excellent job of not only identifying such vulnerabilities but also suggesting sensible, practical solutions that are highly relevant for India and other countries in the developing world facing some of the same challenges. I wholeheartedly recommend this book to development economists and policymakers everywhere; it is timely, intellectually stimulating and inspiring.”

—Augusto Lopez-Claros, *Executive Director, Global Governance Forum and Former Chief Economist, World Economic Forum*

“As this volume reveals, the COVID-19 crisis and its intersection with other economic and environmental crises was a source of danger and suffering that revealed many of the weaknesses of Indian society but also permitted identification of opportunities to act on multiple fronts to create a more just, cohesive, effective and resilient India.”

—Michael Dunford, *Emeritus Professor, University of Sussex, UK*

“Many believe that the smart recovery of the Indian economy from the Covid-induced shocks indicates that it was only a passing nightmare. Nothing could be further from the truth. As this book shows in great depth and detail, there have been fundamental structural changes in the economy across a wide range of sectors.”

—Pronab Sen, *Former Chairman, National Statistical Commission, and Principal Economic Adviser, Planning Commission, New Delhi*

“This stimulating volume provides astute insights into the profound shock of the pandemic on Indian society and economy, and makes a compelling case for broadening the dominant approach to development and the role players involved.”

—Ivan Turok, *Research Chair in City-Region Economies, University of Free State, South Africa*

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Introduction

Arash Fazli and Amitabh Kundu

The present volume is the outcome of a series of online seminars organised by the Bahá'í Chair for Studies in Development at Devi Ahilya University, Indore, to explore the second-order effects of the COVID-19 pandemic on India's most vulnerable populations. The consequences of the pandemic in terms of the millions of deaths and the adverse impact on social and economic development around the world have been well-documented. India has been one among the worst-affected countries on account of the loss of both lives and livelihoods.

The premise underlying this series of seminars was that like every major global crisis, the disruption caused by the pandemic held within it the seeds of profound social and economic transformation. The disorientation, shock and anxiety that it triggered led to both a desire to return to 'normalcy' as soon as possible as well as a disturbing consciousness

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of how far our present social and economic order has drifted from the long-cherished principles of justice, solidarity, mutual collaboration and environmental stewardship that constitute the essential prerequisites of healthy, harmonious and prosperous collective existence. The pandemic exposed the alarming levels of systemic injustices lying just below the veneer of everyday, middle-class existence. This was evident in the acute precarity that all those on the wrong side of the caste, class, gender, religious and ethnic divide had to endure as a consequence of the pandemic. Similarly, while the transmission of zoonotic viruses such as SARS-CoV 2 is not a new phenomenon, the rapid increase in the frequency of their emergence and the pace of their spread in recent decades as a result of anthropogenic factors was a stark reminder of the catastrophic consequences of human depredations of nature in the age of the Anthropocene. The pandemic had thus exposed how unnatural and unsound our conception of the ‘normal’ had become.

The crisis also showed how ill-prepared we were for the unique challenges of the highly globalised world of the twenty-first century. Like climate change, this crisis was planetary in scale and an effective response to it required the entire human family to act with a degree of unity of thought and action that the world had never seen before. As the Colombian economist Mauricio Cárdenas observed comparing the crises of today with those of the past:

We seemingly live in a permanent state of danger. Crises are no longer isolated tail-risk events that affect a few. They are much more frequent, multidimensional, and interdependent, and – because they transcend national borders – have the potential to affect everyone simultaneously... (N)o individual country’s actions will resolve today’s crises, much less prevent new ones. Today’s crises, ...are interdependent and truly global in scope, with a potentially much greater impact. ... (S)olutions no longer depend exclusively on the competence of national economic authorities. Addressing them effectively requires leadership and action between governments around the world. (Cárdenas, 2022, paras. 2–6)

As Cardenas points out, the pandemic made nation states—their leaders and citizens—much more acutely conscious of the extent to which the welfare of their nation or group depended on the welfare of humanity as a whole. Even if one section of humankind did not participate in the steps needed to overcome the crisis, it could imperil the well-being of the whole.

Rapid advances in transportation and communication technologies and increasing international trade have created a world tied together in dense networks of interrelationships where any change in one part has ripple effects on the rest in unpredictable ways. With tightening bonds of global interconnectedness, the social, political and economic systems of our world which were conceived and created in earlier centuries for a world of sovereign nation-states are increasingly exposed to global forces pushing them towards levels of interdependence and complexity for which they were not designed. A fundamental challenge of our times made evident by the pandemic is to adapt these systems to evolving global realities in the direction of greater collaboration and cooperation, mutual support, justice and environmental sustainability rather than conflict, extreme inequality and the plundering of nature.

This context of a world in rapid transition with structures that need to evolve in response to the forces of history provided the background for the reflections in this volume on social and economic development in post-COVID India. This historical context has profound implications for the nature and scope of change that development is envisioned to achieve. By exposing the fragile foundations of the present social and economic order, the pandemic took the discourse on development back to the fundamental normative questions of who we are as human beings, what we owe each other as members of society, what principles should guide our relationship with the natural world in which we are embedded and what must be our conception of a good society towards which the processes of development should help us advance. The responses to these questions needed to be addressed and articulated in the context of the changing realities of a world being drastically transformed by the processes of globalisation, of technological development, of environmental degradation and of identity politics.

The sixteen papers in this volume cover a wide range of themes from fields in the social sciences and humanities including history, economics, labour reform, unemployment, water governance, food and nutrition security, rural development, urbanisation, epistemic justice, gender studies, tribal studies and public health. The authors of these papers shed light on some of the most pressing questions that have been raised within their fields by the disruption caused by the pandemic and they propose insights and interventions that can provide the contours for a new development paradigm that must emerge based on the principles of

social and economic justice, environmental sustainability and inter-group unity and collaboration.

With regard to the papers in this volume, in her paper ‘Summoning the Collective Will and Courage to Seek Economic Justice’ Holly Hanson examines the role of human agency in creating economic institutions based on norms and values. She views the pandemic as a historical opportunity to break out of ‘path dependence’ and reclaim society’s sense of agency to create institutions that promote and perpetuate values conducive to individual and collective well-being. She makes her point by contrasting the joint stock limited liability company, an institution created to help the privileged amass wealth while being protected from losses or from accountability, with *commenda*, a late-medieval economic institution that pioneered the concept of profit-sharing and equal partnership of capital and labour. While the former perpetuated greed and conflict, the latter created trust, harmony, cooperation and generosity. Hanson argues that a great force for social transformation lies locked up within the unawakened consciousness of the masses who are heedless of their power to create the kind of society they want to live in. As people become conscious of their power of agency and learn to use it to create a world that embodies their shared values, they begin to write an alternative future for themselves and for generations to come. The process, while difficult and complex, is not unachievable. Hanson suggests that to work as a conscious agent of long-term change towards a more just and united world requires courage and a commitment to learning through collective action and reflection.

While Hanson calls for communities to envision where they would like to be within a hundred years and begin to learn to reach there, Parag Wanknis’ paper focuses on more immediate economic interventions that can address structural inequalities. Wanknis argues that discriminatory structures such as caste and gender create the economic fault-lines that limit an individual’s ability for upward mobility. During the pandemic, the highest levels of precarity and vulnerability could be traced along these fault-lines. To address these structural weaknesses, Wanknis proposes a policy framework promoting inclusive economic institutions that provide all citizens with an equal chance to participate in the economy. He also recommends steps such as coupling the development of the financial sector with increased public spending through government borrowing, protecting vulnerable populations from aggregate or idiosyncratic shocks through short-term money transfers and the establishment of an urban

employment guarantee scheme. While these steps are aimed at creating a conducive policy environment for economic growth with justice, he acknowledges that their impact will be enduring only when the macroeconomic interventions are coupled with parallel efforts to uproot injustices in the social, cultural and political domains.

In his paper ‘Labour Reforms and Economic Justice: Inequality, the COVID-19 Pandemic and Regionalism’ Amitabh Kundu argues that addressing extreme inequalities would require not just the redistribution of wealth but also a transformation in the structure of the economy so that the processes of income generation become more equitable. A beginning in this direction would require a fundamental change in the relationship between labour and capital. Analysing recent legislations to reform labour laws within India, Kundu observes that while they provided some benefits to the unprivileged working classes in terms of access to social security, the overall effect has been to weaken labour unions and relax labour laws making it easier for industrialists and big employers to exploit their workers. Thus, attempts at reforming the system are undermined by the inherent logic of the system which perpetuates the exploitation of labour by capital.

Kundu cites data from the United Nations’ Human Development Index to emphasise the structural causes that maintained high levels of inequality in countries such as India. He observes that while income inequality was high in countries across the development spectrum—from the highly developed to the least developed—inequalities in terms of access to health and education tended to be low in highly developed countries but very high in countries at the lower end of the spectrum. The impact of this is that those at the bottom of the income pyramid lack the enabling conditions of access to good healthcare and educational facilities to break out of the intergenerational cycle of poverty.

With its large population of young people, India has the advantage of a demographic dividend. Yet the creation of new jobs has not happened at the pace required to absorb this youth workforce. The years immediately preceding the pandemic saw high levels of unemployment which was drastically exacerbated during the first year of the pandemic with the unprecedented shrinking of the Indian economy resulting in massive job losses, especially within the informal sector. The paper by Panchanan Das and Swarup Roy titled ‘Youth Unemployment, Education and Job Training: An Analysis of PLFS data in India’ provides a granular picture of the impact of the pandemic on youth unemployment in India. They

analyse the impact in relation to various criteria including different age groups of youth, gender, rural or urban setting and levels of education. The policy relevance of their findings is evident. They found, for example, that the youth unemployment rate increased at a much higher rate in urban areas both for male and female youth during the initial phase of the pandemic. The likelihood of youth being unemployed is less for older youth than for younger ones. Their most telling observations relate to the relationship between education and employment among the youth in India. An inverse relationship is observed between the level of education and employment among young people—the unemployment rate is the highest among those with a Master's degree. This highlights the disconnect between the content of educational programs and the skills and capacities needed in the job market. They conclude that unemployment levels among young people, which are aggravated in times of crisis, can be reduced through policies addressing this mismatch between education and skills needed in the job market.

The stubborn, intersectional character of structural inequalities is brought out in Vibhuti Patel's paper on the impact of the pandemic on women's participation in the economy. She identifies the various barriers to the full and equal participation of women in the economy including the gender division of labour which requires women to shoulder the burden of unpaid domestic work; occupational segregation in the labour market; gender-blind development policies; regressive social norms and patriarchal attitudes. The challenges facing women only increased with the pandemic which led to large numbers of women dropping out of the work force.

Patel suggests that in the immediate future, the State must play a crucial role in redressing this injustice. In the absence of strong demand-driven growth in the market leading to the creation of new jobs, the State would have to make strategic interventions to create employment opportunities for women. It would also have to create social security programs, welfare schemes and basic infrastructure to relieve women from the burden and drudgery of care work and household management. Gender-sensitive policies on the basis of disaggregated data will have to be crafted to address women-centric issues. At a broader level, she calls for a rethinking of the dominant models of development that pursue economic growth and rise in the country's Gross Domestic Product (GDP) as the panacea for all social problems. Such models have given rise to the rampant exploitation of the labour force, with women being among the most vulnerable. She ends her paper with the insight that beyond ensuring

greater participation for women in the existing economy which is beset with crises and injustices, the long-term challenge rests in building new economic structures that are not only more just and equitable but also more reflective of non-patriarchal values of care, collaboration and mutual assistance.

Another segment of the population gravely impacted by the pandemic are the Adivasis. Even prior to the pandemic, they were among the most disadvantaged groups in the country, ranking very low on almost all development indicators. Development policies across the decades have only exacerbated their displacement, alienation and destitution. H.S. Shylen-dra's paper titled 'Whither Adivasi Livelihoods? A Longitudinal Study of a Bhil Village in Gujarat' draws on an inter-temporal micro-level case study, carried out by him and his team in a tribal village of Gujarat over the course of two and a half decades from 1994 onwards, assessing the changes in living conditions and livelihoods of the villagers during this period. The study concludes that there has been little or no improvement during this time for the Adivasi villagers. Ironically, the study coincides with the liberalisation of the Indian economy, which was supposed to usher in 'a big tide that would lift all boats'. As the study found, far from achieving substantive improvements, the macroeconomic changes during this period only increased the vulnerability of the Adivasis to capitalist forces. Unable to rely on their traditional sources of livelihoods in forestry and agriculture, most of the inhabitants of the village under study, including women, were forced to rely on seasonal and circular migration to make ends meet. Most of the work available to them was of the unskilled or semi-skilled kind in the construction sector in urban areas which were highly exploitative, hazardous and degrading. Although many of them received some level of education and benefitted from various government welfare schemes, the improvements in their lives remained too superficial and meagre to allow them to resist or overcome the formidable forces that kept them in a state of deprivation. The paper makes a number of recommendations to reduce the vulnerability of the Adivasis, including increasing their local resource-base through water harvesting and forest land regeneration, the collectivisation of agriculture to increase their bargaining power, making available to them much-needed credit, and a special focus on increasing their access to quality education and skill development programs.

The issues facing the agrarian sector and the need for change have come into sharper focus in the aftermath of the pandemic. The return of

millions of migrants from cities to rural areas served as a stark reminder of the continued significance of agriculture in India's economy and polity. The attempt of the central government to pass the three ill-fated farm laws in 2020, the severe and protracted backlash that it provoked and the consequent decision to rescind these laws only served to bring the issues facing Indian farmers further into the spotlight of public attention. Harbir Singh Sidhu's paper 'Transforming India's Agrarian Society in a Post-COVID World: Prospects and Challenges' traces the imperatives that have shaped the trajectory of rural development in post-independence India. His analysis spans the totality of rural society including the social, cultural and political institutions and forces that constitute the matrix within which the rural economy functions. It also explores the possibilities of social, cultural and political change based on a perspective that attempts to reconcile the imperatives of social cohesion and justice with a practical reading of the ground realities in India's villages. The path towards change, as suggested by this paper, includes recommendations for reform in social, cultural and political structures and practices at the village level, and economic prescriptions such as increasing the marketability of agricultural produce in India and abroad and creating jobs in the manufacturing sector to absorb unskilled and semi-skilled workers displaced from the agricultural sector.

The pandemic's impact on food security, malnutrition and hunger has been one of its most disturbing effects resulting in great suffering for millions of the most vulnerable people in India and demanding urgent policy interventions. Dipa Sinha's paper analyses these issues in some depth. For the millions of people who were faced with the prospect of starvation due to the loss of livelihoods and increased expenditure on health, the free distribution of rations by the State through the Public Distribution System (PDS) was a life-saver. Sinha calls for access to the PDS to be universalised, at least in periods of crisis such as the pandemic, covering even those vulnerable populations who, for various reasons, lack access to the PDS. Further, she suggests decentralising the procurement of food for the PDS so as to source food items that are grown locally such as millets, pulses and edible oils. Such decentralised procurement can also be followed for the food provided through the Integrated Child Development Services and the Mid-Day Meal Scheme. This approach would provide greater food and nutrition security and ensure that the producers of crops other than rice and wheat receive an assured price.

In her paper ‘Degrowth, Diversity and Decentralization: Building Sustainable Food Systems for Food and Nutrition Security’, Richa Kumar uses the context of the food crises caused by the pandemic to highlight the unsustainable nature of the modern agricultural system which has caused much damage to the natural environment and to human health. To build sustainable food systems and ensure food and nutrition security, Kumar argues that we focus on three ‘D’s: degrowth, diversity and decentralisation. In the present economic system, which focuses on increasing economic growth, food production and agriculture are considered economic activities that function outside of nature, whether in the form of material extraction or waste creation. The degrowth movement calls for the recognition that all economic activities, agriculture in particular, are embedded in nature and that there are ecological limits to how much an economy can grow. It calls for reducing the size of the material economy, redistributing resources more equitably and reprioritising the values of care, justice and environmental sustainability. In addition to degrowth, Kumar calls for a move away from standardised foods towards food diversity which characterised traditional diets that drew from a range of locally-sourced ingredients. However, moving towards degrowth and bringing back food diversity will not be possible without Kumar’s third ‘d’ which is a process of decentralisation where capacity is built at the block and district levels to support framers, to help build local supply chains and to facilitate the creation of local markets.

By reviving the conversation around what we value as a society, Kumar feels that we can move away from the relationships of exploitation and extraction that characterise our existing food production and consumption systems. This would involve, among other things, changing how we measure success by bringing into the cost-output equation the impact food and agricultural systems have on the environment and on human well-being in its broadest sense.

The need for a reframing of the relationship between human beings and the natural world is the broad theme of three papers in this volume concerned with the challenges of water management and water governance in post-COVID India. In his paper titled ‘Water Management Priorities in a Post-COVID World’, P.S. Vijayshankar argues that the growing crisis of water scarcity cannot be addressed from within the development paradigm that has given rise to this problem. According to him, the extractive paradigm which prevails today views high rates of economic growth as the main goal to be pursued. The increasing

extraction of natural resources is seen as the means to achieve this goal. Approaches to water management that are based on this paradigm view water as a resource primarily meant for human consumption. In contrast, Vijayshankar proposes an ecosystem paradigm in which water is viewed as being embedded within the ecosystem as an inseparable part of it, to be protected and preserved for future generations. The principle that should guide humanity's relationship with water is that of 'water stewardship'.

Vijayshankar identifies five priority areas of action for water management in post-COVID India: the need to move away from water-intensive agriculture through the diversification of crops; sustainable and community-based management of ground-water; the protection of river systems and wetlands; ensuring of water quality and drinking water security; and the creation of strong legal frameworks for water governance in India.

In his paper 'Principles for Water Governance in a Post-COVID World: Water Sector Needs to be Embedded in Environmental Justice', K.J. Joy observes that the crisis in humanity's relationship with water revealed in rapidly-escalating demand and dangerously-depleting fresh-water and ground-water reserves is an outcome of the anthropocentric assumptions underlying our current development models. Drawing on principles from an environmental justice framework, Joy calls for a drastic restructuring of the water sector on more equitable, sustainable and democratic lines. Some of the guiding principles for water governance that he suggests include ensuring that interventions to water bodies are along the contours of nature and not artificially imposed; focus on the management of demand for water as against the present emphasis on supply augmentation; recognition of the structural and historical inequities which determine access to water; adoption of an approach to water management that is adaptive to rapidly changing circumstances and the promotion of participation of all peoples in water governance and in the processes of knowledge production.

The disruption caused by events such as the pandemic can provide a stimulus for a fundamental reassessment of the reading of reality on which policy-making is based. Vishal Narain's paper titled 'Seeing Water Differently' suggests that the pandemic offers just such an opportunity to alter narratives about crucial public policy issues. According to him, narratives play an important role in framing public policy and the kind of solutions proposed depend on narratives that shape our understanding of the problem. Based on this premise, Narain posits that the narrative around water governance needs to change from a mistaken focus on scarcity to

the issue of unequal access. He further elaborates on some of the implications of the distributional inequities faced on the basis of class, caste, gender and the rural-urban divide in India.

In light of this reading, Narain calls for greater sensitivity to existing forms of social, economic and political discrimination in the drafting of water policies. While analysing the social and political dimensions of water management, he stresses the need for interdisciplinarity in water resources education to prepare professionals in this field to approach water governance in all its complexity rather than from a purely technocratic perspective.

Among the vulnerable groups who were disproportionately impacted by the pandemic were informal sector workers and those dwelling in urban informal settlements or slums. The remaining four papers of this volume focus on groups that belong to these segments. The paper by Puja Guha, Annapurna Neti and Roshni Lobo titled ‘Reclaiming their Place in the City: Narratives of Street Food Vendors of Bengaluru during the COVID Crisis’ sheds light on the plight of urban street food vendors. Their paper is based on a qualitative study carried out with food vendors in Bengaluru. It analyses how these vendors struggled to cope with the fallout of the pandemic. With the abrupt announcement of the lockdown in March 2020, which completely shut down city streets for an extended period, these vendors were cut off from their only source of livelihood. Many of them were migrants for whom the abrupt and prolonged loss of income left them with no option but to move back to their hometowns or villages or stay in the city and pile up unmanageable levels of debt. Even when the restrictions on mobility were eased and the streets became accessible, these vendors had to struggle to get back their customer base. A bigger challenge was to reclaim their physical space on the street which, during the prolonged lockdown, was appropriated for other purposes. Based on this study, the authors raise questions about the exclusionary nature of urbanisation which is reflected in the struggles of street food vendors for access to urban spaces and by their elusive quest for belongingness in the city.

Nomita Kumar and Kavita Baliyan focus on another segment of the urban informal sector—women domestic workers—in their paper titled ‘The Impact of the COVID-19 Pandemic on Female Domestic Workers in an Urban Setting’. Among informal workers, women remain the most exploited and vulnerable. They are often not recognised as workers and

their contribution is often rendered invisible due to the intersection of gender and informality, making them doubly oppressed.

As described by Kumar and Baliyan, domestic work is mainly performed by women who migrate to cities from neighbouring villages or towns in search of livelihoods, often due to the absence of opportunities for remunerative work in rural areas and the need to repay debts. The pandemic and the consequent lockdowns dealt a devastating blow to the financial status of these women and their families, many of whom were pushed into a debt trap. In many cases, they were the primary earners of their families. Even after the lockdowns were relaxed, some of these women reported being stigmatised as the spreaders of the virus due to which they were prevented from returning to work or entering upper-class neighbourhoods.

Based on their interviews, Kumar and Baliyan observe that female domestic workers mostly opt for this line of work due to the large number of dependents in their households and the limited availability of income-generating opportunities. As their study reveals, many such women preferred domestic work to the other options of work available in the construction sector that were gruelling and degrading. Additionally, the domestic workers they interviewed gave various reasons for valuing this form of work—it helped them build strong relationships with their employers, it brought them respect in their communities and it gave them the opportunity to be outgoing and independent. The pandemic, thus, not only deprived them of their income but also of the positive social, emotional and mental support they derived from their work. These deprivations, in addition to the increased household duties they shouldered as women and the anxieties of contracting the virus, left many with mental health problems.

In the face of such an unprecedented crisis, the authors call for strong state support to this class of women in the form of greater social protection coverage, free food rations even for those without documents establishing their domicile, income support through cash transfers and gender-sensitive policies that address women-centric challenges. Furthermore, they point out that the right set of policies and legislative measures alone are not enough to secure the interests of women in the informal sector. Governments and employers can find loopholes to abdicate their responsibilities towards these vulnerable groups. The authors feel that there is also the need for genuine political will and a more profound social consciousness and commitment to social justice for all in society to

ensure that significant improvements in the living and working conditions of these vulnerable groups are achieved.

The next two papers in this volume focus on inhabitants of informal settlements, discussing not just the precarity of their lives aggravated by the pandemic but also their much-neglected capacities to serve as agents of change. In their paper ‘Impacts of COVID-19 on Public Health in Urban Slums in India and Lessons for the Future’, Siddharth Agarwal, Kanupriya Kothiwala, Shabnam Verma and Mayaram Sharma capture the tragic impact of the pandemic in terms of the disruption of routine and essential public health services to slum dwellers. The paper provides a glimpse of what this deprivation has meant for slum dwellers—pregnant mothers not receiving essential antenatal care and being deprived of medical attention even at the time of child birth; children missing out on essential immunisations and not receiving supplementary nutrition and medical attention during the crucial early years of their lives; cases of tuberculosis going undetected and untreated and women being unable to use birth control measures resulting in innumerable unwanted pregnancies. The cost of this massive lapse in healthcare provision in terms of the preventable deaths that occurred, and the irreparable damage dealt to the health and well-being of children and adults can never be fully estimated.

Drawing on a qualitative study carried out by the Urban Health Resource Centre in selected slums in Indore and Agra, their paper brings to light the veritable collapse of the system of healthcare for the vulnerable populations during the most intense phases of the pandemic. To build a more robust public health system in India to tackle future crises of this magnitude, the authors call for a significant increase in investment in the healthcare system to improve the quality of services and to expand its reach. In particular, they call for strengthening the health infrastructure in small cities, which have become the preferred destinations for rural migrants in search of livelihoods. They also argue that the increased resilience of the public health system in India will require reinforcing other crucial determinants of well-being such as food security, job opportunities and good education. This would call for coordination between various departments and agencies of the State and their active collaboration with the communities and the non-governmental organisations working at the grassroots.

The impact of the COVID-19 pandemic has highlighted the need for greater agency and involvement of the masses, especially urban migrants

dwelling in informal settlements, in their own development. Their participation however is predicated on how policy paradigms view them vis-à-vis knowledge. How valuable is what they know? How relevant is their perspective to shaping policies? Caroline Fazli's paper 'Whose Knowledge Makes a City Smart? Exploring Conceptions of the Role of Knowledge in Urban Policy in Indore, India' suggests that to truly value the learning and knowledge of the masses and to elicit their participation in development processes necessitates looking beyond conceptions that equate knowledge with information or technical expertise and being open to the way these populations generate and apply various forms of knowledge to achieve individual and collective well-being.

To understand the limitations of the way urban policies have viewed the poor, her paper uses historical institutionalism to gain insights into the way policy paradigms emerge on the basis of certain assumptions and beliefs. She uses this theoretical perspective to analyse the particular direction that urban policy took and draws on a recent study by the Bahá'í Chair for Studies in Development and the Institute for Studies in Global Prosperity to propose that there is an epistemic gap which needs to be filled by taking into consideration people's own knowledge systems. This would require policy makers to broaden their conception of knowledge to include forms of knowledge generated outside scientific research institutions and those based on non-material ontological truth claims. In this expanded paradigm, it becomes possible to make visible how people resolve development issues through applying their own spiritual convictions, learning from them and passing on this learning to others thereby creating a culture based on these values.

Before ending, a word is in order about the proposition implicit in the title of this volume—that the pandemic must serve as the occasion for a much-needed reimagining of what prosperity is for India. Two questions arise from this proposition—what is the nature of the change being envisioned and who are the protagonists that will lead the country towards it? In response to the former, the volume proposes that the overarching goals of development must move beyond a narrow focus on economic growth and material prosperity and encompass a much broader conception of human well-being which includes the spiritual, social and cultural dimensions of life. Justice, the oneness of humankind and our interconnectedness with nature are after all ideas that resonate with people at the spiritual, social and cultural levels. Most people do not see themselves merely as utility maximising, self-interested economic actors. Rather,

while the material dimension of life has its importance, most people derive their deeper motivations and their sense of purpose from their spiritual convictions, their interpersonal relationships and their cultural values. This is especially so in a country such as India. Development plans and programs will be much more likely to elicit the wholehearted participation of the masses and summon their collective will for change when the prosperity for which they aspire combines the spiritual, social and material dimensions of life.

With regard to the second question, the pandemic has thrown into sharp relief the distinct contributions of the various protagonists in the development story of India at this moment in history. The State and its agencies create a conducive policy environment for change to occur through, for example, providing public goods such as health and education to all citizens that constitute the basic enablers of social and economic mobility. Furthermore, as the pandemic has shown, the State has to be the provider of the last resort. The pandemic also showed the enormous potential for rapid progress that is made possible when the private sector collaborates with the State in achieving common objectives. The development of safe and effective COVID-19 vaccines within less than a year that saved millions of lives was a testament to the progress that can be achieved when business aligns itself with social goals. Protagonists from civil society such as community groups, social movements or non-governmental organisations play an indispensable role in mobilising the collective will for change. They incubate and test new ideas and provide prototypes of workable models to be implemented at regional and national scale. The various institutions of society such as the judiciary, religious institutions, the media, the education system and the family provide the necessary ecosystem within which the commitment to justice, to social harmony and to the preservation of the environment can be strengthened and nurtured. Through both formal and informal means, they act as promoters and regulators of normative values that can guide and constrain behaviour of the State, the private sector and the community. The picture remains incomplete without recognising the unique place of the moral agency of the individual in this scheme. The volition and initiative for change and the fire that sustains it come from a spark of the spirit that is born within the conscience of the individual. It is also through the active engagement of individuals that the moral integrity of a movement for change and its consistency over a long term

can be protected and preserved. It is thus through the mutually reinforcing collaboration between all the protagonists of the development process that the dynamics of a sound, steadily growing and sustainable process of social and economic change can be generated and sustained.

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Summoning the Collective Will and Courage to Seek Economic Justice

Holly E. Hanson

Things can be true and at the same time unthinkable. The global COVID-19 pandemic has given us many examples of things which are too painful to bear thinking about. The plight of migrant workers walking home across the country from their employment in Delhi, Mumbai and other cities in March of 2020 is one; families' desperate search for oxygen canisters for their relatives at the height of the second wave in May of 2021 is another. Realities which are too painful for our minds to grasp have been revealed, incontrovertible, before our eyes. A reality which we cannot recognise because our categories of thought have no place for it is another kind of unthinkable. Michel-Rolph Trouillot explained in *Silencing the Past: Power and the Production of History* that the Haitian revolution did not make sense according to contemporary perceptions in 1791, or those of historians later, and therefore it never assumed its appropriate place in our understanding of the modern world (Trouillot, 1995). Mental

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habits which create a frame for our reality leave some things—such as the possibility of providing every citizen with secure subsistence and access to health in the twenty-first century or the self-liberating capacity of intelligent enslaved Africans in Haiti in the eighteenth century—beyond our capacity to comprehend.

The urgent needs of the present moment illustrate the binding limitations we place on our own understanding of the world, and what therefore becomes unthinkable. How might the COVID-19 crisis have unfolded differently if in early 2020 we had had strong, effective international structures instead of absolutely sovereign nation states and weak international institutions? What if decisions regarding vaccine production and distribution and emergency travel restrictions had been made by a bicameral world legislature with power to allocate manufactured products and natural resources, and to oversee a world currency? If we had had a world legislature with one house representing nations, and one house consisting of legislators who were democratically elected in non-partisan elections by all the people of the world, in proportion to population, those leaders could have undertaken coordinated, collective action in 2020 and at least some of the suffering caused by COVID-19 pandemic could have been avoided. An imagined world legislature with sovereign authority is beyond our conception of the possible. But why? Strong, effective international institutions, built on global democracy and utilising resources for the well-being of all humanity, would create the possibility of changing so many elements of our current world that are intolerable. Perhaps stronger international institutions frighten us because we assume that human beings are naturally aggressive, the strongest always win, and self-defence is the source of safety. The “realist” school of international relations assumes polities will always be in conflict, in contrast to the “idealist” or internationalist school that imagines collaboration is possible. Why do we label them that way? We might call international relations strategies that anticipate collaboration “productive”, “safe” or even “realistic” and those which perpetually plan for conflict “dangerous” or “problematically pessimistic” instead of “realist”. We might consider that global-level authority is required to solve problems that affect the entire world, and in 2020 and 2021 humanity needed a way to make decisions related to COVID-19 at the global level, rather than at the level of the nation-state. If the tools we need lie beyond the horizon of what we can imagine is possible, we need to make efforts to cross the barriers we place in our own thought.

The fundamental injustice of rural-to-urban labour migration is one arena in which viable solutions seem to elude us, and perhaps to be unthinkable. One hundred million seasonal casual workers contribute to the Indian economy, and some argue that the profound precarity of their lives has come to seem natural and unavoidable (Corbridge & Shah, 2013; Gupta, 2012; Mander, 2012). The absence of rural livelihoods, unbearably evident as millions walked home across India in 2020, is also the driving force of international migration from South America and from Africa as well as a concern internal to India. It is a central problem for the human race, and what to do about it seems to be beyond our ability to comprehend. In the following pages, I suggest that one way to pry open our minds to possibilities that might be unthinkable is to look at ways that we explain how the profound disempowerment of rural-to-urban migrants came to be. One, locating the origin of rural people's disempowerment in the turn towards market liberalisation which deprived farmers of protections from the state, is based in fact and presents a range of actions that can be pursued. A second origin story, which sees the marginalisation of rural livelihoods as an inherent component of the industrial revolution and the establishment of the modern world, suggests that a very large process of remaking social institutions would be necessary to recreate viable rural livelihoods. It can be imagined and we could learn to create it. A third way of thinking, which locates the origin of the plight of migrant labourers a century earlier, in the transformation of scale and morality that accompanied the rise of mercantilism, takes us much further from our current habits of thought, but may open up possibilities for actual rural prosperity that we cannot otherwise reach, and suggests a long-term process of learning that could be pursued.

Many people see policy changes in the last quarter of the twentieth century as the origin of the plight of rural people and the problem of rural-to-urban migration. Peasant farmers suffered under market liberalisation and the imposition of structural adjustment which enforced market-focused economic policies in both India and in other parts of the world. Recognising that the conditions of rural people's lives got worse under these policies suggests a range of possible responses. If the crops grown by peasant farmers can be produced more cheaply on an industrial scale, then farmers need subsidies in purchasing inputs, protection of their right of access to land and domestic markets need to be secured from international competition (Shiva, 2002). Or, alternatively, farmers need a

guaranteed source of income to ensure their ability to purchase food (Sen, 2002). These goals can be accomplished through mobilising political will: when voters value rural lives, they will elect leaders who enact policies that protect rural livelihoods. India's Mahatma Gandhi National Rural Employment Guarantee Scheme is an expression of collective will that people will not die of starvation. These policies do not actually change the structural elements of a national and global economy in which rural life does not produce prosperity. The situation in March of 2020 when millions of rural-to-urban migrants in India were suddenly out of work and there was nothing they could do but start walking back to villages dramatically demonstrated the voicelessness and absence of agency that are inherent in the structure of the world we inhabit. Redistribution of wealth that guarantees subsistence to those at the bottom does not actually change those structures. When an economy offers people no way to support themselves, the provision of subsistence can have a dehumanising effect (Ferguson, 2015).

Another place to locate the beginning of rural disempowerment might be the late nineteenth and early twentieth centuries, when new technologies revolutionised agriculture and peoples' place in it. Steamships and railroads diminished the power of farmers, because the people in their communities could acquire food from further away, even other continents (Cronon, 1992). The possibility of replenishing soil health with fertilisers that came from South American guano or from newly developed chemical technologies broke farmers practices of maintaining reciprocities with their land (Melillo, 2012). Mechanisation drove the majority of farmers off the land in many nations. Because these processes happened at the same time that the first industrial economies were established, the decline of agrarian livelihoods has been linked with the rise of national wealth fuelled by industry. In economic development, *path dependence* means there is no path but the one we have taken, and perhaps one of the boundaries in our ability to imagine a future for the human race is the degree to which the loss of viable small-scale agriculture is associated with modernity.

Industrial technology did create fantastic wealth, and it also created the concentration of economic activity in urban areas that relates directly to the crisis we are seeing right now. It is not acceptable for millions of people in a society to be living at or below subsistence. What were people thinking when we set up the world this way? Industrialisation should have eliminated material want from the world. It gave us the technological capacity to clothe, house and feed everyone on the planet because of the

way it multiplied the consequences of human labour. Instead, industrialisation the way we did it led to a loss of agency for people who stopped controlling their own labour, a de-skilling of many people's work and a loss of voice and agency at the level of communities. These long-term negative social consequences have to do with choices people made early in the process of industrialisation: industrial organisation of labour was based on the largest-scale use of human labour which was known at that time, which was the organisation of enslaved labour on plantations (Baptist, 2014).

It is problematic to identify late nineteenth-century technological and social change as the source of the immiseration of rural people, because it implies that there is no way out. If technological innovation is the cause of people's disempowerment, we are stuck. If we want a world with hot running water, universal elementary education and aeroplanes and an abundance of material goods (for some, not for everyone)—the things we have created with the abundance of wealth that industrialisation gave us—then we must also accept endemic poverty and rural powerlessness, because those conditions arose out of the same technological progress. It is the path we are on. Other paths might have been possible, but once we made the path, labour, laws and flows of resources trap us there. It is as though we built a prison for ourselves in the way we industrialised, and even though it does not work for most people, we have to live in it because we made it. All we can do is ameliorate the conditions of life for the people who fall below subsistence: the structures cannot change. This is a habit of mind we must challenge.

It is possible to grant human beings more capacity than the theory of path dependence allows. Human beings made trillions and quadrillions of human choices to set up the relationships among people that are modern urban-centred societies, but we could aspire to make something different. We could learn to make choices that lead to habits and structures that hold people in different kinds of relationships, ones that make more space for rural vitality. This would involve a re-evaluation of how we allocate infrastructure, of how we use technology. It would require us to acknowledge the actual productive potential of small-scale agricultural production and adjust our systems of knowledge generation so that they incorporate and benefit smallholders. The effort to learn other paths, to innovate new kinds of relationships between farmers and the land, and farmers with each other and with larger communities, is the aspiration of social movements

such as Via *Campesina* (“What is La Via Campesina”, n.d.). Learning to do things differently is a choice we could make.

To make ourselves path-independent, it may be useful to ask whether the origins of rural disempowerment could be pushed back to an even earlier time. At the beginning of the seventeenth-century forms of economic activity changed in significant ways, and there was a corresponding shift in how people thought about the purpose of economic activity. The pattern of organising economic activity called *mercantilism* (some call it *war capitalism*) involved a tremendous growth in scale, and a loss of complexity, and an abandonment of the idea that economic activity had to serve a clear social purpose (Shiva & Seshadri, 2017). Karl Polanyi called this “the smashing up of social structures to extract the labour inside them” (Polanyi, 1944, p. 172). For example, consider the social consequences of two forms of partnership. The creation of the East India Company required a new legal and economic institution, the joint stock limited liability company. It was invented to assemble vast amounts of capital in order to make a profit fighting wars of imperial conquest, and to prevent the people owning the company from being held responsible for the actions of the company. An earlier economic instrument, called *mudaraba* or *commenda*, was a partnership between one partner who had labour and one partner who had capital, who agreed to a joint enterprise of a fixed duration, with a plan for how they would divide the profit. *Commenda* requires trust, builds trust and spreads wealth. The joint stock limited liability company, in contrast, presumes and builds on conflict. The habit of thought that economic activity can be good for a nation even if it is bad for people emerges at this time.

Perhaps the profound disempowerment of rural people and the sense that it is natural and inevitable for them to live on the edge of starvation has its origins in market liberalisation and structural adjustment in the late twentieth century, and also in the rise of urban-centred industrial economies in the late nineteenth century, but also in the global restructuring and rationalisation of violence for material gain that encompassed the planet a century before that. Perhaps, at each of these moments of change and distress, our forebearers had a sense they were making harmful choices, then they rationalised those choices, and now we are burdened not only with the structures they created, but also with believing those structures are inevitable.

Perhaps the way to restore dynamic rural communities is to commit to thinking past the rationalisation of past failure. Prosperous villages, materially secure small farmers and rural economic vitality are not unthinkable. We can choose to stand in the present and ask, what do we need to learn now, so that in 50 years, or in 100 years, the relationships of rural communities to urban ones would be more reciprocal? What would be the sequence of steps that would re-establish agency and voice and a sense of collective effort? We would need to create spaces for cultivating a collective vision; we would need to learn how to foster generosity and a sense of mutuality among people who are not physically neighbours. We would have to shift our habits of generating knowledge so knowledge generation is happening everywhere. We would have to think about what earlier generations systematically, relentlessly devalued, and figure out how to remember what they forgot about what gives communities vitality. If we make an effort to cultivate courage, we could have a different modernity. What would make it possible is our recognising that we can do it and that creating just, dynamic, prosperous conditions of life for every person on the planet is within our collective grasp.

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Economic Justice in Post-COVID India: A Macroeconomic Perspective

Parag Waknis

INTRODUCTION

The COVID-19 pandemic that engulfed India and the world since early 2020, was a major shock to labour-intensive sectors in the country that eventually led to an economy-wide increased unemployment and substantial income loss. An unplanned blanket lockdown only worsened the situation further highlighting the absence of institutional structures and policies ensuring economic justice to the most vulnerable in society. Thus, the pandemic brought to the surface the already existing fault lines in the Indian economy. The fault lines represent the continued unequal distribution of opportunity for the betterment of life for large sections of the Indian population leaving them vulnerable to aggregate as well as idiosyncratic shocks. As a result, despite the higher growth rate of the post-liberalization period in the Indian economy, many have been left out of the virtuous circle making this a period of “growth without inclusion”

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(Ray & Kar, 2020). By further reducing the capacity of the vulnerable to insure themselves against income shocks, the pandemic arguably has exacerbated the fault lines. A path to economic justice in post-COVID India, therefore, can only be ascertained by policies that focus on equalising opportunity through building capacity.

FAULT LINES

Economic justice in the sense of opportunity for the betterment of life irrespective of caste, gender, geography, or any other discriminatory marker has not always materialized in practice even though it is enshrined in the constitution of India, in many individual policies over time, as well as in the country's Five-Year plans for economic development. In this paper, I argue that the variations in the capacity to better life conditional on the socio-economic division a person belongs to makes such divisions "fault lines". They constitute structural weaknesses in the economy leaving out millions of people without the capability to participate in the economy meaningfully and remuneratively. In what follows, I discuss each of these major fault lines in detail clearly highlighting their role in creating substantive inequities.

Caste

Caste remains one of the significant markers of socio-economic backwardness in India despite the existence of affirmative action policies such as the reservations in government jobs, in admission to educational institutions, and in the electoral system. This is because caste as a socio-economic grouping decides the human and social capital a person inherits and the access to resources and opportunities they will have throughout their lives. As an economic system of resource allocation, the caste system is not efficient as the occupational choice or economic advantages a person's caste affords them even today does not depend on their ability or choice but rather on birth (Dorfman, 1972). This also implies that the existence of the caste system creates persistence in economic outcomes across generations while also determining current economic outcomes. While the relatively liberal mores in urban settings along with affirmative action policies do afford individuals some flexibility in the choice of occupation thereby enhancing economic efficiency, they do not insure a lower caste person completely against discrimination or inherited constraints.

Therefore, even though affirmative action has led to some degree of convergence in terms of education, incomes, and access to resources across caste groups, the caste one is born into continues to determine individual economic outcomes to a substantial extent even today (Deshpande & Ramachandran, 2019; Kumar, 2013; Mosse, 2018; Munshi, 2019). As a result, it is not surprising to see that the segments of the population worst affected by the pandemic were those belonging to the disadvantaged caste groups. For example, Abraham et al. (2021) show that the loss of jobs was more severe for those belonging to lower castes when compared to intermediate and upper caste people and for daily wage workers as compared to regular wage workers. Arguing against the general notion peddled by the popular media that the COVID-19 pandemic was a great leveller affecting everyone across income and social backgrounds, Deshpande and Ramachandran (2020) show that while all caste groups lost jobs in the first month of the lockdown, the job losses for lowest-ranked caste groups were greater by a factor of three. They argue that this difference is the result of lower levels of human capital and over-representation in vulnerable jobs for the lowest-ranked caste groups in the country.

The internal migration of labour allows people an opportunity to improve their living conditions and escape caste discrimination in their towns and villages. However, in the absence of any social safety net in the destination cities millions of migrant workers had to resort to walking back hundreds of kilometres to their homes and back into the discriminatory socio-economic relationships (Srivastava, 2021).

Gender

The gender fault line highlights the several dimensions on which women face significant disadvantages compared to men in India and possibly other developing countries as well. It is a well-accepted fact that women in India share the disproportionate burden of unpaid housework in India relative to men (National Statistical Office, 2020). They bear the brunt of consumption adjustments undertaken at the household level in response to economic shocks (Rose, 1999). Women are mostly engaged in low growth sectors like agriculture and handicrafts with low productivity and wages (Verick, 2014). They are paid less than men for comparative skills and positions. According to the World Bank, the female labour force participation in India stood at 21% in 2019, a figure that has been

declining since 2010. The International Labour Organization states that only a fifth of adult women had a job or sought one in 2019 in India, compared with three-fifths in China. The Centre for Monitoring Indian Economy, an independent private research firm, put the share of urban women at work or looking for work at just 7% in November 2020 (“Many hands, light work”, 2021).

Given these statistics, it is not really surprising that Deshpande (2021) found that even though employment for both women and men recovered after the initial decline at the onset of the pandemic, the gender gap in the likelihood of being employed widened relative to the pre-pandemic level between August 2019 and April 2020. The proportion of educated women seeking self-employment after the pandemic has increased suggesting that they have dropped out of paid work during this period. The recovery in employment for men was higher than for women underscoring the well-established fact that women pay a higher price of adjustment to any economic shock (Bhandare, 2020).

The Informal Sector and the Lack of a Social Safety Net

The informal sector contributes about 50% of the total Gross Domestic Product (GDP) in India. It employs around 93% of the workforce in India (Department of Economic Affairs, 2019), implying that a majority of India’s workforce is utterly vulnerable to economic shocks due to lower relative wages, no safety net, and lower productivity. While Schneider (2016) and Schneider and Enste (2000) show that there are many reasons behind the existence of the informal sector including regulations in the formal sector, a significant fact remains that most participants in the informal sector may not be in it by choice but because of significant barriers to entry in the formal sector. Most of these barriers, like lack of education or sufficient social capital are manmade and can be remedied through State intervention and through the provision of public goods. Notwithstanding this, the sector’s inherent vulnerabilities and the inability of its members to insure against aggregate as well as idiosyncratic economic shocks implies that it would be worst hit by the pandemic.¹

¹ Technically, agents cannot insure against aggregate risk but only the idiosyncratic one in an Arrow-Debreu world. However, inequality of endowments could mean that some sections of society end up sharing disproportionately higher absolute risk as proportion of average aggregate risk.

For example, informal workers lost more wages, 22.6%, compared to formal workers, 3.6% as per Estupinan and Sharma (2020).²

There is also a considerable overlap between informality and the caste/religious minority fault lines as Muslims constitute the highest share of informal workers, followed by those belonging to the Scheduled Tribes, Scheduled Castes, and the Other Backward Castes (Chandrashekar & Mansoor, 2020). Similarly informality overlaps with gender. The recovery of employment for men in the informal sector has been higher than that for women.

The negative effects of the pandemic on the informal sector were mitigated to some extent by the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) which provides work and wages to those from rural areas (Afridi & Sangwan, 2021). This scheme probably served well to mitigate the distress of those who were able to successfully reverse migrate. However, the absence of an urban counterpart to the MGNREGS meant that informal sector workers in urban areas were left in the lurch with absolutely no social safety net.

A POLICY FRAMEWORK FOR ECONOMIC JUSTICE

Importance of Inclusive Institutions

These fault lines are the result of institutional failures that have plagued the Indian economy along with those of many other developing countries. Here institutions mean the written and unwritten rules of participation in the economy. More specifically, economic institutions determine the way societies organize themselves and shape the incentives for individuals and businesses (so-called economic rules of the game) to make physical and human capital investments. These institutions determine the rate of return on physical and human capital accumulation as well as on entrepreneurship. Optimal economic institutions provide an equal return to factor accumulation irrespective of the race, caste, class, or any other marker of difference of the person engaged in that activity. However, that is where we find differences between countries or even at times within

² The authors first identify workers who are at risk of losing jobs across formal and informal sectors. These are the workers from inessential industries and are unable to work from home. Using the Periodic Labour Force Survey (PLFS), 2017–2018 data, the wage loss is estimated which represents the lost wages given that these are the workers who would be laid off during the lockdowns.

countries. For e.g. rate of return on educational investment for a black person is not the same as for a white person in the United States as there is substantial evidence of race-based wage discrimination in the labour market. Moreover, it is also well documented that a black person faces a very high probability of being incarcerated than all other ethnicities in the United States. These factors certainly affect the life outcomes for the racial minority despite having access to a much better public education and health system. According to Acemoglu and Robinson (2012), differences in these economic institutions are ultimately responsible for the large differences in prosperity observed around the globe. Acemoglu and Robinson (2012) (AR henceforth) argue that some countries/societies are able to provide the right incentives and alleviate constraints on full participation in the economic and social sphere for all, enabling their citizens to earn and maintain a relatively higher standard of living, while other societies fail to do so.

The factors contributing to the growth of the average standard of living can be classified into two groups: proximate and fundamental determinants of economic growth. While proximate determinants relate the standards of living to the levels of physical capital, human capital, and the ability to generate and use ideas, fundamental determinants of economic growth look at why the level of proximate determinants differ across time and countries. AR successfully demonstrate that there is at best limited evidence to show that geography and culture are fundamental factors. Compared to these factors, they found that there is much stronger support for considering economic institutions as the ultimate determinant of prosperity in the long run. Based on contemporary and historical evidence of the impact of economic institutions on individual economic outcomes, AR classify economic institutions as being of two types—inclusive and extractive.

Inclusive economic institutions are the ones that foster long-run prosperity by allowing agents to earn the maximum return possible on the accumulation of proximate factors. These institutions establish and protect private property, support well-functioning markets, and ensure equal opportunity for participation in economic activity via the effective provision of public goods like education and health. They provide equal access to an impartial justice system, allow formation and enforcement of private contracts, and facilitate free entry into new lines of business and occupations. Extractive institutions do the exact opposite. Specifically, they do not enable all citizens to participate fully in the economy.

They fail to alleviate constraints beyond the control of citizens such as historical discrimination in the form of race or the caste system. They do not provide access to a fast and effective justice system and such access, if at all present, is conditional on one's social position and power. In the absence of corrective intervention, extractive institutions are beneficial to existing elites and hinder attempts at redistribution.

This can be simply illustrated with the example of North and South Korea (Robinson et al., 2005). They were one country with a similar geography and culture in the early twentieth century, but show substantially different economic outcomes today. This difference can be effectively traced to the nature of economic institutions that developed over time in each of these countries. South Korea became a market-oriented economy and a fully functional democracy allowing its citizens to earn full returns on physical and human capital accumulation. On the other hand, North Korea developed into a dictatorship channelling its resources to the ruling elite and in pursuit of their military ambitions, leaving the average citizen bereft of any means or mechanism to better their circumstances. The institutions that developed in various colonies under European settlers offer another example of how economic institutions evolve and affect prosperity today. Acemoglu et al. (2012) show that the kind of institutions European settlers developed in their colonies were influenced by their mortality rates in these colonies. Colonies where the settlers could survive saw the establishment and development of inclusive economic institutions leading to prosperity and places where they faced a higher mortality rate saw the establishment and persistence of extractive economic institutions facilitating the transfer of resources to the colonizers.

The fault lines for the Indian economy discussed above are glaring examples of extractive institutions at work. The caste system not only leads to discrimination today but perpetuates the disadvantages arising out of centuries of deprivation. The same holds true for all other forms of discrimination based on markers like gender, religion, and sexual orientation. Because of not being able to fully participate in the economy, these groups facing discrimination have little or no incentive to invest in human capital accumulation or take risks and start a business venture. Given that most of the people of such groups would likely be poor because of these inherited disadvantages, they need much wider access to quality public education and health infrastructure than is currently afforded by reservations in educational institutions and some jobs. The quality aspect of

public goods provision is important lest it continues as a token gesture with poor quality of inputs for both schools and medical centres. This would seriously undermine any effort at achieving a more egalitarian future for the society.

Since they are characterized by significant positive externalities, education, and health care are public goods that should be provided by the government. Most developed countries have been providing free access to public education and subsidized higher education to their citizens for about 150–200 years now. As a result, their average citizen has received approximately 13 years of education as compared to an average of only six years of education in India. Though the passage and implementation of the Right to Education Act, 2009 is a step in the right direction that has increased primary school enrolment phenomenally, the quality of education remains suspect. According to the 2012 Annual Status of Education Report (ASER) survey, only 47% of students in grade 5 could read a second grade-level text proficiently, while only about 25% of grade 5 students were able to solve questions involving division, a grade 4 level competency. This learning gap in the early years tends to persist and widen over time resulting in 76% of grade 8 students reading at the grade 2 level (Duflo et al., 2018).

Though, the current affirmative action policies have made considerable dent in the unequal access to education and career opportunities for the historically disadvantaged castes and communities, the continued dependence on private investment in quality human capital formation, means that meritocracy in India today still largely represents achievements made possible by historically inherited advantage. To overcome these hindrances in achieving prosperity for all, a huge increase in public spending on education and health infrastructure is urgently needed. Educational infrastructure includes the provision of nutrition to students along with the means necessary to acquire the required skills. Investment in nutrition and the health of children is extremely important as it affects cognitive development and therefore creates persistent effects (Attanasio et al., 2020). The resulting increase in access to quality education and health irrespective of socio-economic backgrounds will eventually set everyone on an equal footing to participate in the economy and benefit from their economic participation. The possibility of achieving economic success will no longer be determined or hindered by the caste, class, gender, or religion that one is born into.

Another important aspect of leveling the playing field for everyone is substantial improvement in access to speedy and impartial justice system. For this, in addition to the much-required reforms in judiciary and institutions of law enforcement, India would need a massive expansion of judicial infrastructure, an increase in the number of police personnel, appropriately skilled human capital to ensure the enforcement of private contracts and a speedy, fair, and just mechanism for dispute resolution. The current judicial and law enforcement infrastructure in India is not even close to the bare minimum that is required. Rajagopalan and Tabarrok (2019) summarize the current state of affairs in this regard very aptly:

Part of the problem is a simple lack of personnel. India, for example, has surprisingly few government workers—about one-fifth as many per capita as the United States. The number of police per capita, for example, is only 135 per 100,000, one of the lowest rates in the world and far below the median (318) or mean (333) of police officers per 100,000 capita in the rest of the world (UN Office on Drugs and Crime 2017). Moreover, a significant number of the police are assigned to VIPs rather than to protecting the public at large (Vaishnav 2017). The number of judges per capita (12 per million) is far below the U.S. rate (108 per million), which helps to explain India’s enormous backlog of 32 million cases, millions of which have been in process for more than a decade (Joshi 2017). (p. 167)

A market-based economy is prone to business cycles—short-run fluctuations in real GDP. Monetary or fiscal policy interventions have only had a limited impact in smoothing these disruptions. At times they have even precipitated a crisis or delayed a recovery from it. Access to formal consumption-smoothing mechanisms like savings or credit lines are limited to the small minority that has access to the formal financial sector. Therefore, a well-functioning economy would also require an efficient social safety net to tide over temporary employment shocks. The current MGNREGS is a good example of such a policy that provides employment for up to 100 days to anyone asking for work. A similar policy needs to be designed and implemented for the urban sector on an urgent basis. The presence of a large informal sector makes this even more urgent.

Along with a social safety net in the urban sector, many existing government benefits will need to be made portable. This is especially relevant given the extent of internal migration that takes place in India. There

are over 100 million circular migrant workers in India that travel every year to their work destination and then back to their native place only to repeat it next season (Tumbe, 2020). Portability of benefits for such workers would go a long way in ensuring minimum disruption in their consumption. The central government's move to create a single ration card for the nation is a good step in this direction. What would also help is portability of health and education benefits.

Public Spending for Inclusive Institutions

Establishing inclusive economic institutions, or redesigning existing institutions to make them more inclusive, will require changes on several fronts. Public spending has to be reprioritized to reflect the strong preference for public goods provision. This might mean an increase in the fiscal deficit in the short run, balancing its negative effects through its positive impact on growth in the medium and long run.³

It implies balancing the imperative of the short-term amelioration of distress with policies that aim for structural reform in the medium or long term. To cite an example of insurance provided by fiscal policy, when the crops fail because of bad monsoons it might be necessary to provide relief in terms of farm-loan waivers. However, such policies should be associated with developing mechanisms to reduce vulnerability to such aggregate shocks. Changing cropping patterns, diversifying into crops that are less water intensive, and desilting of dams and river beds to facilitate replenishment of the water table could be some of the reliable ways of reducing the rainfall dependence of agriculture and hence the need for farm-loan waivers (Krishnan, 2021). This would also reduce the moral hazard generally associated with state-sponsored bailouts of private agents in the economy. Additionally, investment in cold storage at the site of district agricultural wholesale markets would improve the returns for farmers by boosting their bargaining and holding power.

³ There might be a need to rethink India's Fiscal Responsibility and Budget Management Act (FRBM) given the constraints that it puts on government spending. Though a rule-based framework with some commitment device as enacted through the act is a laudable objective, the effects on public spending and its impact on private investment and consumption may not be as straightforward as the act presumes. The magnitude and sign of these effects depend on many factors such as the way the spending is financed, utility of the spending as insurance against aggregate as well as idiosyncratic shocks for vulnerable sections of the society and whether it can be categorized as productive or not.

Financing of this increased public spending would become cheaper over time as governments build credibility by actually delivering the public goods. This would arguably boost private consumption and investment as productive government expenditure would help build human capital and the infrastructure needed for growth. It will also reduce the existing income inequality over time. The positive effects of productive government spending on economic growth, and on the reduction of inequality has ample theoretical as well as empirical support (De La Croix & Michel, 2004; Galor & Moav, 2004; Glomm & Ravikumar, 1992).

Private investment can also go up as a result of an increase in government debt as public debt can act as a collateral in private-loan transactions addressing the overall shortage of safe assets. A safe asset is a simple debt instrument that is expected to preserve its value during adverse systemic events (Caballero et al., 2017). While the global supply of safe assets is primarily determined by the bonds and other securities issued by the United States and other developed countries, within India safe assets can be credibly produced by private as well as government entities. Though debt issued by a government does not automatically constitute a safe asset, as the central and state governments focus on delivery of the necessary public goods, the possibility of being able to raise higher tax revenues in the future to repay the debt becomes higher, increasing the value of public debt itself as a collateral.

Making institutions inclusive via investment in human capital will also reduce the size of the informal sector over time as increasing numbers of people become capable of participating in formal sector. This reduction in the informality in the economy can be aided by simultaneous changes in access to financial markets, reduction in costs of entry for new businesses, and speedy and efficient contract enforcement. Emphasis needs to be placed on the introduction of such reforms with proper groundwork and preparation so as to reduce the burden of those who stand to lose from the institution of these reforms. This will be necessary to ensure the long-run sustainability of these reforms.

MARKETS AND INEQUALITY

While advocating for free markets as one of the inclusive institutions, we cannot neglect the allegation that it has contributed to the substantial inequality in India and around the world. In response to such claims, we should take into consideration the fact that markets in themselves are

neither good nor bad. It is their interaction with the existing social structures and distribution of endowments among the participants that often determine the output and its distribution. The social structure in which the markets are invariably embedded determines not only the participation constraints on different members of the society but also their share of output produced. This seems to be the case with inequality in India. As Ghatak (2021) argues the problem of inequality in India arises because of lack of intergenerational upward mobility. The affirmative action policies have made some dent by allowing a higher mobility for scheduled castes and tribes along with other backward castes. However, other subgroups like the Muslims continue to experience very low mobility. There is also a substantial geographical variation with the south and the west enjoying higher mobility than the north and the east because of the higher spread of education in the former. Thus, providing access to quality public education and health would certainly help communities circumvent their historical disadvantages and achieve higher upward mobility. This expenditure can be financed through taxation of wealth as it “reflects the cumulative accumulation of the results of economic advantage on the part of the rich over generations” (Ghatak, 2021, p. 7). To further support such a tax, I allude here to the second welfare theorem which states that any efficient allocation can be supported as an equilibrium allocation by appropriately distributing the endowments (Pancs, 2018).

Inequality in developed countries has been a result of a set of very different circumstances. The fact that technological progress has been skill biased over the years; people who have been able to invest in such skill sets have reaped considerable rewards. Goldin and Katz (2008) call this the race between education and technology that has produced economic growth as well as inequality. They show that access to schooling actually reduced the college wage premium from 1915 to 1980 in the United States substantially but the decline in relative supply of skilled labour later eventually brought back the wage premium to its 1910 level. The primary reason seems stagnation or reduction in the relative supply of skilled graduates as a result of slowing graduation rates. American high school graduates simply seem to be not prepared to succeed at college education. As technological progress continues, its skill biasedness is going to further put pressure on expected skill sets from college graduates. The United States has to figure out a way of making sure that their high school graduates are college ready in order for education to win against the race with technology.

Another perspective on inequality in the United States is provided by Acemoglu et al. (2020) who argue that over the years capital has received a favourable tax treatment compared to labour in the U.S. tax code which has fed the process of automation. If the tax code removes this favourable treatment of capital, the skill intensity of technological progress might reduce along with automation. Having said that it remains true that the American education system is going to require reforms and therefore possibly more spending to ensure students are prepared to face challenges of a university education.

In short, markets can work well to the advantage of everyone provided the State ensures redistribution of endowments through public spending on quality education and health financed by taxation of wealth. For markets to be really free we need to build State capacity to break the link between existing social structures that foster inequities and markets.

CONCLUSION

The COVID-19 pandemic brought to the surface the already existing fault lines in the Indian economy. These fault lines represent the continued unequal distribution of opportunity for the betterment of life among large sections of the Indian population leaving them vulnerable to aggregate as well as idiosyncratic shocks. The path to economic justice in the post-COVID world would thus have to be paved by investing in a policy framework that emphasizes redesign of existing institutions and building new ones that guarantee capabilities for all irrespective of barriers created by caste, class, race, and gender. In other words, it would call for investment in creating inclusive institutions. The provision of public goods like education, health, and impartial access to the justice system for all form the core functions that these inclusive institutions will facilitate. The legal framework and State capacity required for well-functioning markets can be built by reprioritizing public spending and through credible provision of public goods. Given that safe assets within the country can be produced by a State that delivers on its promises and makes growth-oriented investments ensuring future tax revenues, development of the financial sector can be successfully coupled with the financing of increased public spending via government borrowing. While there would be continued reliance on direct monetary transfers as insurance against aggregate shocks, creative solutions to reduce the vulnerability to such

shocks could be developed to reduce the dependence on money transfers. Establishing an urban employment guarantee scheme would go a long way to ensure the availability of consumption-smoothing mechanisms to the most vulnerable informal sector workers while strengthening the production and provision of necessary public goods.

This of course is easier said than done. Economic policies are formulated by politicians elected by people with unequal voice. As Lindert (2003) argues that even though human capital investment is the most important channel for growth, the elites may choose to fund policies that reflect their preferences as they have more voice than the non-elites. Amidst this class politics and the fact that the poor would often find their interests clashing with other groups, Rajan (2009) argues that the outcome might be competitive rent preservation and stalling of reforms. For a lasting change to occur the battle must be fought on multiple fronts—social, cultural, and political—and therefore policy-making should necessarily involve an interdisciplinary approach that harnesses the knowledge generated across social science disciplines.

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Labour Reforms and Economic Justice: Inequality, the COVID-19 Pandemic and Regionalism

Amitabh Kundu

INTRODUCTION

The French-born American microbiologist René Dubos, also a social visionary and a humanist, made an important point that every civilisation creates its own disease. After enduring and witnessing the long lockdowns the world over and in India, I am convinced that the disease our civilisation has produced is not COVID-19 but inequality. Ortega y Gasset wrote, ‘Man has no nature, what he has is history’ (Gasset, 1941, p. 217). While there is no denying that human beings are products of their social and cultural history, one must not underplay the fact that everything s/he does is conditioned partly by biological attributes. The developmental outcomes, social fragmentation, conflicts and group violence in a country or a region reflect, at least partly, the biological necessities of

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the dominant classes and the propensities inherited from the past. Human decisions, right or wrong, taken at different points of time, create social and cultural history, but the ground conditions for this are determined by the evolutionary and experiential biological history of the class which controls power at a given point of time. When Gandhi talked of greed in society as opposed to need, he was referring to the biological propensity of the elite class.

It is important to review the choices the political system in India has made, particularly since the middle of the last century that are responsible for the perpetuation of inequality in spatial and socio-economic spheres, inherited from the colonial period. Inequalities in certain dimensions have, in fact, got accentuated over time. The crisis provoked by the pandemic provides an opportunity for introspection on these choices that have led to peculiar land–labour, labour–capital and labour–management relationships. Such introspection would involve determining the extent to which these choices are responsible for the growing inequalities and the fragmentation of the labour market by constraining labour mobility across states and from rural to urban areas. Such an inquiry would also seek to identify the factors responsible for the emergence of regional vested interests that are manifesting in an alarming manner, threatening to destabilise the delicately built planning system for promoting spatially balanced development in the country.

This paper seeks to analyse the key factors behind the trend and pattern of inequality in India. It seeks to examine the implications of the pandemic and of the labour reforms instituted during the period of the pandemic (undertaken with the avowed objective of increasing employment and improving efficiency in the labour market) for the economic well-being of the working class in India.

The underlying premise is that inequality itself is an outcome of structures and institutions that are based on self-interested and power-seeking behaviour of the ruling class. These instincts for self-aggrandisement are the nature-bestowed drivers of behaviour that need to be harnessed towards the common good by organising social and economic processes to meet the larger societal goals. Failing in that, the dominant development paradigm becomes self-fulfilling by creating conditions in a social reality where motivations and patterns of behaviour that are not inspired by self-interest are filtered out or undermined for being ‘irrational’ or ‘idealistic’. In such a setting, there is no overt incentive or motivation for anyone to turn away from seeking the maximisation of personal gain

and divert resources, time and energy towards the pursuit of economic justice. Inequality in access to resources and opportunities thus widens indefinitely. A corrective to this scenario would require new economic models to emerge based on a broadened conceptions of human nature that account for the social, spiritual and cultural motivations and affiliations that should guide human behaviour. It would also require a strong normative framework that includes the values of justice, unity and environmental sustainability regulating the functioning of economic, political and cultural institutions.

It is argued in this paper that unless the strategy of development and the process of legislative changes undergo a paradigm shift, backed by a strong normative framework ensuring equity and sustainability, the problems of inequality and risks of physical and economic disaster are unlikely to be addressed due to the inherent human nature and the resultant free market dictated by the elite class.

INEQUALITY IN VARIOUS DIMENSIONS OF DEVELOPMENT IN INDIA IN A GLOBAL CONTEXT

António Guterres, the General Secretary of United Nations, has mentioned that the current medical emergency has successfully drawn our attention to the serious problem of inequality (Guterres, 2020). This proposition was empirically supported by the World Economic Forum in its successive annual meetings. They noted that the sharp inequalities that exist in social, economic and physical systems, determining access to natural resources including air, water and the micro-environment, are responsible for the status of our well-being, our health and vulnerability to the pandemic.

In examining structural inequality and the factors behind it, let us begin by taking a macro-level view of inequality across different groups of countries that are at different levels of human development. Table 4.1 gives the average loss in three dimensions of human development due to inequality within countries, as stipulated by the United Nations Development Programme (UNDP). For the purpose of comparison, the table provides the values that reflect the average inequality in India, China, in Asian countries as well as for the three development categories under which UNDP has grouped the countries based on their Human Development Index (HDI)—very high, high and medium and low. The analysis has been done at two points of time, 2011 and 2018.

Table 4.1 Average loss (%) in the inequality-adjusted indices for different categories: 2011 and 2018

		<i>No. of Countries</i>	<i>HDI</i>	<i>Life Expectancy</i>	<i>Education</i>	<i>Income</i>
Very High HDI Countries	2011	47	9.3	5.0	6.0	16.4
	2018	58	9.9	4.7	6.9	18.6
High HDI Countries	2011	47	17.0	11.5	13.7	23.3
	2018	53	17.0	11.2	12.9	24.5
Medium and Low HDI Countries	2011	93	29.6	28.1	31.4	28.0
	2018	67	28.9	25.2	31.8	26.6
Asian Countries	2011	48	20.7	15.8	23.7	18.9
	2018	48	17.3	12.2	17.9	18.3
China	2011		22.3	13.5	23.2	29.5
	2018		14.5	7.9	11.5	23.3
India	2011		28.3	27.1	40.6	14.7
	2018		26.8	21.4	38.7	18.8

UNDP has started giving inequality-adjusted *Human Development Indices* since 2010. If a country has a high level of human development but sharp inequality, that country's inequality-adjusted values will go down. The first row for each region gives the inequality in the overall HDI and the three dimensions of human development for the year 2011 while the second row gives the corresponding figures for 2018.

The table reveals that inequality has gone down marginally both globally as well as in different regions during the period under consideration. It is noteworthy that while income inequality—measured as a coefficient of variation—in ‘very highly developed’ countries is high at 18%, inequalities on the health and educational dimensions at just 5 or 6% are not that high. When we examine the next category of ‘highly developed’ countries, we find that income inequality is similarly high but inequality in terms of health and education are much higher than what it was for very high HDI countries. When we come to the third category, comprising 93 countries at medium and low levels of HDI in 2011, the loss in the value of the index due to inequality becomes extremely high. It is noteworthy that at this level, educational and health inequalities for many countries are much higher than their income inequality. The loss in human development due to intra-country inequality would, therefore, work out to be extremely

high in countries at medium and low levels of human development. The same is true for the Asian countries as well.

Interestingly, in China, health inequality, measured in terms of life expectancy, is not very high. One can argue that because of the communist regime or data not being robust and comparable with other countries, China records a very low percentage loss due to inequality in health as also in education, the figures in 2018 being 7.9 and 11.5% only. In the Indian context, the income inequality is modest, slightly higher than China but comparable with low and middle income countries. The disturbing fact, however, is that inequality in health and education are extremely high in India, much higher than the average of the medium and low HDI countries. What this means is that the educational and health facilities accessed by the poor and rich are very different in India. The schools where the upper and so-called middle classes send their children are qualitatively very different from those where the children of their domestic helpers go. Similarly, the hospitals for the elites are those that the common people simply cannot afford. This kind of inequality in accessing institutions of education and health does not exist in highly developed countries, despite their sharp income inequality, spatial segregation and the discriminatory treatment of migrant populations that characterises their social and economic systems.

The alarming consequence of such inequality in India is the tragic denial of essential healthcare to millions of people. Yet the tragedy of this avoidable suffering does not shake the consciousness of the public because this inequality and its consequences have been largely invisibilised. Toby Ord, a moral philosopher at Oxford University dramatically illustrates the apathy that allows inequality to perpetuate itself:

(T)here are still 6 million children dying of preventable diseases each year, to say nothing of the effects of disabling disease or injury. It is very difficult to really understand such a figure and the on-going emergency it represents. Six million children per year is more than 16,000 deaths each day. This is equivalent to forty fully laden Boeing 747s crashing every day. If a single 747 crashed, it would be on the nightly news. Scenes of rescuers looking through the wreckage and doctors treating any survivors would fill our living rooms and it would — rightly — be seen as a moral emergency. Yet the much larger moral emergency of forty 747s worth of children dying each day from easily preventable diseases is left unreported. (Ord, 2014, p. 178)

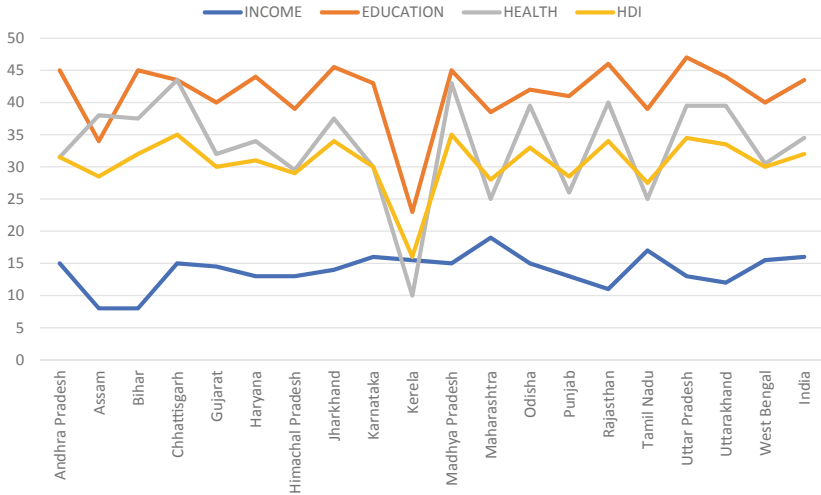


Fig. 4.1 Percentage loss or inequality in the three inequality adjusted indices of human development for the Indian states 2011

The gender dimension of inequality is extremely important to take into account especially for Asian countries. Several studies show that a woman’s educational level and status within the family determines the health of the household including that of its head. Despite this, concern is generally missing in programmatic interventions. The situation in India in this regard is alarming. Its gender development index is pretty low compared to even the neighbouring countries like Sri Lanka, Nepal, Bhutan, Bangladesh as reflected in Table 4.2.

Figure 4.1 depicting income, health and educational inequality for various states in India shows an interesting pattern. One would note that educational inequalities are very high uniformly in all the states followed

Table 4.2 Gender Development Index for select South Asian countries—2018

Sri Lanka	0.935
Nepal	0.925
Bhutan	0.893
Bangladesh	0.881
India	0.841
Pakistan	0.750

by inequality in access to healthcare. The figures for both these dimensions are well above income inequality. Kerala has the lowest inequality both in education and health but not in income. Importantly, both the economically developed as well as the less developed states exhibit very high inequality in health and education. The confidence that economic development would automatically take care of the problems of inequality in social dimensions would, therefore, be misplaced. Given the high levels of deprivation, highly differentiated conditions in various states and the labour market conditions, it would be important to realise that mobility of labour can help both the labour surplus and labour deficit states by engaging the workforce at higher levels of productivity and promote greater social justice in the country.

PANDEMIC, VULNERABILITY AND PUBLIC PERCEPTION

It is important to note that the Indian economy collapsed under the impact of the SARS-CoV-2 virus and is still struggling to get out of the crisis. It was, however, in a difficult stage for at least a year and a half even before the onset of the pandemic. The fact that it was going downhill could be inferred from the Gross Domestic Product (GDP) growth rate depicted in Fig. 4.2. GDP registered a sharp decline of 23.9% in the first quarter (April–June 2020) after the lockdown of the economy beginning in late March 2020. It is indeed true that the poorest sections of society were the worst hit as the poverty situation worsened. This was a manifestation of the structural inequality that exists in the system which was accentuated and exposed by the lockdown (Fig. 4.3).

It has been pointed out with fragmentary evidence that the number of deaths because of unemployment and hunger are as high as that due to the pandemic. While there have been long spells of complete and partial lockdowns in India, much more than most other countries, state governments have taken initiatives to open up the economy and create employment opportunities often in the name of helping the poor and the vulnerable sections of society. They have relaxed the restrictions on the movement of labour and entrepreneurs are proactively seeking to bring back workers who returned to their homes during the lockdowns.

These concerns of boosting the economy and employment however, are not primarily linked with the well-being of the unorganised workers, short duration migrants and vulnerable populations. It is basically a concern of the middle classes and the upper classes whose lifestyles have

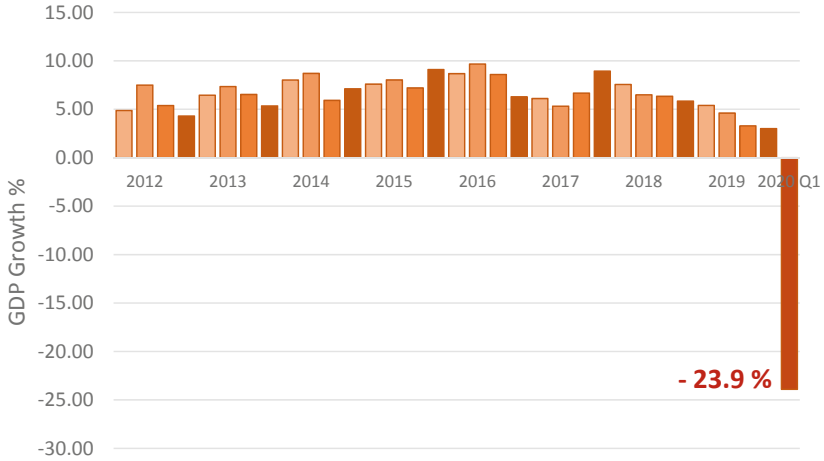


Fig. 4.2 India Gross Domestic Product collapse in the face of the pandemic

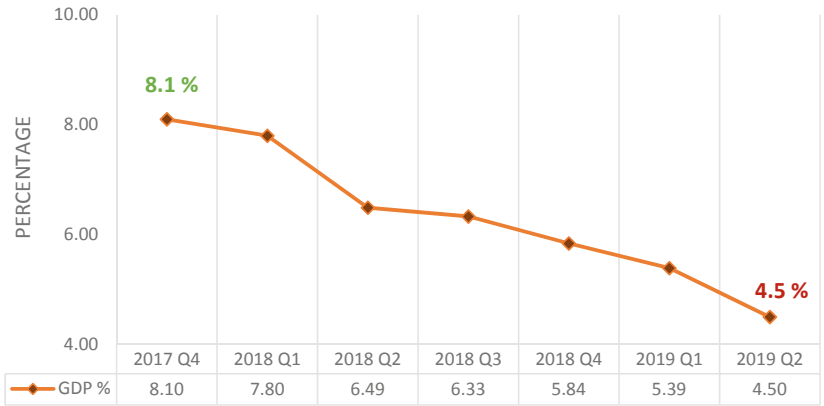


Fig. 4.3 Gross Domestic Product growth rate has contracted for six quarters

been completely disrupted during the lockdowns. The comfort level of these classes had markedly deteriorated as a result of the restrictions imposed during the pandemic. Their sufferings—mental, psychological and physical—not to have the freedom of movement or travel, of being

denied various elements of their accustomed lifestyle, and of being forcefully confined to the internet has certainly been painful. This led them to exert pressure on the government to relax the lockdowns. There has been a dramatic rise in the cases of domestic violence and mental illness during this period among the rich. The urgency of unlocking mobility and freeing market forces can, thus, be seen as also linked to the interest of the middle and upper classes. The well-being of the poor and the labouring class was not necessarily the foremost concern when steps were taken to unleash market forces with a sense of urgency while the threat of the virus still loomed large.

With regard to inequality in India, it must be noted that the pandemic has not made people poor and vulnerable overnight although the economic fallout has been borne disproportionately by them. It has, nonetheless, brought the issue of inequality to the consciousness of the public and made it a subject of popular discourse. More importantly, it has made the reality of poverty, misery and vulnerability visible to such an extent that the media and the political system could no longer push the issue under the carpet. There is no statistical evidence that the poorer localities in the cities have had higher incidence of COVID-19 cases. However, the number of deaths there have been higher due to the non-availability of medical facilities and their suffering has been higher during the lockdowns due to non-availability of means of survival.

One may ask why have such large numbers of migrants started walking for hundreds of kilometres to their homes, knowing well the dangers that taking such a step posed to their well-being and life. Why did they huddle into crowded buses and trucks when this was extremely hazardous from the viewpoint of getting infected? Should we presume they are irrational people? The answer is quite simple. Even in 'normal' times, these people work for 10 h a day every day for weeks, months and years without a break. When one considers the hazardous conditions in which they live and work, their actions during the lockdown no longer appear so irrational since they are anyway engaged in a battle for survival on an almost daily basis. It is only through the pandemic that their already precarious existence was brought to the attention of the public.

RELAXATIONS IN LABOUR LAWS AT STATE LEVEL FOR CREATING EMPLOYMENT FOR LOCAL POPULATIONS

It is important to analyse and assess the present reforms in the labour–capital–governance relationships that have been initiated in many States during the period of the pandemic with the avowed objective of creating employment opportunities for the poor. It would be important to see whether these reforms have indeed changed the situation in favour of the working class. Would the reforms make the large cities more humane in their treatment of these classes, providing better living and working conditions to the poor migrants in the long run? Are the in-migrating states ensuring greater economic equality and social justice through these reforms in their labour laws?

Given the claims that the reforms in the labour and the capital markets are for economic justice, it would merit looking at their impact a little more rigorously with empirical data. The analysis in this section draws from a recent paper by Kundu and Mohanan (2021) that reviews the labour laws that have been amended in different states. In the state of Uttar Pradesh maximum relaxations have been given in the application of labour laws because it was argued that these laws have come in the way of investments in small and medium-scale industries. Consequently, all the labour laws except the Factories Act and the Industrial Disputes Act have been suspended for a thousand-day period. In Madhya Pradesh, even the Industrial Disputes Act had been suspended along with many other legislations for three months. Gujarat has exempted all registered factories from the restrictions on the number of hours of work and the legitimate compensation to be paid for overtime work to the labourers. A similar change has been brought about in Rajasthan, allowing entrepreneurs to increase the working hours to 12 h per day without having to pay a higher rate on an hourly basis for overtime, as was stipulated by the law. The same was the case with Himachal Pradesh.

The basic assumption behind the relaxation in labour laws is that with this step, labour-intensive growth will automatically take place. The experience of Gujarat and Rajasthan over the past 12 years, however, shows that this did not happen. The relaxation of labour laws did not bring in greater investment in the state of Rajasthan. Gujarat succeeded in attracting national and foreign investment during this period but not much of it was in labour-intensive industries.

There is a concern that the labour-protecting legislations and administrative systems that have been won through a long-drawn struggle by the labouring classes are being diluted to make the economy recover faster from its present crisis. In the context of such apprehensions, it is a matter of some satisfaction that the Supreme Court bench in the *Krishna Kumar Singh v. State of Bihar* case has recognised the power of States to make such decisions only in extraordinary situations. These ordinances and the amendments related to labour laws that have taken place in recent months are subject to judicial scrutiny. It is extremely important that all these ordinances and relaxations in labour protection laws are thoroughly reviewed.

A strong case has been made in India for unifying and integrating the labour markets, allowing people to move freely across states, from rural to urban areas and shift from less to more productive activities, bringing down the sharp inequality that exists in employment and wage rate. The North–South developmental divide in India is a matter of serious policy concern. The South has already achieved more or less stable population with a total fertility rate of 2.1—the golden replacement level. With the total fertility rate in the country being below 2.1, as reported by National Family Health Survey (NFHS) 5, the overall growth rate of the population in the coming decades may not be high. A few northern states, nonetheless, are recording high rates of population growth. Here, there has to be labour mobility across the states to address the problem of imbalance in labour supply at the regional level.

The legal and administrative stipulations restricting labour mobility need to be given serious attention in view of emerging imbalances in population growth. Southern states, such as Andhra Pradesh, Tamil Nadu and Karnataka have introduced ordinances and laws, during the first year of the pandemic, to ensure that jobs are reserved, at least at the lowest level, for their local people. This is being prescribed even for the private sector. The fundamental rights of mobility and equal opportunity, enshrined in the Constitution are being diluted through similar modification of laws and administrative orders in other states as well. Maharashtra, Gujarat, Rajasthan, Madhya Pradesh and West Bengal are proposing legal stipulations to reserve jobs for the domiciles of their own states. The inflow of non-locals is being restricted by requiring local language proficiency of workers for employment. Although no clear administrative intervention for implementing these legal or administrative prescriptions are presently operational, these developments are triggering social unrest

and encouraging people to go into an agitational mode. Such policies are fragmenting the labour market and have serious implications for the social fabric in the country.

Importantly, three labour codes were passed during the pandemic with the objective of protecting the economic, physical and social interests of the workers. The workers' unions, in general, have found many of the provisions desirable and empowering for unorganised workers. The three codes relate to worker's safety at the workplace, their access to social security measures for the family and the employer–employee relationship while another one passed before the pandemic pertains to wages. While many of the provisions in these codes would go a long way in empowering individual workers, a few others can weaken trade unions and reduce the collective bargaining power of labour.

The government claims that these labour codes will enable 500 million workers, both in the organised and unorganised sectors, to enjoy stronger social security provisions, provident fund coverage and pension benefits, higher medical and accident insurance coverage and better working conditions. However, the codes specify that many of these clauses would apply to factories that meet certain employment and legal features, implying that there will be many exemptions. A detailed analysis of these provisions indicates that many of the medium and even large-scale employers would succeed in getting these exemptions. As the numbers of such units are likely to be significant, many labour unions have protested that their position may get weakened and the gains made through a long struggle would get diluted.

With regard to trade unions, there is a requirement in the code that if any union has to represent the labourers in its factory, it should have at least 75% of the workers as its members. This requirement is considered extremely stringent. Furthermore, several exemptions have been granted for large registered industries. The limit of exemption has been raised to cover units with an annual turnover of up to ₹30 million which would allow a large number of industries to function outside the purview of the labour laws. Thus, while the four codes would, to a certain extent, empower the working classes by strengthening their access to social security measures, they would tend to reduce their collective bargaining power and the powers of their trade unions.

CONCLUSION

As far as overall economic growth during the second half of 2021 is concerned, there are several positive indications. Several green shoots are visible. The collection from the Goods and Services Tax (GST) has picked up and so have the exports. Quarterly employment rates have been going up and down linked with national or partial lockdowns and restrictions on mobility. The level of unemployment in the last two quarters of the calendar year 2021 appears encouraging even in comparison to the pre-pandemic quarters when the situation of employment in the country was alarming. The pandemic has disrupted the lifestyle of the middle and the upper classes but this has created massive unmet demand. A lot of money is in their hands and they are looking for opportunities to spend their forced savings. A V-shaped recovery of the economy is, therefore, likely although the angle in the trajectory of recovery will depend on the support given by the government to growth of demand for consumer durables for the masses.

The efforts of the government to address labour issues during the pandemic has a historical parallel to a similar effort in England in the fourteenth century when the bubonic plague had struck the European continent and many countries lost 25 to 30% of their populations. Such a large loss of lives due to the pandemic that hit in 1348 resulted in a labour shortage which in turn led to the passing of the Ordinance of Labourers in England in 1349 culminating in the Statute of Labourers in 1351. It did what is being sought to be done by the governments today in light of the pandemic—but was done much more stringently and ruthlessly. The Statute had fixed the wages of labourers around the survival rate and labourers were barred from moving from one place to another so that the industries could have easy access to a labour pool. This resulted in the biggest Peasants' Revolution in Europe in 1381, resulting in massive losses in lives and properties.

It is important to learn from history. We don't have to repeat history but rather learn to transcend it. A welcome step in this regard is the initiative by the Ministry of Labour of the Government of India to launch a series of surveys focussing on low-paid unorganised workers—domestic help and migrants—in order to better understand their problems with regard to their earnings, working and living conditions and relationships with their employers. It is hoped that these surveys will lead to sensitisation of policymakers to the conditions faced by unorganised workers and

in turn result in the creation of appropriate legal and administrative structures to ensure social justice for the marginalised segments of the labour force. It is hoped that these initiatives will also lead to the ushering in of policies and programmes enabling migrants to return to cities that are more humane, accommodative and less exploitative.

The governments at the state and central level must re-examine the changes in labour laws and ordinances that have been brought about to kick-start growth and save people from hunger and destitution that are likely to have long-term implications. There was no time to do such detailed analysis in the immediate post-lockdown period during the heat of the crisis since the primary concern then was to create employment and increase the purchasing power of the poor. We should now be able to formalise the decisions by evaluating the modifications proposed by the Codes and state-level laws and ordinances, focussing on the costs and benefits for vulnerable segments of the workforce in the country so that we do not commit the mistakes of history.

I agree with the often-repeated proposition emphasising the importance of redistribution of the gains of development to build a just society. A welfarist approach is the imperative of the hour, given the distress and suffering of the poor, not merely during the pandemic-induced period of economic crisis but also in so-called normal times. However, once income is generated through the existing production structures in a country, certain income patterns will emerge that could be extremely uneven and unjust. If the only choice national and regional leaders want to exercise relates to redistribution, their actions will have only a limited impact. For bringing about social and economic justice in any real sense, we must have a paradigm shift. If the structure of the production system itself is changed, generating reasonable income for all segments of the labour force, we would not need many redistributive interventions. It would be important to design a production system that generates a more equitable income distribution. This would necessitate greater localisation of the production base and redesigning of labour–capital relations and labour–management practices.

A more just economic order would be based on interdependent local economies thriving together and not a pattern that involves hubs of prosperity locked up in relations of exploitation with local communities in rural and urban areas which leads to the enrichment of the former at the expense of the latter. Again, as stated in the introduction, unless the very models of development are re-examined to accommodate the higher

and more altruistic propensities of human nature and to have a strong normative orientation, patterns of exploitation and injustice are bound to re-emerge regardless of the historical or geographical setting.

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Youth Unemployment, Education and Job Training: An Analysis of PLFS Data in India

Panchanan Das and Swarup Roy

INTRODUCTION

With a significant part of its population within the young age range of 15–29 years, it is well-known that India has the advantage of a demographic dividend. To exploit this demographic dividend, employment opportunities for young people will need to be created for them to contribute to the development of the country. Employment opportunities for youth largely depend on factors such as their educational background, other personal, household-specific characteristics and labour market dynamics. According to the human capital theory, education has a significant role to play in determining employment prospects and wage rates. However, in a country like India the role of education in determining employment

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is disturbed by social and religious factors and by the dominance of the informal sector in the economy. These intervening factors are perhaps among the major challenges inhibiting the creation of quality job opportunities for the youth in India. Moreover, a significant skill mismatch along with longer school-to-work transition could be other challenges when considering the issues of employment faced by the youth.

Against this backdrop, this study analyses how youth unemployment across different age cohorts has been affected by the health shocks in the form of the COVID-19 pandemic in India by using Periodic Labour Force Survey (PLFS) data. Job losses occurred not only among casual workers but also among regular wage earners and self-employed workers of different types because of the sharp decline in demand as well as production in the first quarter of 2020–2021 and thereafter during the lockdown period. India experienced job losses along with falling GDP growth much before the pandemic had started at the beginning of 2020, and thus the pandemic is expected to accelerate the damaging effects on employment particularly among young people. In this study youth unemployment is examined by using household and personal-level information from the PLFS for 2018–2019 and 2019–2020. In PLFS 2019–2020, quarter 4 covers the initial phase of the economic lockdown in India because of the COVID-19 pandemic. Thus, the analysis may shed some light, at least partially, on the impact of the pandemic on youth unemployment in India.

We analyse the causes of low employability among young people in India by considering the problems of skill mismatch, low-wage and poor-quality jobs. To carry out empirical analysis we have considered three age cohorts among the young people—15–19 years, 20–24 years and 25–29 years. Although PLFS data is not sufficient to analyse the nature of school-to-work transition, this study makes a preliminary attempt to capture the state of youth unemployment by analysing this transition.

This chapter is organised as follows: Section ‘[Education, Skill Mismatch and Youth Unemployment: Some Studies](#)’ provides a short description of available studies in the literature on youth unemployment, education and skill mismatch. Section ‘[Data and Variables](#)’ describes briefly the data and variables used in this study. The summary of findings on different issues relating to youth unemployment calculated by using the survey data are presented in section ‘[Summary of Findings](#)’. Section ‘[Econometric Methods](#)’ provides the basic econometric model used in this study. The

interpretation of empirical findings based on probit estimates is given in section ‘[Empirical Results](#)’ and the last section provides the ‘[Summary and Conclusion](#)’.

EDUCATION, SKILL MISMATCH AND YOUTH UNEMPLOYMENT: SOME STUDIES

A large number of studies on unemployment in India exists but a very limited number of them study youth unemployment using survey data. Papola and Sahu (2012) analysed the causes forcing unskilled youth workers in India to find work mainly in agriculture and in petty jobs like street vending. In another study, the International Labour Organization (2013) observed that the fact that a large number of the young people in India form part of the unskilled labour force may be one of the reasons for insignificant effect of employment on economic growth. They further observed that school drop-outs at early ages create casual employment among the youth. The study by Sanghi et al. (2015) analysed some aspects of skill mismatch as a contributory factor to youth employment in the Indian labour market.

Aggarwal and Goldar (2019) focus on the possible effects of economic reforms on youth employment. Papola (2013) analyses the implications of high growth phase after reforms in India on employment and concludes that this phase was characterised by jobless growth. Chandrasekhar et al. (2006) examined the demand side and the supply side of the labour market to analyse skill mismatch among youth workers in India. Newhouse and Suryadarma (2011) examined the possible reasons for the high concentration of young workers in low-paid and unsecured informal jobs. Visaria (1998) used data from the Planning Commission to examine the unemployment problem in India.

A large number of studies have focused on different issues of unemployment by using employment and unemployment data provided by the National Sample Survey Office (NSSO) (Abraham, 2013; Dev & Venkatanarayana, 2011; Himanshu, 2011; Sanghi & Srija, 2014). Himanshu (2011), examined the changing patterns of employment and unemployment in India with the changes in demographic patterns. The study by Mitra and Varick (2013) analysed the patterns of youth employment and unemployment, and observed that higher unemployment occurred among lower caste people. Abraham (2013) discussed the changes in women participation in the labour market by taking into account workers’

socio-economic conditions. Sanghi and Srija (2014) examined youth unemployment by using the 55th round and 68th round of NSS data. In their study, supply-side factors were identified as the possible reasons for skill mismatch among the young people.

Our study re-examined different issues of youth unemployment by using PLFS data to provide some insights into the problem.

DATA AND VARIABLES

Unit level data from PLFS for 2018–2019 and 2019–2020 compiled by the National Statistical Office (NSO) of the Government of India are used in this study. It provides household- and person-specific information relating to the labour market in India. The household-specific information used in this study includes the number of members in the household, household type by major occupation, social status, religion and economic status in the form of monthly per capita consumption expenditure. The person-specific information used in this study includes the persons' age, level of education, marital status, training, employment status as well as other characteristics of labour market participation like status, industry, occupation, information about their workplace, wages earned and hours worked or available for work by the person. We have considered the 15–29 age cohort as young age to focus on for this study.

Major types of information collected in the Periodic Labour Force Survey include activity status, industry, occupation, earning from employment for the employees and their levels of education. The survey also gathers information about the demographic characteristics of household members, weekly time disposition and their main and secondary job activities. In Schedule 10.4 of the survey round, activity status is classified into 13 groups consisting mainly of different forms of self-employment, wage employment, unemployment, continuing education and other activities. The activity participation of people is multidimensional and it varies with region, age, education, gender, industry and occupational category. These aspects of the labour force have been captured in detail in the present survey on the Periodic Labour Force Survey. In the survey schedule, persons not continuing their further education and available for work are treated as unemployed. Unemployed persons are differentiated in terms of the duration of unemployment and the period during which the person

remains unemployed. In the survey schedule, the duration of unemployment varies from one week to more than 12 months. In our study, a person seeking a job for more than 12 months is considered unemployed.

PFLS uses three different measures of activity status of an individual (usual activity status, current weekly status and current daily status) based on three different reference periods (one year, one week and each day of the reference week). The usual activity status is further differentiated into principal status (engaged in the activity for a relatively significant period of the 365 days preceding the date of survey) and subsidiary status (engaged in the activity for at least 30 days during the 365-day reference period). In this study, the analysis of youth unemployment is based on the concept of usual principal status and current weekly status.

SUMMARY OF FINDINGS

The report based on PLFS 2019–2020 reveals that while the unemployment rate for all age groups is 4.2%, youth unemployment rate is as high as 15.4%. The share of unemployed youth in total unemployment is 79.6%. More strikingly, the unemployment rate among youth with tertiary level education is 13.4%. The PLFS 2018–2019 also indicates that unemployment is highest among youth with secondary-level education (28%). This implies that in India, education is not empowering the youth with the right skill sets to be deemed employable in the job market. This study has been undertaken to understand what factors contribute to youth unemployment in the current economic and social context of India and how to overcome the problem.

Youth Unemployment and the Pandemic

In PLFS, employment and unemployment status are provided by using both *usual status* and *current weekly status* approaches with 365 days and 7 days as reference periods, respectively. While the first approach captures chronic unemployment, it includes persons performing part-time and temporary jobs as those who are employed. Thus, employment estimates based on the first approach includes the under-employed workforce. The second captures the actual unemployment situation more accurately. Many respondents in May 2020, for example, may have got registered as unemployed in their current weekly status as they would have lost their jobs due to the lockdown, but would still have got registered

as employed in usual status as they would have worked for more than 30 days during the past year. For this reason, in this study we have calculated youth unemployment rate by using the second approach which captures the status of a person in the latest week when the response was recorded. We have looked at the unemployment situation among young people, separately for males and females, at different age cohorts during the COVID-19 pandemic period (4th quarter of 2019–2020 survey period) by comparing the quarterly estimates with the period just before the pandemic had started (3rd quarter of 2019–2020 survey period) and the same quarter one year back (4th quarter of 2018–2019 survey period).

The unemployment rates for male youth in rural areas and for male and female youth in urban areas increased significantly because of the health shocks in the form of the COVID-19 pandemic. The youth unemployment rate increased at much higher rate in urban areas both for male and female youth during the initial phase of the pandemic. The highest unemployment rate is observed within the age cohort of 20–24 years. Female youth in rural areas were less affected by job losses during the pandemic possibly due to a significant number of them being engaged as own-account workers or in unpaid domestic work (Tables 5.1 and 5.2).

Table 5.3 presents unemployment rates among young people in different age cohorts one year prior to the pandemic in 2018–2019 which was a normal year. Open unemployment among younger age people (age groups 15–19 and 20–24 years) is much higher than the rates among youth in higher age group (25–29 years), partly because of the mismatch between job expectations and the availability of jobs. The unemployment rate is higher among urban youth than among their rural counterparts. In urban areas, unemployment rate is higher among girls, while in rural areas the unemployment rate is higher among boys.

High unemployment rate among young people may be a reflection of a mismatch between the demand and supply of skills. The skill levels of those who join the labour market early are low as they are often school drop-outs and haven't had the opportunity to undergo vocational training. Thus, it becomes difficult for them to find suitable employment, particularly in the early stages of their career when they also lack adequate work experience.

Table 5.1 Quarterly changes in youth unemployment rate: 2018–19 Q4 and 2019–2020 Q4

Age group	Rural				Urban			
	Male		Female		Male		Female	
	2018–2019 Q4	2019–2020 Q4	2018–2019 Q4	2019–2020 Q4	2018–2019 Q4	2019–2020 Q4	2018–2019 Q4	2019–2020 Q4
15–19	32.6	37.6	27.0	18.8	28.4	39.6	17.7	30.8
20–24	22.5	31.2	31.7	23.3	25.2	41.1	34.9	53.9
25–29	11.4	19.7	15.3	13.1	12.1	26.4	18.2	29.5
15–29	19.5	27.1	23.0	17.4	19.1	33.6	24.9	41.4

Source: Authors' calculation by using PLFS unit level data 2018–2019, 2019–2020

Table 5.2 Quarterly changes in youth unemployment rate: 2019-2020 Q3 and 2019-2020 Q4

Age group	Rural				Urban			
	Male		Female		Male		Female	
	2019-2020 Q3	2019-2020 Q4	2019-2020 Q3	2019-2020 Q4	2019-2020 Q3	2019-2020 Q4	2019-2020 Q3	2019-2020 Q4
15-19	23.1	37.6	18.7	18.8	29.7	39.6	24.9	30.8
20-24	25.2	31.2	24.5	23.3	26.3	41.1	35.5	53.9
25-29	13.2	19.7	13.0	13.1	18.5	26.4	19.6	29.5
15-29	19.3	27.1	17.9	17.4	22.5	33.6	26.7	41.4

Source As for Table 5.1

Table 5.3 Unemployment rate among young people: 2018–2019

<i>Age group</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>
15–19	31.6	17.4	29.7	24.7
20–24	21.1	24.6	24.5	37.7
25–29	9.6	11.2	12.5	19.5
15–29	17.5	17.2	19.1	27.5

Source Authors' calculation by using PLFS unit level data 2018–2019

Activity Status of the Youth by the Level of Education

We have calculated the percentage shares of young people in different activity statuses separately for male and female youth at different levels of their education (Table 5.4). We have reclassified activity status performed by the individuals into self-employment, wage employment, unemployment, continuing education and other activities. Persons neither in employment nor in education are treated as unemployed. The pattern of distribution of the youth by their activities is different at different levels of their education. Incidence of unemployment at any level of education is more for males than for females among young people. However, lower unemployment rates among young females do not necessarily imply that they are in a better position than young males since this can be attributed to the higher incidence of their absorption in domestic work and other activities. While this share declines with education level, nearly 47% of young females with the education level of post-graduation and above are forced to engage in other types of jobs including domestic work, begging or prostitution. Young males, irrespective of their level of education, on the other hand, are absorbed mostly in wage employment followed by self-employment. This observation contrasts with the pattern of occupational choices in the developed world. In the neoclassical world, people with higher level of human capital mostly prefer entrepreneurship if they have adequate financial capital, while wage employment is the second choice for them. But, in the developing world, people with higher levels of human capital prefer to be in wage employment even if there is no constraint of financial capital. These observed facts raise the question of

whether the enhancement of educational capabilities always improves the bundle of choices available to people and their freedom to choose from among these choices.

Youth Unemployment and Education

As witnessed in many developing countries, the unemployment rate increases with the level of education. Youth without education or low levels of education often belong to low-income households and they are desperate to sell their labour at any condition even at very low rates. Table 5.5 shows unemployment rates among young age people across different levels of education. It is clear that the rate of unemployment is higher at a higher level of education. The rate of unemployment is the highest among youth who are university graduates and above. As per data from 2018 to 2019, at the highest level of education, the unemployment rates are 36.1 and 56.4% among males and females, respectively in rural areas. The respective figures in urban areas are 23.5 and 40.9%. It is observed that unemployment rates among higher educated youth are lower in urban areas than in rural areas. But, at lower education levels (less than secondary level) the unemployment rates among youth are higher in urban India than in rural India. This is because job opportunities for higher educated people are more in urban locations than in rural areas. Well-educated people are better positioned in urban areas to find employment than rural people, while less educated people generally find themselves struggling to find sufficient employment opportunities in urban areas. A higher unemployment rate among the youth with higher levels of education is observed both in rural and urban areas. Table 5.5 reveals that the unemployment rate among graduates and above is much higher than among those with secondary and lower levels of education everywhere in the country. Furthermore, unemployment rate among females is higher than males, particularly if their education level is higher secondary and above.

The figures in Table 5.5 highlight that job opportunities for persons with high levels of general education is very low in part because of a skill mismatch and also due to the lack of jobs in the conventional services sector in the Indian labour market. A significant structural change occurred in demand for labour in the labour market because of the expansion of the private sector during the post-reform period. Demand for

Table 5.4 Activity status of youth by level of education: 2018–2019

Education Level	Male				Female					
	Self-employment	Wage employment	Unemployment	In education	Others	Self-employment	Wage employment	Unemployment	In education	Others
Illiterate	29.2	45.6	8.9	0.8	14.7	7.4	8.9	0.1	0.2	82.0
Below primary	27.8	55.9	9.2	3.4	6.9	12.2	11.1	0.0	2.9	73.6
Primary	27.3	47.3	7.5	16.9	4.2	6.6	7.4	0.7	10.1	74.6
Middle	22.3	30.5	8.5	36.0	2.3	6.2	4.3	0.8	29.8	58.9
Secondary	14.6	19.3	6.3	58.3	1.5	3.6	3.5	0.9	52.1	39.9
Higher secondary	14.1	16.4	7.7	60.6	1.1	2.7	3.2	2.3	52.2	39.3
Diploma	11.5	42.5	23.8	20.7	1.2	3.5	19.3	19.3	23.7	33.2
Graduate	17.9	30.6	25.3	24.8	1.3	2.7	12.4	27.0	24.5	48.1
Postgraduate and above	17.4	43.7	25.6	11.2	1.2	2.8	20.5	20.4	9.6	46.7

Note: Wage employment includes both permanent and temporary employment; others include domestic work, not able to work, begging, prostitution, etc.

Source: As for Table 5.3

Table 5.5 Youth Unemployment rate by level of education: 2018–2019

<i>Education level</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Illiterate	9.2	0.06	15.2	3.9
Below primary	10.8	0.04	7.1	0.2
Primary	8.8	3.7	9.6	9.1
Middle school	14.1	4.9	13.1	14.1
Secondary	15.8	9.6	15	17.5
Higher secondary	20.3	27.6	19.9	29.8
Diploma or certificate course	33.7	51.3	26.6	39
Graduate	36.6	56.9	31.7	35.4
Post graduate and above	36.1	56.4	23.5	40.9

Source As for Table 5.3

Table 5.6 Youth unemployment by level of technical education: 2018–2019

<i>Level of technical education</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Below graduation level	32.5	52.2	26.6	41.2
Graduate and above	45.1	45.6	36.4	19.4
Non-technical education	19.6	18.3	22.1	31.2

Source As for Table 5.3

labour with appropriate analytical and verbal skills increased in the corporate sector, particularly in the area of IT-enabled services during the post-reforms period. In India, general education has expanded through the expansion of educational institutes, both private and public, without considering necessary changes in the curriculum-content matching with the changing pattern of labour demand. It is also observed that the unemployment rate among youth with technical education is significantly higher than the rate for youth with non-technical education (Table 5.6). This fact reflects that the demand for technical workers is very less compared to that for non-technical workers. This may be because the Indian economy has been experiencing faster growth through the expansion of those segments of the services sector where the demand for technical workers is very low.

Table 5.7 Youth unemployment rate and vocational training: 2018–2019

<i>Category</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Formal vocational training	28.3	35.9	26.9	24.3
Non-formal vocational training	2.7	4.6	2.8	11.1
No vocational training	19.6	18.3	22.1	31.2

Source As for Table 5.3

The role of vocational education and professional training may be significant in analysing the incidence of unemployment among young people. Vocational education prepares students for a job by providing them skill-based training in several fields such as health care, banking and finance, computer technology, trade and tourism. The education imparted focuses less on academic learning and more on manual or practical activities and training. The emphasis is on developing skilled manpower to meet job demands.

To reduce youth unemployment, the government of India has taken several initiatives to promote vocational education among the youth. But, as revealed in Table 5.7, unemployment rates among the youth with formal vocational training is much higher than those without vocational training. As a substantial number of young people have not been employed even after getting vocational training, the promotion of only vocational training may not be enough without the creation of demand for trained workers. Thus, the creation of employment opportunities is also very important along with the promotion of vocational education.

Youth Unemployment by Social Groups

The social background has proven to be an important determinant of the likelihood of finding a suitable job. Table 5.8 presents the variation of unemployment rates among young males and females across social groups in rural and urban areas. The urban unemployment rate is higher than the rural unemployment rate both for young males and females except in the case of upper caste people. As agriculture and agriculture-based activities dominate in rural areas and these activities have been concentrated among the lower caste people for historical reasons, young people belonging to the upper castes have fewer job opportunities in rural areas.

Table 5.8 Youth unemployment by social groups: 2018–2019

<i>Category</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Schedule tribe	13.3	10.4	25.3	38.3
Schedule caste	18.6	15.1	22.2	28.5
Other backward caste	18.0	17.5	19.9	28.2
Upper caste	17.9	27.6	16.3	25.1

Source As for Table 5.3

Also, upper caste people who tend to have better education and hail from higher economic backgrounds can afford to remain unemployed for longer periods in order to search for better jobs. The unemployment rate is the highest among female and male youth of scheduled tribe families in urban areas, partly because of cultural reasons, despite the existence of government support in the form of reservation policies. It is to be noted that the gender gap in unemployment in each social group is less in the rural areas than in urban areas. While in rural areas the unemployment rate is higher for male youth, in urban areas the female unemployment rate is more than the male unemployment rate among young people in each social group.

ECONOMETRIC METHODS

The probit model is used for econometric work in this study. Let us specify a model in the following form

$$Y_i^* = \beta_0 + \sum \beta_j X_{ij} + u_i \quad (5.1)$$

Here, the dependent variable Y_i^* denotes the level of disutility of a person being unemployed and is unobservable. What we observe is the outcome having the following decision rule:

$$\begin{aligned} Y_i &= 1, \text{ for all } Y_i^* > 0 \\ &= 0, \text{ otherwise} \end{aligned}$$

If a young person is not successful at getting a job, we observe $Y_i = 1$, and we take this to be evidence that the person is unemployed. The failure

to get a job has two components $\beta_0 + \sum \beta_j X_{ij}$ and u_i . The first part is deterministic and depends on the person-specific factors like education and training, while the second part is purely stochastic and unobserved. In this study, the binary response model as shown in equation (5.1) deals primarily with the probability that person i within age group 15–29 years remains unemployed.

The probability of a person being unemployed is obtained as

$$\begin{aligned} P_i &= \text{prob}(Y_i = 1) = \text{prob} \left[u_i > - \left(\beta_0 + \sum_{j=1}^K \beta_j X_{ij} \right) \right] \\ &= 1 - F \left[- \left(\beta_0 + \sum_{j=1}^K \beta_j X_{ij} \right) \right] \end{aligned}$$

where F is the cumulative distribution of u .

If the distribution of u is symmetric, we can write

$$P_i = F \left[\left(\beta_0 + \sum_{j=1}^K \beta_j X_{ij} \right) \right] \quad (5.2)$$

EMPIRICAL RESULTS

There are a multitude of factors that determine employment. However, there are some idiosyncrasies specific to the problem of youth employment. Because of the fact that young people are mostly flexible in their approach to searching for and change jobs, one traditional approach is to simply attribute youth unemployment to a scarcity of jobs. This leads to a macroeconomic view of the problem where we investigate the macroeconomic conditions that produce more employment. However, this approach does not explain the significant difference in youth unemployment that exists in similar economies. This macro approach also does not tell us anything about the inequality in employment across different demographic groups that might further tell us about existing structural problems. The other approach is to take a microeconomic view of the problem, with the argument that youth employment mostly arises from a failure of transition between school and the work place. This failure of

transition can again be attributed to several socio-economic factors. The advantage of this view is that we can identify the factors that lead to unemployment and have policies that directly address these factors and target demographic groups. For instance, if we find that youth unemployment is concentrated among a particular gender, policies targeting that demographic group will be far more effective than general policies aimed at the entire population.

The probit estimates of unemployment function for the youth as shown in Table 5.9 highlight that the likelihood of youth to be unemployed is less in upper age cohorts within the young age range. Females are more likely to be unemployed as compared to males among young people. The higher likelihood of female youth being unemployed can be explained by socio-cultural and other non-economic factors. Many young females are forced to be in unpaid household work and domestic activities. Women are more vulnerable than men when it comes to getting a decent job. A slight difference is observed between rural and urban areas, other things remaining the same, in getting jobs for the youth in the Indian labour market. Household size plays an important role in determining the likelihood of a young person remaining unemployed.

Caste is an important social factor in Indian society for getting a job. In PLFS data used in this study, caste is classified in terms of four social groups: scheduled tribes, scheduled castes, other backward caste and general caste. We have used here social status dummy by taking general caste as a reference group. Surprisingly enough, the estimated results suggest that the likelihood of being unemployed is more for youth belonging to scheduled tribes and scheduled castes as compared to general castes despite the fact that the Indian government has created some reservation policies for providing employment for them. The negative and significant coefficient for the religion dummy can be interpreted to mean that Hindu youth are better placed to find a job than those belonging to religious minorities. A married person has a lower probability of being unemployed. The incidence of unemployment is low for a married person as compared to an unmarried one because of greater social and financial pressure to get a job after marriage.

Education at primary or below-primary level has no significant effect on the incidence of unemployment of the youth. When the level of education is primary or below, education does not determine whether a young individual is in employment of any type or not. Youth who are illiterate or have minimal education and who join the labour market at

Table 5.9 Probit estimate of youth unemployment

<i>Explanatory variables</i>	<i>Coefficient</i>	<i>Marginal effect</i>
Age group dummy for 20–24	−0.32***	−0.07 ***
Age group dummy for 25–29	−0.67***	−0.16***
Female Dummy	0.27***	0.06***
Rural Dummy	0.04***	0.01***
Household size	0.02***	0.006***
SC Dummy	0.07***	0.01***
ST Dummy	0.11***	0.02***
OBC Dummy	0.009	0.002
Household consumption expenditure	−0.00005	0.00001
Hindu Dummy	−0.10***	−0.02***
Married Dummy	−0.74***	−0.17***
Education Dummy up to primary	−0.004	−0.001
Education Dummy middle school	−0.15***	−0.03***
Education Dummy secondary	0.40***	0.09***
Education Dummy higher secondary	0.68***	0.16 ***
Education Dummy diploma	0.88***	0.21***
Education Dummy graduate and above	1.19***	0.28***
Formal vocational training Dummy	−0.14***	−0.03***
Informal vocational training Dummy	−0.94***	−0.22***
Technical education Dummy	0.20***	0.04***
Diploma below graduate level Dummy	0.14***	0.033***
Diploma level above graduate Dummy	0.16***	0.0399***
Intercept term	−0.69***	
Log pseudo likelihood	−18,087.9	
Number of observations	42,799	
Wald $\chi^2(21)$	6011.1	
Prob > χ^2	0	
Pseudo R^2	0.185	

Note ***Significant at 1% level, the rest are statistically insignificant

Source As for Table 5.3

an early age, enjoy the benefit of having practical work experience in the labour market. However, education plays a significant role in determining the employment of youth if the level of education is middle school and above. The higher the level of a youth's education, the more will be its effect on their transition to the workforce. The positive sign implies that education enhances the transition in the sense that a person with higher education remains unemployed at least temporarily because the person will hesitate to accept an indecent job with low pay in the

initial phase after the completion of his or her schooling. For this reason, the coefficient of the education dummy is positive and higher at higher levels of education. The labour market, like any other market, relies on the phenomenon of demand and supply where educational achievement should meet the nature of the demand that exists in the youth labour market. In many cases, youth with higher education may not have sufficient skills as demanded by the employer, and, as a result, the duration of their transitional phase becomes long.

Vocational education serves to fill the skill gap between general academic education and the job market. The polytechnic institutes and the Industrial Training Institutes (ITI) are the prominent institutions recognised in India to provide vocational courses. Formal and informal vocational training enhances the necessary skills needed for employment. The negative sign of the estimated coefficient representing vocational training supports this fact. The probability of being unemployed is less for those who have vocational training along with academic education from the general stream.

More unexpectedly, people with all the three types of technical education—agriculture, engineering/technology or medicine—with a diploma or certificate below graduate level or a diploma or certificate above the graduate level show a positive and significant coefficient which can be interpreted to mean that possessing technical education by itself doesn't necessarily guarantee employment in the event of a deficiency in demand for technically educated people.

SUMMARY AND CONCLUSIONS

This study highlights the changes in unemployment rate across different age cohorts among young people in India due to the health shocks in the form of the COVID-19 pandemic. The study observes that youth unemployment rate increased at a much higher rate in urban areas, for both male and female youth, during the initial phase of the pandemic. To understand the severity of the effects of the pandemic on unemployment across different age groups among the youth, this study enquired into the nature and causes of unemployment among them. The probit estimates of unemployment function for the youth reveals that the likelihood of youth being unemployed is less in the upper age cohort within the young age range.

The study finds an inverse relationship of general education with employment in the case of the Indian youth labour market. We have shown that there is significant evidence of gender disparity, urban–rural divide, caste discrimination and religious bias in procuring employment for the youth. We have also shown that youth unemployment can only be reduced through the introduction of policies that promote a work-related curriculum and seek to reform education systems and professional development through the introduction of educational policies giving importance to vocational education. Our results depict that those with higher levels of education along with skill development through vocational training have higher chances of obtaining employment. We have also found evidence of the interplay between general education levels and the returns to vocational education. These results indicate that there is a need for more research to fully understand the current dynamics of the Indian labour market. India is a growing economy with an expanding labour market, with continuously evolving dynamics between different factors. It is of utmost importance that we study these dynamics to better understand what policies can have the maximum desired effect. This study is a step in that direction.

Our analysis also has several important policy implications. It should be mentioned that unemployment, particularly among youth can have devastating consequences on society. Youth unemployment is seen as highly correlated with social unrest, crime and other societal ills. Due to this, it is very important that we alleviate these issues with sound policies based on sound research. Firstly, the study shows that there is an immediate need for social programmes targeted towards women and the socially backward castes. These can either be government initiatives or undertakings by private entities, but strong government support for these kinds of initiatives is vital. The second policy implication is that there should be targeted vocational education programmes for young people, especially directed towards youth from minority religions, women or those from socially backward castes. Very often vocational education programmes can lack definite targets that dilute their impact as a policy intervention. It has to be ensured that such programmes target ‘vulnerable’ youth who have higher chances of falling out of school or colleges or are at greater risk of being marginalised in labour markets.

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Women, Work and the COVID-19 Pandemic: Paving the Path Forward

Vibhuti Patel

INTRODUCTION

The COVID-19 pandemic has significantly worsened the challenges that women face in participating in the economy and in public life on an equal basis with men. *The Impact of COVID-19 on Women*—a policy brief released by the United Nations—observes that the pandemic will likely reverse many of the limited gains made in achieving gender equality in the past decades (UN Women, 2020a). The worsening of gender disparities in the economic domain, which has been observed worldwide, has been particularly acute in the case of developing countries such as India. In the case of India, the downward slide in women’s economic participation started well before the pandemic. The participation of women in the workforce in India which was among the lowest in developing countries

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had come down from 34% in 2006 to 23.4% in 2019 (Kingo, 2020). With the onset of the pandemic the rate of female labour force participation in the country further plummeted to an abysmal 16.1% (Kumar, 2021). This was well below the global average which was 46.9% (Catalyst, 2021).

This paper presents a broad overview of some of the main underlying factors inhibiting women's economic participation in India, it outlines some of the ways the pandemic has impacted the workforce participation of women in the country and it suggests certain interventions to address this challenge.

OVERVIEW OF ECONOMIC BARRIERS FACING WOMEN

Despite impressive progress made in enhancing the participation of women in the public domain over the past many decades, the pandemic has once again brought into sharp relief those structural barriers that continue to impede the economic participation of women. Underlying these barriers has been the gender division of labour which is a fundamental feature of patriarchal societies where women have been unjustly burdened with the responsibility of attending to the unpaid work of caregiving and household management which includes managing and carrying out the various functions that go into maintaining a household such as feeding, cleaning and cooking.

Every society has had to have an arrangement for taking care of those who cannot take care of themselves and to perform the routine, mundane drudgery-prone tasks that need to be carried out on a daily basis. While both care work and domestic work are necessary, they demand that the individuals performing them at least partially put aside their individual wishes and aspirations for the sake of caring for and serving others. The caregiver has to often spend many years tending to the needs of those who are recipients of their care which places limits on their freedom to follow their own aspirations and goals or pursue activities of their own choosing. Similarly domestic work involves a high degree of drudgery and monotony which deprives the individual of opportunities to engage in work that is creative and stimulating in nature. In a just society, these functions would be divided equally among its members irrespective of gender and those who perform them will be appreciated and compensated. However, patriarchy resolved this paradox through what feminists call a 'gender division of labour'. An entire segment of society belonging to a particular gender—women—were assigned the functions of serving

and caring for others which was made to be the centrepiece of their gender role and their prime-most duty to society. As feminist economists have observed, there is no biological basis for assuming that women are uniquely or exclusively equipped for performing these functions. The only functions that women can perform which men cannot are giving birth to a child and breast-feeding. All the other forms of domestic work and care work can be performed by any human being irrespective of sex.

Since these functions were ostensibly duties ordained for women by nature, their performance of them was not considered to require compensation or gratitude. These forms of work remained unremunerated and by extension unvalued. Thus a woman's efforts are not recognised as 'work' but rather are seen as her duty which she is required to perform in pain of punishment. Indeed, unmet expectations related to women's care responsibilities remains one of the main causes of domestic violence faced by women (Oxfam, 2019). The oppression of women was thus naturalised and built into the structure of society.

Although over the past century the participation of women in the public domain and in the economy has vastly improved, yet the influence of patriarchal structures continues to persist throughout the world including in India. In cases where women have entered the workforce, they are expected to still be responsible for managing the household and providing unpaid care. While they can delegate such work, women are still considered the one responsible for managing it. When the tension between responsibility for the home and the work place becomes unmanageable, women are often expected to prioritise their domestic responsibilities given the gender stereotype that maintains that a woman's primary responsibility is to her home.

One of the implications of the fact that a woman's work largely remains unpaid in contrast to men is that often even the productive economic activity that women engage in are not recognised or remunerated. Women carry out a range of productive economic activities in the handicraft and handloom industries as unpaid family workers' that remain unrecognised. When men carry out these same activities, they get paid for it. For example, in a home-based enterprise, the woman of the home might be engaged in offering much of the labour but it is usually her husband who sells the product or service since as a man it is easier for him to navigate and negotiate with the market. When government surveys are conducted, he would be recognised as the owner of the enterprise while his wife

would be referred to as a housewife with no recognition of her contribution, no matter how skilled and valuable it be. Not only are women's economic contributions of this kind often not recognised, her productive role is not respected. It is seen as an extension of her household duties. Even in the case of women entrepreneur-led businesses in the cottage industries, handicrafts and handloom production, women usually get neither credit nor the forward and backward linkages with factor markets and forward linkages with the product markets (Narasimhan, 2020).

When women do enter the workforce, their labour tends to be undervalued and they are paid less for the same work that a man would do. Women also end up having significantly lower reservation wages which is the minimum wage at which they are willing to work. A 2019 Oxfam report found that in India women earn on an average 34% below men (Oxfam, 2019). The work that women did, tended to be lower status and there were fewer women who made it to leadership positions at the top levels of organisational hierarchies.

The influence of women's gender role leads to occupational segregation within the labour market. Women get clustered into certain occupations which usually involve providing services similar in nature to their functions of caregiving and household work. Nursing, primary school education, primary health care work and hospitality are some examples of such sectors. These occupations usually tend to be low-paying, relatively low-status jobs (Banerjee, 2019).

GENDER NORMS AND UNPAID CARE WORK

The social and cultural structures of society are geared towards pushing women into stereotypical occupations that are extensions of housework and away from other kinds of career choices which would be considered unconventional for a women. Due to the need to accommodate their domestic and care-related responsibilities, women are also more likely to move towards work that have a flexible schedule, are temporary or part-time and less likely to be considered for highly competitive or demanding jobs in the formal sector that require the commitment of long hours and fixed schedules. Recent political debate on 'wages for housework' has also betrayed the mindset of caging women in the domestic arena (Khaitan, 2021). Surveys have found that employers in the formal sector prefer not to hire women. This in part explains why a mere 6% of the

women in the labour force in India are employed in the formal sector. When women become mothers they are even less likely to be hired by prospective employers due to a phenomenon that economists refer to as ‘the motherhood penalty’. Mothers are ‘hired and promoted less often, and generally receive lower salaries’ due to a perception that they are ‘less competent and committed’ (Patnaik, 2021).

LABOUR PROCESSES AND LABOUR RELATIONS IN THE INFORMAL SECTOR

The majority of the woman in the workforce are employed in the informal sector carrying out work which in the words of one observer ‘lacks the dignity of labour, social security, decent and timely wages and in some cases, even the right to be called a ‘worker’’ (Banerjee, 2019). The fact that the large majority of working women in India are in the informal sector and that there is a poor coverage of women-centric issues in the labour laws of the country leaves working women in India with little or no social protections or legal protections. This despite the fact that they are more exposed to various forms of harassment, violence, hazardous work conditions, unsafe living and work conditions and the lack of housing and sanitation. A woman street vendor, for example, has to work for 12 to 14 h on the streets in unsafe conditions under the constant threat of being harassed by other vendors, passers-by or petty officials and without access to clean and safe toilets, even when she is pregnant or going through her menstrual cycles. Rampant sexual harassment of women workers in the informal sector has been reported (Ahmad, 2020).

NEED FOR FORMALISATION OF INFORMAL SECTOR

A solution that has suggested for women in the informal sector is to formalise their work. However, this ‘solution’ presents its own set of challenges. In cases where a woman is self-employed, such women-owned enterprises are run with very limited capital and the expenses involved in formalisation of their enterprises can make their very enterprise unviable. Such an effort can also entangle them in complicated legal procedures which they lack the ability, time or resources to address. In many cases, it can make them prey to overregulation and to exploitation by low-level officials seeking bribes in exchange for permits. In cases where the

woman is working for an employer, the formalisation of her work can make it less likely for prospective employers to hire her due to the higher costs and increased regulations that come with formalisation. In any case, labour laws can be manipulated to suit the interests of the employer, undermining the very purpose of formalisation.

GENDER BLINDNESS IN THE DESIGN OF POLICIES

There are various types of structural barriers that inhibit a women's participation in the economy. Patriarchal attitudes and mindsets can make what is an easy and simple task for a man into a formidable challenge for woman. Such mindsets can be seen when women deal with male officialdom that does not take them seriously and denies them access to what is owed to them. It can be seen among male peers who feel threatened by or resentful towards the woman who relate to them as equals in the workplace. It could be within the family where a working woman is expected to give up her work in order to take care of additional care work or to avoid competing for status with men in the household.

In many cases these structural barriers arise from gender blindness in the design of policies. Policies related to the design of transportation systems are a case in point. Mobility is one of the most fundamental requirements for a woman to be economically independent. This requires that policies that design public transport in rural and urban areas be responsive to the unique trip-chaining patterns of women which caters to their life experiences of facing greater insecurity outside the household and having to reconcile their work and caregiving responsibilities. This is not the case with the way systems are presently designed.

Another example of such gender blindness in policies can be seen with the recently-issued four labour laws. These laws fail to acknowledge women as workers in their own right (Mazumdar & Neetha, 2020). Feminists have criticised these laws for completely ignoring issues of vital concern to women such as the gender pay gap and sexual harassment at the workplace which require grievance redressal mechanisms.

URGENT NEED FOR GENDER-DISAGGREGATED DATA

What obscures women's presence in the economy for policy makers and legislators is the non-availability of accurate gender-segregated statistics. In the absence of gender-segregated data not only are their particular

challenges not made visible, their very status as ‘workers’ is put into jeopardy. For example, on the issue of migration, the fact that there was no data on women labour migration meant that gender was not incorporated in development approaches to internal migration (Mitra, 2019). Similarly, in the agricultural sector women contribute greatly at every stage of the farming process. Yet a farmer is perceived to be the person who owns the land and in patriarchal societies men continue to be predominantly the ones to own and inherit land. Thus, the farmer is always assumed to be a male member of the household. Women farmers are not identified as farmers. One consequence of this is that the women farmers who commit suicide due to accumulated debts do not get counted in the list of farmer suicides. Their families do not receive the compensation that the State otherwise provides in such cases.

This phenomena of the invisibilization of both the contributions that women make and the challenges that they face is the reason feminists call for policies and legislations to be gender sensitive. Yet, even where policies are designed with the interests of women expressly incorporated into them, the bureaucracy of the State composed mostly of men steeped in patriarchal mindsets can pose impediments to their implementation. Attitudes of dismissiveness, paternalism and nonchalance towards women and their issues among middle level or local level officials are widespread—especially to those from poor, rural and marginalised communities.

In many countries around the world including in India women face legal barriers to their economic participation. These barriers are reinforced by discriminatory attitudes and social norms. A World Bank study found that throughout the world women have only three quarters of the legal rights that men possess (World Bank, 2021). Even if they do have the rights, a host of other challenges make it difficult for them to access justice. The daunting challenge legal systems pose to women is well described by Okoro and Prettitore (2020):

(W)omen frequently lack the financial resources and social networks to navigate justice systems. Social norms, which often are more restrictive than laws, may prevent them from taking legal action. And even when they do act, gender-biased public officials may undermine them. And women who must already balance family care with formal and informal jobs may lack the time to go to court. (para. 7)

With particular reference to the economic domain, women face structural impediments that limit their ability to own, access, and control productive assets. Ownership of assets has a significant bearing on an individual's ability to generate income, have access to credit and cope with and respond to shocks. Even in cases where legally, women can inherit property, due to cultural mindsets in most cases properties and land are passed down to male members of the family. On the other hand, in cases of crisis, it is a women's assets such as jewellery and small animals that are the first to be sold.

In the last few decades, feminist movements have pointed out that efforts that seek to advance the conditions of women in the public domain will have limited impact if they do not recognise how gender intersects with these other marginal identities of caste, race, class, tribe, ethnicity and religious identity. Patriarchy is intrinsically connected with other social structures. Menon and Vora (2018) interviewed legendary feminist activist the late Kamla Bhasin who describes this interconnectedness of social structures which she learned to appreciate early on in her career as a development practitioner:

As I worked at the grassroots in Rajasthan, I increasingly found that amongst the poor, women were poorer. Amongst Dalits, women were more Dalit. Amongst the excluded, women were more excluded. ...We cannot talk about class without recognising how it affects men and women differently in a gender unequal society. Similarly, we can't get rid of patriarchy without getting rid of caste or race because all these structures are connected. (para. 7)

Recognising and addressing intersectionality of gender with other identities has implications for the economic participation of women as well. In her study on the Maharashtra government's decision to ban bar dancing in 2005, Sameena Dalwai points out that while feminist groups opposed this ban due to the loss of livelihoods to around 75,000 women, for Dalit feminists the issue was the perpetuation of the dominance of a 'Brahminical patriarchy, and its hegemonic ideas of women's chastity and sexuality' (Dalwai, 2019, p. 20). Bar dancers were mainly lower caste women who came from traditional dancing communities in North India who can be seen as 'performing their castes'. The fact that these women

were earning well upset the traditional caste, class and gender boundaries which provoked a moralistic backlash from the State as a defender of upper caste values (Dalwai, 2016).

THE GENDERED IMPACT OF THE COVID-19 PANDEMIC

For women in India, the various obstacles that they faced in participating in the economy prior to the COVID-19 pandemic were steeply exacerbated with its onset and the consequent government-imposed lockdowns which went on for many weeks. The loss of jobs on account of the pandemic has hit women much harder than men. According to a McKinsey report, women's jobs were 1.8 times more vulnerable to the crisis than men's jobs. Globally, although women make up 39% of the workforce, they account for 54% of overall job losses (McKinsey & Company, 2020). According to one study, women were seven times more likely than men to lose their jobs during the lockdown phases. Among those who lost their jobs, women were 11 times more likely to remain jobless than their male counterparts (Abraham et al., 2021).

Those sectors which are disproportionately represented by women as a result of occupational segregation have witnessed massive job losses during the pandemic. These include health care, hospitality and education. Not only are the jobs held by women more vulnerable, they also hold a greater share of the professions most at risk during the pandemic such as frontline health care workers, nurses and the providers of social services. By one estimate up to 70% of frontline healthcare workers such as nurses, *ayaaabais* (housemaids), sanitary workers and doctors most exposed to the virus are women putting them at greater risk of infection (Patel, 2020).

In most cases where women have been compelled to drop out of the workforce during the pandemic, they have been driven to do so by a significant increase in unpaid domestic care work. According to a recent survey, the pandemic increased the time women spend on family responsibilities by 30% in India. It wasn't surprising that India's position in the 2021 Global Gender Gap Index published by the World Economic Forum slipped 28 places compared to 2020 to rank 140th out of 156 countries. In addition to caring for children, the sick and the elderly at home, women ended up being responsible for children who are staying home due to the closure of schools and day care centres. Shedding light on this phenomenon, a recent report by UN Women (2020b) observed:

Data from the rapid assessment surveys also shows that, in all countries, women are more likely to see increases in both unpaid domestic and unpaid care work since the spread of COVID-19. In addition, they are also more likely than men to say they are in charge of performing all three activities: unpaid childcare, unpaid adult care and unpaid domestic work. On the contrary, men tend to concentrate on tasks like shopping for the household, making repairs and playing with children, which are overall less time-consuming. (para. 11)

Of those who have been pushed into poverty due to the pandemic, women far outnumber men. A larger number of small and nano enterprises run by women have shut down during this period. Women are also among those who are most vulnerable as a result of the social and economic impact of this crisis. Those who fall under the most vulnerable category include women-headed households, people with disabilities, pregnant women and homeless people, lonely elderly, socially stigmatised transgender community, sex workers, prisoners, and inmates in overcrowded shelter homes, and makeshift tents. Those in the informal sector that employs a vast majority of women, were particularly vulnerable and badly hit. Daily wage labourers, head-loaders, construction workers, street vendors, domestic workers, small-scale manufacturing workers in recycling, scrap and garment industries, and others who managed their survival by earning daily wages had nothing left due to unemployment and confinement to their homes for over a month (Ratho, 2020). The status and condition of women among the millions of migrants who under very trying conditions walked to their homes during the pandemic remains unclear and undocumented due to the absence of gender-segregated data.

The pandemic has also sharpened male biases and prejudices that hold back women from participating in the public domain. Due to the high incidence of male unemployment caused by the pandemic, women were discouraged from competing with men for work because, as mentioned earlier, the man is seen as the primary bread winner and the woman is at best a supplementary earner. According to a global World Values Survey, more than half the respondents in many countries in South Asia and Middle East and North Africa (MENA) agreed that men have more right to a job than women when jobs are scarce (McKinsey & Company, 2020). This phenomenon is seen both in rural and urban settings. In villages, with men returning from the cities after the lockdown, women

were discouraged from participating in public employment schemes so that men could take their place.

The pandemic also exposed the new vulnerabilities of women which had repercussions for their ability to join the workforce or run their own enterprises. During this crisis, digital inclusion became critical for people to access critical health services, government welfare schemes, opportunities for education, civic participation, employment, and financing. Access to smartphones, a computer and an internet connection became a critical necessity for survival with crucial services related to health, vaccinations, livelihoods, education and security being offered mainly through digital means. At such a time, only 14.9% of women in the country were reported to be using the internet. The low penetration of the internet among women was attributed to the low levels of digital literacy, the relatively expensive costs of acquiring a smart phone and internet access and preference being given to male members of the family for internet access.

For women, the loss of employment opportunities and income were only part of the challenges that this health crisis brought. The basic well-being and security of millions of women was placed under severe duress during this period. The increased stress in the domestic setting caused by factors including the loss of livelihoods and income contributed to the sharp rise in domestic, sexual and gender-based violence during the pandemic which turned into a shadow epidemic. In cases where husbands lost their jobs and became unemployed, the risk of domestic violence was seen to be much higher.

With families losing their livelihoods and being pushed into debt traps, the cases of the girl child being given away in marriage and their consequent underage pregnancies shot up dramatically. Similarly, poverty led to the loss of food and nutrition security which again disproportionately impacted women. The increasing malnutrition and hunger among girls and women during the pandemic—which has gone largely unnoticed—is perhaps the cruellest manifestation of this discrimination. Girls and women eat the last—and the least—in the home. With the loss of income, families cut down on sources of nutrition such as vegetables and milk and the worst hit by this are women. The pandemic also caused an increase in girl and maternity-related deaths due to the lack of access to medical facilities that have been overwhelmed by addressing the needs of COVID-19 patients. Finally, this crisis led to the large scale drop-outs of girls from school education. Currently more than 10 million girls are out of school due to the closure of schools and colleges after the lockdown (Trivedi,

2021). Given that the digital divide is far more pronounced in case of girls and women, only a small percentage of girls have access to online education platforms. Being forced out of the education system in turn has exponentially increased their vulnerability to child-marriage, human trafficking and forced child labour (International Labour Organization, 2020).

The combined effect of job losses, the loss of income and the loss of physical, social and psychological well-being has been truly devastating for India's women pushing them into a condition of far greater precarity than men.

THE PATH FORWARD

Addressing the issue of unpaid care work and domestic work that women are burdened with as part of their gender identity is fundamental to addressing the issue of declining female labour force participation. This is especially relevant in the post-COVID-19 scenario where the burden of unpaid care work has significantly increased. Recognising the significance of this issue, political parties during state elections in Tamil Nadu, West Bengal and Assam included in their electoral promises cash transfers to married women as a payment recognising the value of their care work and domestic work. However, feminists criticised this policy stating that it would lead to further consolidating the existing gender stereotype which places the burden of this work on women (Khaitan, 2021). They also pointed out that with patriarchal structures unaltered within the family, the money would still be under the control of men in the household. Overcoming this challenge, required in part that care work and domestic work be valued and recognised for its immense contribution to social, economic and psychological well-being of society as a whole. Boys and men should be encouraged and incentivised to take on an equal share of this work between boys and girls or women and men within the family. The decision about how to divide the work of the home should be the result of an open consultative process within the family and not an imposition based on gender. As the economist Ashwini Deshpande put it, 'there is a domestic sphere and the public sphere and all adult individuals have the capability to do [activities pertaining to] either and it should be their choice' (as cited in Khaitan, 2021, para. 27). Similarly, while the tremendous value of care work and household work needs to be appreciated,

technological means must also be employed to reduce drudgery-prone and hazardous tasks.

The State has a vital role to play in providing the infrastructure that can reduce this burden of unpaid work for women and creating a safe and wholesome environment for them to work. This would include the provision of better housing, toilets, electricity, sanitation, access to running water, clean fuel and more efficient and safe transportation systems. It would also include programmes that ensure food and nutrition security, provide childcare facilities, ensure maternal and child health, helpline facilities and shelter homes for protection from domestic violence.

On the other hand, when policymaking is not gender-sensitive, the State can also add to a woman's burden of care work and domestic work by adopting fiscal austerity measures that cut down on the State provision of care services, that lead to the rise in prices of essential commodities through implementing regressive forms of taxation and the fall in household income due to pay cuts or job losses. These have a direct impact in increasing a woman's burden of unpaid care work and their management of households dealing with the implications of less income and rising prices.

To ensure that policies are gender sensitive, feminist economists have called for the integration of the gender perspective into government policies and the design of government programmes at the inception stages (Dewan, 2019). When policies are considered, it will be necessary to take into view their impact on the most vulnerable sections of society such as women working in the informal sector who neither have access to social protection nor is their identity as a 'worker' legally recognised. While the gender perspective is integrated in plans and programmes, it will need to increasingly be considered in tandem with class, caste, tribal and religious identity to gain a more granular understanding of the ways patriarchy and other social structures come together to place barriers in the path of women's economic participation.

Gender-sensitive policy making will require that women's legal identity be established as a 'worker' and her contribution and the issues she faces will need to receive increasing attention through the gathering of gender-segregated data. This includes the unpaid economic work that women do.

Apart from reducing the burden of unpaid care work that women shoulder, responding to the COVID-19-induced drop in female labour force participation will require that more work opportunities be opened

for women. In this regard, an unprecedented contraction of the Indian economy as a consequence of the pandemic and the lockdowns has meant that demand for goods and services has steeply reduced due to which job opportunities in the private sector have significantly reduced. The State offers various schemes that provide employment and opportunities for entrepreneurship. Given the depressed state of the market, schemes aimed at encouraging women entrepreneurship and skill development are not likely to bear fruit in the immediate future due to the lack of demand. In such a scenario, the most promising option for female labour force participation in rural areas is from Mahatma Gandhi National Rural Employment Generation Act (MGNREA) which provides wage employment. To ensure the greater participation of women in this programme, creche facilities need to be provided. In urban areas in the absence of a similar employment-guarantee scheme, an expansion in the employment of women under government programmes and departments is called for (Mitra & Sinha, 2021).

The role that women themselves can play in taking charge of their own development through grassroots action has received much attention from social scientists and development practitioners. For women, especially those among the most marginalised such as rural poor or those in urban informal settlements, experience from the world over has shown that the formation of collectivities allows them to achieve greater well-being. Where individual action has little or no chances of making a difference, movements towards the formation of collectives have shown to raise the income levels of women, give them access to credit, enhance their self-respect and sense of agency—giving them more confidence in challenging structural inequalities and oppressive social norms— and increase their ability to represent their concerns and influence outcomes in their relations with the agencies of the State, the market and within the home. Although the history of collectives has been littered with failures and mistakes, Agarwal (2010, p. 65) argues that collectives continue to provide a powerful means for ‘rural poor especially women to become agents of their own empowerment’. However, to avoid repeating mistakes of the past, she suggests that they incorporate ‘significant elements of a human rights-based approach to development, especially equity, accountability, participation and the empowerment of vulnerable groups’ (Agarwal, 2010, p. 65).

At the macroeconomic level, ensuring that women participate more fully in the economic life of society would require that economic models

be based on equity and justice and not on a narrow emphasis on economic growth. As is widely recognised among economists, policies that place singular emphasis on economic growth to enhance Gross Domestic Product (GDP) exacerbate the exploitation of labour of whom women are the most vulnerable segment. In the Indian context, with the progressive dilution of labour laws guided by the adoption of neo-liberal policies, firms and employers have been able to extend work hours, reduce wages, cut down on the provision of social securities and require workers to work in increasingly hazardous conditions. Women who provide the ‘reserve army of labour’ can be hired without a contract or job security. They are willing to work for lower wages, are willing to do work involving monotony and drudgery; they can be given work that is hazardous and they are less likely to fight back oppression or to form unions. This model of the economy, which valorises economic growth, encourages men to work longer hours in pursuit of greater productivity since this would make them more competitive in a highly insecure job market. This in turn implies that women end up having to shoulder an even greater share of the work at home.

Thus, the participation of women in the economic life of society clearly requires the transformation of policies, social structures, institutions and cultural traits that are based on, or shaped by, patriarchal assumptions. Through a long-term process of sustained action and reflection the learning will need to be generated about weeding out such unjust systems, patterns of thought and behaviour and building a more gender-just society. Yet, justice requires not just that women be given an equal part in participating in the present economy—which is itself in crisis for being unjust and unsustainable. The unconscionable levels of disparity between the rich and the poor and the rapid deterioration of the environment and the Earth’s climate that are the fruits of a consumption-driven model of economic growth indicate that a fundamental rethinking of the way economic life is organised and arranged is urgently needed. The dominant economic thinking which is based on the conception of *homo economicus*—a utility-maximising, self-interested and perfectly objective individual who corresponds to a masculine stereotype is being vigorously questioned. In a world which is rapidly transforming and where the challenge is to move towards higher degrees of interconnectedness and diversity, to establish justice, to overcome the challenge of anthropocentric climate change or the unmanageable levels of disparity between the rich and the poor, increasingly economic researchers will have to

find new ways of organising economic activities that have more just, environmentally-friendly and unifying outcomes. Such efforts will need to draw upon humanity's heritage of learning to build relationships with an other-regarding and altruistic orientation which are based on love, trust, cooperation and mutual support. It is arguable that millennia of experience have prepared women to make their unique contribution to such an effort. Thus, to build a more united and just world, women would need to not only be invited to participate more fully in the current economy but also to contribute their perspective to rebuilding the economy on a more humane and just basis.

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Whither Adivasi Livelihoods? A Longitudinal Study of a Bhil Village in Gujarat

H. S. Shylendra

INTRODUCTION

There have been diverse approaches adopted towards the development and emancipation of Adivasi communities known also in policy and scholarly discourses as ‘tribes’ or ‘indigenous groups’. While in the past, an integrated planned approach characterised the efforts towards development of Adivasis, reforms and liberalisation in line with the dominant discourse have assumed importance in recent decades (Munshi, 2012). Adivasi communities, one of the historically disadvantaged groups in India, constitute about 8.63% of India’s population and display enormous diversity in terms of their habitation, culture and living conditions. Despite wide-ranging policy initiatives, the general conditions of the Adivasis, even in terms of basic indicators like poverty and literacy, remain pathetic when compared to society as a whole (see Table 7.1).

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Table 7.1 Rural poverty and literacy status of adivasis (scheduled tribes)

	<i>Rural poverty %^a (2011–12)</i>	<i>Rural literacy %^b (2011)</i>
Adivasis	45.3	56.9
All	25.7	66.8

Note The sources of the displayed figures are ^aNITI Aayog (2013) and ^bCentral Statistics Office (2017)

Given the various social and economic disadvantages Adivasi people face and the peculiarities of their circumstances, developmental initiatives have only accentuated their problems leading to their marginalisation which has been amply attested by various assessments. Colonial rule dislocated the Adivasis from their forest habitations by curtailing their rights even as market forces, that made inroads during this period, alienated them from their lands. Post-colonial planned development, despite its proclaimed integrated approach, further displaced and marginalised a huge chunk of the Adivasi people. This is manifested clearly in the fact that Adivasis account for 40% of the total number of people displaced in the country by various developmental projects since the start of the planning era. The rapacious nature of economic reforms launched in the early 1990s underpinned by neoliberalism has further dented the precarious livelihoods and resource base of Adivasis pushing them into a deeper state of crisis (Radhakrishna, 2016). The resultant impoverishment and marginalisation of these socially vulnerable groups have given rise to a major crisis which calls for an urgent and amicable resolution (Munshi, 2012). Devastated as they are by inimical forces unleashed even at the behest of the state, Adivasis have been protesting against their subjugation and asserting their rights and identities. Some fear that unless the grave challenge confronting them is addressed, the Adivasis could be annihilated as indigenous groups that get sucked into the marauding capitalist system in the form of its meek reserve army of labour (Louis, 2007). The catastrophe of the COVID-19 pandemic has only worsened the crisis for them.

While many alternatives are being proposed to resolve the ‘Adivasi question’, any meaningful intervention would require a careful assessment of how their livelihoods have transformed especially in recent

decades characterised by globalisation and liberalisation. Such an assessment would help to not only throw light on the changing plight of the Adivasis but also provide relevant insights for addressing the challenges they face. This paper is an attempt in the direction of understanding the changes that have occurred in the livelihoods and living conditions of the Adivasis based on an inter-temporal micro-level case study of a Adivasi village in the State of Gujarat.

CHANGING ADIVASI LIVELIHOODS: A BRIEF REVIEW OF LITERATURE

The ongoing capitalist expansion in India, aided by economic reforms, not only requires capturing of latent markets for commodities produced but also needs unfettered access to cheaper labour and natural resources like land, forests and water. The state, besides creating infrastructure for the private sector, is bent upon allowing investors to access and acquire land and other resources, easily and cheaply. The entire process, which is theoretically referred to as ‘the primitive accumulation of capital’, enables the private sector to acquire cheap capital and labour for its expansion. The fallout from such an accumulation process is felt by vulnerable groups like peasants, Adivasis and labouring classes, who are compelled to surrender their resources and labour even at the cost of losing their livelihoods (Balagopal, 2007; Munshi, 2012; Rao, 2019). Further, the process of the acquisition of land or forests is facilitated by blatantly infringing upon the rights and the autonomy of local communities for the benefit of capitalist forces.

Economic reforms entail adherence to fiscal prudence to attract finance capital (Patnaik, 2014). The major brunt of fiscal prudence is borne by the poor because it involves the curtailment of the state’s social sector expenditures on which they are highly dependent. The final blow comes by way of the failure of the reforms process to generate the much-promised jobs for the poor, the displaced and the unemployed owing to the inherently exploitative logic of the system that generates jobless growth by emphasising the need for cost-reduction and efficiency. All that may be available for the poor and the unskilled would be highly casual and irregular jobs. They are reduced to being the reserve army of surplus labour at the beck and call of capitalist forces who aim to deepen their footprint with active state support. The imminent outcome of such a process of development

would be the further dislocation of the livelihoods of vulnerable populations such as the Adivasis along with the deprivation of their rights as citizens (Radhakrishna, 2016).

Official assessments and scholarly studies (Munshi, 2012; Rao, 2019; Scheduled Areas & Scheduled Tribes Commission, 2004) have vividly brought out the devastation caused by developmental efforts on Adivasis both before and during the reforms period. A major dislocation historically happened when the Adivasis were deprived of their rights over forests by colonial rulers. This curtailment had restrained them from pursuing shifting-cultivation or accessing forests for meeting their basic needs of food, fodder, firewood and other such forest products. This curtailment continued in the post-colonial period depriving them not only of a source of livelihood but also affecting the cultural values linked to such forest-based livelihoods. Those who continued with cultivation in areas designated as forests came to be considered as 'encroachers'. Though provisions such as the *Panchayats Extension to Scheduled Areas (PESA) Act 1996* granted autonomy over natural resources to the Adivasis, yet the compulsions of reforms have made state governments to bypass such provisions infringing on the basic rights of the Adivasis (Balagopal, 2007).

Farmland, which has been another source of livelihood support for the Adivasis, has also come under the pressure of market forces resulting in massive land alienation among them. This process, which began again in the colonial period, has continued unabated despite various legal protections in the subsequent periods. The developmental projects of both the planning and post-reforms era have accentuated land alienation and displacement through land acquisition enabled by the state (Balagopal, 2007; Karuppaiyan, 2000). Efforts at compensation have so far shown dismal results. Various socio-economic pressures, including that of a growing population, have contributed to increasing landlessness among Adivasis hastening their proletarianisation.

The loss of forests and other resources along with growing alienation have resulted in widespread protest and agitation by the Adivasis and other affected communities against the state. Their struggle with the state has enabled the Adivasis to get certain concessions like the implementation of legislations such as PESA, the Forest Rights Act (FRA) and various relief and rehabilitation measures designed either to grant them their constitutional rights and autonomy or to mitigate the losses they have suffered (Munshi, 2012). However, either due to the lack of commitment or poor implementation, many of these measures have proved to be

ineffective in protecting and restoring the resource base, the livelihoods and the cultural milieu of the Adivasis (Rao, 2019).

Most Adivasis have pursued subsistence agriculture as small and marginal peasants. However, as a result of their unviable land holdings and dependence on rainfall, farming as a source of livelihood has been characterised by low and varying yields thus increasing the Adivasis' vulnerability (Vatta et al., 2017). The combined effects of constraints in the access to forests, growing population pressure and ineffective developmental interventions have only prolonged the livelihood crisis of the Adivasis and forced them to resort to debt, distress migration and wage labour as a means of survival (Munshi, 2012; Shylendra & Rani, 2005). The incidence of starvation has not been uncommon in tribal pockets (Kumar, 2001). Though migration has brought some dynamism to their economic conditions, the context of high distress in which such migration is undertaken, and its circulatory form have kept Adivasis in a state of vulnerability (Bremant, 2019; Deshingkar & Farrington, 2009). Even women from Adivasi communities have been forced into informal migratory circuits totally unprotected from exploitative practices that are rife in work of such unorganised nature (Radhakrishna, 2016; Shah & Dhak, 2014). In the process, the bulk of the Adivasis has been reduced to casual and unskilled labourers in various sectors that thrive on such labour. Moreover, with many of the Adivasis being peasants, their migration has largely taken on a seasonal and circulatory form. Though migration may have helped in their survival through remittances, it has not enabled them to achieve any kind of upward mobility. Limited education and lack of skill development have become serious constraints limiting the possibilities for the Adivasis to take advantage of opportunities for upward mobility and of new job opportunities (Bremant, 2019).

There have been several kinds of interventions to uplift the socio-economic conditions of the Adivasis (Scheduled Areas & Scheduled Tribes Commission, 2004). Apart from the constitutional guarantee of rights and autonomy, various developmental schemes have been introduced for their benefit. Tribal Sub-Plan (TSP) has been a framework policy that purports to ensure the flow of planned funds to the Adivasis at least in proportion to their population. At the same time, all major welfare and rural development schemes are made applicable in areas dominated by Adivasi populations. Even non-governmental organisations (NGOs) have made focused interventions in Adivasi pockets. While some positive impacts of these interventions have been witnessed on Adivasi livelihoods,

by and large such efforts have not succeeded in significantly changing the conditions of precarity faced by these populations (Ballabh & Batra, 2015).

Although reforms have no doubt played an inimical role in the development of Adivasis, their adverse impact is also the result of the cumulative failures of earlier approaches adopted towards Adivasi development. The integrated, planned approach has at best produced mixed results for the Adivasis. Policies providing reservations for Adivasis and the spread of modern education among them enabled a section of this population to increase their awareness of, and participation in, the larger development processes (Chandra et al., 2008). However, the weaknesses of such policies which include their top-down nature prevented them from making a significant dent on the socio-economic conditions of the Adivasis. The negative consequences of the top-down developmental approach are aggravated in a globalised economy driven by capitalist interests which have neither empathy for the livelihood struggles of the Adivasis nor the sensibilities needed to treat them as communities in their own right. The Adivasis have been reduced to ‘nowhere people’ or ‘footloose labour’ (Bremar, 2019). It is suggested in the development discourse that the ‘Adivasi question’, encompassing the concerns highlighted above, has to be addressed by combining dimensions of their communitarian identities and their class-based consciousness given the larger challenges like agrarian crisis and proletarianisation afflicting them (Munshi, 2018).

It would be useful to understand how the processes and outcomes described above have unfolded particularly at the grassroots level in the context of an Adivasi community.

THE STUDY AND ITS OBJECTIVES

Based on the above literature review, we hypothesise that the livelihoods of Adivasis, which have been crippled owing to adverse colonial and post-colonial policies, are likely to be further debilitated in the period of globalisation pushing them to the brink of marginalisation as a community. This paper makes an attempt to examine the hypothesis in the context of the changing livelihoods in an Adivasi village in the State of Gujarat based on a longitudinal study. More specifically, the paper has the following objectives: (a) To examine the changing livelihoods of an

Adivasi community with reference to their resource base and occupational structure and identify the factors influencing the changes observed; (b) To study the changing nature and pattern of circulatory migration which has become the major form of livelihood sustenance; (c) To study the changing living conditions of the Adivasis as a result of changing livelihoods; and, (d) To identify possible future directions in terms of addressing the livelihood crisis confronting the Adivasis, more so in the post-COVID-19 scenario.

The paper draws data for its analysis from an ongoing longitudinal study about changing livelihoods in the hinterlands of Gujarat. The paper specifically focuses on an Adivasi village called Mahudi in the Dohad district of Gujarat. The data on their livelihoods and other aspects of their social and economic lives comes from household surveys in the village conducted at two points in time spread across twenty-five years: 1994 (pertaining to 1993–1994) and 2019 (pertaining to 2018–2019). The data for 1994 is drawn from a survey of 316 households (out of 528) in the village supplemented by case studies, focus group discussions and Participatory Rural Appraisal (PRA) exercises.¹ The research team also had conducted studies in urban destinations to understand the working and living conditions of the migrants. The survey in 1994 had covered households in the village broadly in proportion to the spread of different clans across different hamlets in the village (Shylendra & Rani, 2005). The 2019 survey covered 60 households² randomly drawn in proportion to the spread of clans across different hamlets in the village. The data was collected using a structured schedule covering various social and economic dimensions of village life.

The data has been analysed using descriptive statistics for both the periods. However, only for the 2019 survey fresh analysis has been attempted.³ The changes between the two periods have been analysed by

¹ The 1994 survey was conducted as part of a larger research titled ‘Rural Livelihood Systems and Sustainable Natural Resource Management in Semi-arid Areas of India’ carried out during 1994–2000 and supported by Swiss Science National Foundation through NADEL, Zurich, Switzerland. For results of the larger study see Baumgartner and Hogger (2004) and Shylendra and Rani (2005).

² The sample of both the years consisted of a small number of non-Adivasi households, 6 in 1994 and 2 in 2019.

³ The data of 2019 study is yet to be fully processed as the field survey got interrupted due to COVID-19 pandemic. The results of 2019 survey are still preliminary in nature.

comparing the prevailing situation of the study variables under consideration in the respective years. The comparison has been attempted only to the extent feasible from the available results of the 1994 survey. It must be mentioned that the data between the two periods may not be fully comparable with respect to some of the variables as the two samples may not be strictly comparable. Hence, the differences seen between the two periods may be taken as indicative of underlying changes. The differences observed based on the comparison between the two periods are explained based on qualitative insights gathered from field work conducted by the author during both the periods.

A PROFILE OF MAHUDI VILLAGE AND THE BHIL COMMUNITY

The village Mahudi is located in the Jhalod taluka of Dohad district in north-eastern Gujarat. The district is part of the eastern hilly region consisting of scrub vegetation, forested areas and uplands (Directorate of Census Operations Gujarat, 2015). Agro-climatically the village is in the subtropical zone with the annual average rainfall being 989 mm for the district. Rainfall is highly uncertain and varying across the years with the actual average rainfall between 2001 and 2011 being 724 mm. About 95% of the annual rainfall is received during the monsoon period.

Except for a few households, the village is entirely an Adivasi village inhabited by the Bhil community. The village and the taluka demographically form, in a way, part of the 'Adivasi region' or belt inhabited significantly by Bhils who are one of prominent Adivasi groups in Gujarat and in the country. The Bhils are the largest tribal groups in the country with a share of 15.05% of the total Schedule Tribe population as on 2001. Jhalod taluka, in which the study village is located, has a predominantly Adivasi population who comprise 90.13% of the total population. The Bhils are a unique community possessing their own social and cultural features which have been changing rapidly. The Bhils are an endogamous group spread across vast areas in multiple states with exogamy being practiced among sub-groups or clans (*atak*). The village, as per the survey in 1994, had 22 clans of Bhils and a couple of small backward caste groups. Except for a few households who have adopted Christianity as their faith, the Bhils in the village follow rituals and practices similar to that of the

Hindus and are identified as Hindu-Bhils. They follow many of the festivals and rituals similar to that of the Hindus including, more recently, the celebration of Ganesha festival.

The Bhils of Mahudi (Jhalod) engage in settled agriculture and supplement this form of livelihood with wage labour and migration to enhance their incomes. Historically, Bhils and other caste groups have been settled in the Jhalod region during the colonial period as a result of agricultural expansion through the clearing of forests and their encroachment. The village was covered with dense forests until the middle of the twentieth century. These forests were denuded through commercial deforestation carried out by the State's forest department and through encroachments by the local community. Efforts to regenerate forests since 1980s through social forestry and the joint forest management program have proven largely futile, although a small part of the forest has been regenerated recently.

Mahudi is located about 14 kms from the taluka headquarters of Jhalod which is connected by road to all major cities of Gujarat and neighbouring states. Jhalod is more of a trading town with only a few micro-industries. Jhalod is considered to be one of the most backward talukas in Gujarat in terms of various social and economic indicators. Dohad district in Gujarat, with an Adivasi population of 74.3% in 2011, is identified as one among the six backward districts in the state. For the purpose of industrial development, Jhalod and other talukas of Dohad are classified as backward and worthy of additional state incentives.⁴

CHANGING RESOURCE BASE OF MAHUDI

In this section an attempt is made to understand the physical and demographic features of Mahudi village and the changes occurring within these parameters in recent decades.

The total area of the village has largely remained the same since 1951 (see Tables 7.2 and 7.3) though its population has increased 5.7 times during the period. As a result, the density of the population of the village has grown from 129 in 1951 to 629 in 2011. This nearly five-fold increase accounts for the growing pressure of the population on the resource base of the village. The forest area has marginally reduced in 2011 as compared

⁴ See Industries and Mines Department (2020) for classification of talukas for various incentive schemes.

to 1991 which may be due to regularisation of agricultural lands. The forests remain largely degraded despite various efforts to address this challenge. A small parcel of agricultural land has been recently converted for non-agricultural use. As per the 2011 census data, the village has 36 hectares of pasture and grazing land accounting for about 4.5% of the total area. However, based on information shared by the people of the village, the pasture land has been used for creating various civic amenities like schools and a health centre as a result of which there is no land available for grazing animals. As per the census record, the total irrigated area shows a considerable increase—from 55 hectares in 1991 to 250 hectares in 2011 (see Table 7.3). The proportion of land area under irrigation has increased considerably from 12.05 to 54.4% in 2011. The sources of irrigation have diversified though wells and tube-wells remain the main source. It may also be clarified here that the census data may be indicative of the potential created by the process of irrigation rather than the actual situation on the ground which is confirmed by our primary survey.

As regards the social dimensions of the population, the village is overwhelmingly composed of Adivasi people. The census data reveals that though the total crude literacy rate has increased from 19.19% in 1991 to 42.21% in 2011, the overall literacy remains low as compared to rural Gujarat as a whole. The average size of a household, despite some fluctuation, shows a trend of increasing which is validated by the data of our primary survey. The sex ratio has increased since 1951 though in recent years it has shown a marginal decrease which is also confirmed by our primary data (see Table 7.4). Overall, like other Adivasi areas, Mahudi

Table 7.2 Demographic changes in Mahudi

<i>Particulars</i>	<i>1951</i>	<i>1971</i>	<i>1981</i>	<i>1991</i>	<i>2011</i>
Population	883	1494	2009	2728	5013
Male	–	–	–	1363	2541
Female	–	–	–	1365	2472
Households	154	226	292	458	814
Average household size	5.73	6.61	6.88	5.96	6.16
Density of population/Sq. Km	129	187	252	343	629
Sex ratio	880	940	960	1001	973
Area (ha)	684.8	797.2	797.0	796.98	796.98

Note The above figures are taken from the respective year's District Census Hand Book

Table 7.3 Changes in land area (in Ha) and its composition in Mahudi

	1991	2011
Total area	796.98	797
Forest area	275.89	267.2
Cultivable land	456.00	459.2
Pasture and grazing land	–	36.0
Culturable waste and fallow land	45.0	22.1
Barren and uncultivable land	20.09	13
Area under non-agricultural use	–	1.4
Total Irrigated Land:	55.0	250
(% of cultivable land irrigated)	(12.06)	(54.4)
By canal	–	50
By well/tube-wells	55	150
By tanks/lakes	–	50

Note Data drawn from Directorate of Census Operations, Gujarat (1995) and Directorate of Census Operations, Gujarat (2015)

Table 7.4 Demographic changes as per primary survey

	1994	2019
1. Average Household Size	6.59	8.45
2. Households by size (%):		
<5	38.92	18.33
5–10	50.63	58.33
>10	10.44	23.33
Total	100.0	100.0
3. % HHs split since 1994	–	45
4. Adult ratio (>15 years) %	56.6	58.38
5. Children ratio (<15 years) %	43.4	41.62
6. Sex ratio (females per thousand males):		
Total	1011	958
Adult (>15)	1052	1041
Children (<15)	958	851

shows a sex ratio which is comparatively better than that of non-Adivasi areas indicating a relatively improved gender situation for women.

In order to examine some of these demographic changes in a more nuanced way, we looked at the primary data collected at two points in time (see Table 7.4).

The primary data indicates that the pressure of a growing population in the village seems to be more acute than what was revealed by the census data. This is reflected especially in the larger household size during the second survey. The average size of a household has increased steeply from 6.59 in 1994 to 8.45 in 2019. The increase in household size is attributable both to the increase in the absolute population as well as to the strategy of holding on to the joint family system given the dwindling resource base in the village. The proportion of households with greater than 10 members has increased from 10.4% in 1994 to 23.3% in 2019. Further, since 1994 about 55% of the households have remained intact without getting split. As per the primary surveys, the sex ratio of females per thousand males shows a considerable decline from 1011 to 958 reflective of the changing gender situation during this period especially with regard to children.

LIVELIHOOD SOURCES AND OCCUPATIONAL STRUCTURE

The changes in the composition of livelihoods are indicated by the changing sources of livelihoods and the occupational structure. As hypothesised above, Adivasi livelihoods are becoming more and more precarious in the post-reforms era with increased dependence on wage labour and circulatory migration. This section looks at the comparative situation with regard to livelihoods and the occupation structure of households in the study village which is depicted in Table 7.5.

With Adivasi households in the village having access to land, agriculture is pursued by an overwhelming proportion (98% in 1994 and 97%

Table 7.5 Livelihood sources and occupational structure (%)

<i>Livelihood/occupation</i>	<i>1994</i>	<i>2019</i>
Agriculture	98.4	96.67
Animal husbandry	93.7	95.00
Wage labour	82.6	85.00
Artisan/services	8.9	3.33
Trade/business	4.4	13.33
Jobs	9.8	23.33
<i>Other features (%):</i>		
Workforce participation	57.97	57.99
Migrating households	75.95	86.67

in 2019) of households in both the periods. However, agriculture, as will be discussed further, remains primarily subsistence-oriented due to the decreasing size of land holdings. Agriculture is supplemented and complemented by animal husbandry which is carried out on a subsistence basis with the households having diverse kinds of livestock like cows, buffaloes, bullocks, goats and poultry birds (see Table 7.8). Wage labour is the third prominent source of livelihood in the village. 85% of households in 2019 (as against 83% in 1994) were engaged in wage labour both within and outside the village. The bulk of the labour work is performed outside the village in the non-farm sector by way of seasonal migration. Even as the workforce participation rate has remained almost the same (58%), the proportion of households migrating for various kinds of work has increased from 76% in 1994 to 86.7% in 2019 indicating the growing significance of migration as a livelihood strategy. Both high rates of workforce participation and a high rate of migration in the village reflect the prevailing distress in the village including the presence of disguised unemployment.

Apart from the engagement of wage labour in non-farm work, there are a few specialised non-farm activities in which the households are involved. These include the artisanal work and the provision of services, trade and business, and a variety of jobs in public or private sector organisations within and outside the village. Except for artisanal work and services performed locally like carpentry, tailoring and driving, one can see an increase in 2019 in the proportion of households involved in trade and business, and non-farm jobs. An increased number of households are taking up trade and business. The number of shops and business units has increased in the village since 1994, both in view of the increased demand for various consumables as well as the lack of employment opportunities in other sectors. The artisan/service activities and the trade and business activities are carried out in the village by way of self-employment. The third category of specialised non-farm occupations consists of various types of jobs obtained, largely on a casual basis, either in government establishments like schools, Anganwadi centres (rural child care centres), and primary health centres or in private sector units like factories, security agencies and hospitals. This category of non-farm jobs is available for those who have some basic education and skills.

The households at the village level thus continue to rely on their pre-existing sources of livelihood. At the same time, there is an attempt to diversify into varied kinds of non-farm activities both in the form of

wage employment and self-employment. However, determining how far the emerging occupation structure can ensure livelihood sustenance and upward mobility would require a deeper understanding of the nature of these sources of livelihood and their contributions. An attempt is made in that direction in the following paragraphs focusing on some of the major sources of livelihood.

Agriculture and Livestock

Agriculture is pursued by all households of Mahudi except for a few non-Adivasis who do not own land. Though agriculture is a source of livelihood for all Adivasi households in the village only a small percentage (45.67%) of the labour force identified it as their primary occupation in 2018–2019 (see Table 7.6).

The proportion is lower for male labour with 30.61% involved in agriculture as a primary occupation as compared to 61.27% for the female labour. Non-farm labour work has become the prominent primary occupation for the male labour (52.38%). Considering all types of non-farm activities together, for over 2/3rd of the male labour non-farm employment constitutes their primary occupation. In the case of women, about 38% of them are involved in non-farm activities as their primary occupation. Overall, for the majority of the labour (53.3%), taking both male and female together, non-farm activities have become the primary occupation. Agriculture and animal husbandry are the most prominent activities pursued as secondary sources of employment. Animal husbandry is the most prominent tertiary activity both for male and female labour. A significant proportion of labour (33%) is involved in a variety of non-farm activities even under the tertiary category. Overall, agriculture and animal husbandry have been relegated to secondary and/or tertiary occupations with non-farm occupations emerging as the primary employment especially for men. For women, even as agriculture, allied, and non-farm activities figure prominently as their source of employment whether primary or secondary, domestic work remains a key activity for majority of them which is indicative of the additional burden faced by them.

Although agriculture has become a kind of secondary employment, it still has a significant role to play in the livelihoods of the Adivasi households. Not only does it provide them some basic employment and food security, it also helps them hold on to their identity as peasants howsoever precarious it may be. All the Adivasi households in the village own

land. The land holdings however have become smaller and smaller over the years (see Table 7.7). The average size of holdings which was 2.46 acres in 1994 has come down to less than two acres (1.91) in 2019. In 1994, 30% of the households had less than 1 acre of land as against about 35% in 2019. To an extent, the continuation of joint families as a strategy seems to have helped in sustaining consolidated land holdings even as per capita land would have declined. Given the declining size of land holdings, the improvement in irrigation has helped households only to a marginal extent. As per official records, irrigation facilities in the village have increased. Yet, the 2019 survey showed that irrigation through diverse sources is reaching to only 25.75% of the land area as compared to 20.9% in 1994. Despite several irrigation schemes involving canals, wells, tanks and river-based lift irrigation, over all, the coverage of land area by irrigation remains limited. Thus, agriculture largely continues to be dependent on the vagaries of rainfall making it a high-risk form of livelihood.

Agriculture, despite some diversification, is centred around the production of food crops like maize, paddy, wheat and pulses accounting for 98% of the cropped area in 2019 which was almost similar to the situation in 1994. Those with irrigation facilities are able to grow vegetables and oilseeds though only to a limited extent. The overall cropping pattern has remained the same except for some minor changes. Kharif is the main season where maize, paddy and pigeon pea (*tuver*) are grown followed by Rabi with wheat and gram as the main crops. In one of the hamlets having

Table 7.7 Changes in landholding pattern (area in acres)

1994		2019	
Size-class	%	Size-class	%
0	1.90	0–0.5	13.33
0.1–1	29.11	0.5–1	21.67
1–2.5	36.39	1–2.0	38.33
2.5–5	27.53	2.0–3.0	13.33
>5	5.06	>3	13.33
Total	100.0	Total	100.0
Average land (acre)	2.46	Average land (acre)	1.91
% Irrigated area	20.9	% Irrigated area	25.75
% Households with a well	15.2	% Households with a well	21.67

a lift-irrigation scheme, a small number of households grow summer crops like green gram (*moong*) and vegetables depending on the availability of water. The overall cropping intensity ratio for 2018–2019 was 1.55 indicative of prevailing constraints on the intensification of agriculture.

Another key dimension of agriculture observed is the continuation of low-to-modest adoption of new technology which has limited the scope for any kind of major advancement in agriculture to generate significant levels of surplus food and income. Though the farmers are unable to clearly identify the nature of seed technology they use, there is a reliance on both local and improved/hybrid varieties of seeds. For maize and paddy, farmers in the village use local varieties of seeds to a significant extent; for wheat, they tend to use improved varieties which was also the situation in 1994. While pesticides are used as per needs, fertiliser application for all the major crops is low and varies from about 18 to 64 kgs per acre. On an average, a farmer used 47 kgs of fertiliser per acre during 2018–2019 as against a mere 19 kgs used in 1993–1994. Despite some increase in fertiliser use, the overall level of application remains low given the rainfed nature of agriculture. In terms of other technologies, though the overwhelming proportion of farmers continues to use bullocks for draft purposes (86.7%), the practice of hiring tractors for specific operations is prevalent among many farmers. On the whole, agriculture remains a low-technology-oriented system given the agro-climatic conditions of the village and economic constraints of the villagers.

The yields of agriculture, in general, have remained low even as there is a decline in the operational holdings. As per the survey, the average yield of major crops during 2018–2019 was 358 kgs for maize, 310 kgs for paddy, 364 kgs for wheat and 239 kgs for chickpea highlighting the limited nature of the contribution of agriculture in both an absolute and a relative sense. Incidentally, 2018–2019 was also a drought year which affected the yields to a considerable extent. Overall, like in 1993–1994, yields were low given the nature of agriculture practiced by the villagers. In 1993–1994, farmers had reported yields of 350–450 kgs for maize and 300–400 kgs for wheat. Those with access to irrigation are able to obtain higher yields during the Rabi season especially for wheat. Given the limited scale of production, farmers have only a small marketable surplus which households sell to generate some cash income.

The Adivasi peasants try and supplement agriculture with at least two other activities. All households have kitchen gardens where they grow a variety of vegetables which include flat beans, bitter gourd, chilly, brinjal

Table 7.8 Changes in livestock holdings and farm trees

<i>Livestock</i>	<i>1994</i>		<i>2019</i>	
	<i>% of HHs</i>	<i>Average</i>	<i>% of HHs</i>	<i>Average</i>
Cows	42.7	1.60	50.00	1.50
Buffaloes	19.0	1.35	11.67	1.29
Milch animals	59.5	2.27	51.67	2.32
Bullocks	83.5	1.89	86.67	1.90
Goats	63.0	2.94	75.00	3.62
Poultry birds	46.2	2.75	41.67	4.64
All livestock	93.7	6.13	95.0	8.28
<i>Trees</i>				
Trees on farm	71.8	96	88.3	18
Eucalyptus trees	86.5 ^a	83	54.0 ^a	23

^a% of trees to total trees

and ladies' fingers. Another supplementary activity is animal husbandry which is carried out by 95% of the households who rear various kinds of livestock (see Table 7.8) as compared to 93% in 1994. The average livestock units have also increased during the period from 6.13 units to 8.28 units with the increase being seen mainly in the cases of goats and poultry birds. Livestock units serve multiple purposes as they meet needs of food, manure, and cash income. Here again limited landholdings and fodder availability act as constraints for scaling-up subsistence animal husbandry. Incidentally, the bulk of the Adivasi farmers (86.7%) continues to rear bullocks like in 1994. Growing farm trees is another way the households supplement their livelihood from agriculture. These trees provide fuel-wood, timber and fruits which are also sources of cash income. Although most farmers (88%) have trees on their farms, the average number of trees per farm has come down significantly when compared to 1994.

Non-Farm Employment and Migration

Given the limited and uncertain support of agriculture to food security, employment and income, the Adivasi households of Mahudi have been exploring alternative avenues to supplement their income. With access to local resources like forests and land being limited, there has been increased reliance on non-agricultural sources of livelihood. Broadly speaking, three kinds of non-farm livelihood avenues have emerged in the

process, even as some of the traditional artisanal and service activities like carpentry, broom-making, drum-beating and midwifery have witnessed a decline. The new livelihood avenues include non-farm wage labour, various forms of self-employment involving trade, small businesses and the provision of services, and a variety of jobs made available by government or private sector establishments both within and outside the village. While many of these sources of alternative employment were in existence in 1993–1994, in the decades that followed there has been both a widening and deepening of the role of these avenues as a means of livelihood. About 67% of the labour force—86% male and 47% female—is employed in various kinds of non-farm employment either as a primary or secondary occupation. As per our preliminary estimations, non-farm employment is the major contributor to household income with 69% of the total income coming from non-farm activities.

At the same time, two major features of non-farm employment as it has emerged over the past few decades have to be taken into account. Firstly, there is a high level of casualisation of the labour force (see Table 7.9) in non-farm employment. The bulk of the employment (including self-employment) is in the informal (94%) and private sector (96%). The role of the public sector has remained very small as expected given the sway of neoliberal policies over the prevalent economic system. Based on our assessment, there is a decline in public sector employment for the Adivasis who face several challenges in obtaining such jobs. More crucially, much of the employment is of a casual type even in the public sector. This casualisation of work is spread across unskilled, semi-skilled and skilled labour. Contracts are made on a daily or piece-rate basis providing the workers no certainty of employment. It is only in the case of regular jobs that workers have more long-term job security through annual contracts or some form of permanent employment.

The forms of livelihood through self-employment are mainly in trade and business sectors where households have started their own shops and business units in the village. What emerged from discussion with the villagers is that the number of such units (including flourmills) has increased in the village raising concerns of their viability. Thus, even self-employment in the non-farm sector is riddled with challenges of competition and uncertainty that goes with casual employment. Overall, the male labour force has a higher proportion of regular jobs particularly in the private sector as compared to the female workers in the village. Incidentally, women are able to obtain more of the public sector jobs than

Table 7.9 Non-farm workforce by nature of employment (2018–2019)

<i>Category</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1. Public sector Regular	0.82	4.76	2.16
2. Public sector casual	1.64	3.17	2.16
3. Private sector Regular	8.20	0.00	5.41
4. Private sector casual	79.51	88.89	82.70
5. Self-employment	9.84	3.17	7.57
Total	100.0	100.0	100.0
% of Formal/semi-formal workforce	8.73	3.45	6.12

men. These include jobs as an Anganwadi worker, an ASHA (Accredited Social Health Activist) worker and a teacher which come under various social sector schemes and are available on contract and consolidated-salary basis. Thus, diversification of Adivasi households into the non-farm sector is more in the form of informal and casual employment which, at best, provides some basic income but is inadequate to ensure them any kind of upward mobility.

The second important feature of non-farm diversification is the dependence on seasonal migration by a vast majority of the labour force. The mobility of the labour force and the circulatory nature of it have again posed several challenges for these households further increasing their vulnerabilities. The nature and impact of the large-scale migration, as resorted to by the Adivasis of Mahudi, is elaborated in next section.

SEASONAL AND CIRCULATORY MIGRATION

As explained earlier, the proportion of migrating households in the village has increased from 76% in 1994 to 86.7% in 2019. Given the limited scope of livelihood opportunities offered by the local resource base, Adivasi households have long adopted seasonal migration as a major survival strategy. The trend, which began in 1960s, has only intensified in the subsequent decades.

One can observe from Table 7.10 that not only has the ratio of migrating households increased but also the average number of migrants per household has gone up from 2.17 in 1993–1994 to 3.35 in 2018–2019. Such an increase is an indication of the underlying surplus labour

in the village and the acute need for alternative employment opportunities. What is perturbing is that the proportion of households having female migrants has significantly increased from 66 to 77% during this period. This is another sign of growing distress among the wider section of the village population. Though the proportion of female migrants is marginally lower in 2019, the share is still quite large (37.35%).

The migration process for the bulk of the labour force is seasonal and circulatory. About 77% of the migrants migrate for two or three seasons as compared to 68.6% in 1993–1994. Their migration follows a pattern matching the seasonality of agricultural operations. The period of migration largely overlaps with the lean season which is the Rabi season and the months of summer. Those with greater surplus labour tend to migrate across all seasons. Migrants commonly go back and forth between the village and their destination places during the migration period. They return to the village for a few months at the beginning of the new agricultural year thus giving the process a circulatory nature. In some cases, surplus labour or drought may force many to migrate even during the Kharif period. Apart from the crucial link with seasonal farm operations, there are quite a few social and economic factors which have played a role in sustaining the circulatory nature of migration. The continued thriving of construction/road work and inability to diversify into other activities has posed a constraint for the Adivasis to transition into regular workers in urban areas compelling them to continue with their circulatory migration.

Coming to other dimensions of migration like its duration and the annual earnings from it, on an average a labourer from the village

Table 7.10 Comparative scenario of migration

<i>Details</i>	<i>1993–94</i>	<i>2018–19</i>
% of households (HH) Migrating	75.95	86.67
% HHs with female migrants	66.12	76.92
% of Female Migrants	38.98	37.35
% HHs migrating for 2 or more seasons	68.55	76.92
Average number of migrants per HH migrating	2.17	3.35
Average days/migrant	141 ^a	119
Total migrating days/HH	306 ^a	399
Average HH earnings (Rs. Lakh)	0.25 ^a	1.33
% Migrants staying in open places	81.58 ^a	75.14

^aData pertains to 1996–97 from a resurvey of a smaller sample

migrated for about 120 days during 2018–2019 with a total of 399 migrating person-days for the household as whole. This has enabled a migrating household to earn annually about Rs.133,000 as income under the prevailing wage rates. During 2018–2019, the wage rates for unskilled workers ranged from Rs. 300 to 350 per day and Rs. 600 to 700 per day for a skilled worker. The average daily earning of a migrant in 2018–2019 has increased by about four times as compared to 1996–1997 (the year for which data is available) indicating a modest increase in earnings. The increased supply of migrant labour and stagnating wages are the possible causes of a lower increase in earnings.

In terms of the type of work performed during migration, construction/road work of various kinds remains the major type of employment for both male and female migrants (see Table 7.11). The migrants involved in construction work performed either skilled or unskilled work on the sites with the former being performed mainly by trained male workers. Construction work accounted for 81.61% of the various works of the migrant labour force in 2018–2019 as against 82.1% during 1993–1994. This highlights the fact that the construction sector, which covers house and building construction along with road and infrastructure construction, has remained the prominent absorber of such low-skilled labour since 1990s. Besides being segmented, it also reflects the constraints faced by the Adivasi labour force to diversify into other sectors being largely unskilled. However, some changes have inevitably occurred in the type of work being carried out by some of the migrants. Factory labour work and various kinds of service jobs (which are skill-based) have increased as compared to the 1990s. Employment in factories account for about 9.2% of the migrant labour in 2018–2019. A range of service-based work requiring technical and non-technical skills accounts for about 7.5% of the migrant labour. The work requiring technical skills that involve migration from the village include plumbing, repair of air-conditioners, tailoring, auto-mechanic work and work as insurance agents and laboratory assistants. Sweepers and security guards are other kinds of non-technical work included under the category of services. Some of the specialised jobs under services are obtained especially by those having relevant skills or educational qualifications. Simultaneously, the share of agricultural labour work in the employment options for migrants from the village has declined since 1993–1994. Only a small percentage (1.72%) of the work force now migrates for agricultural work.

Table 7.11 Types of work (%) under migration

<i>Particulars</i>	<i>1993–94</i>			<i>2018–19</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1. Construction/road	79.94	85.51	82.11	79.82	84.62	81.61
2. Factory work	6.79	3.38	5.46	10.09	7.69	9.20
3. Services	–	–	–	8.26	6.15	7.47
4. Agri-labour	7.10	8.21	7.53	1.83	1.54	1.72
5. Truck loaders	4.63	0.00	2.83	–	–	–
6. Others	1.54	2.90	2.07	–	–	–
Total	100.0	100.0	100.0	100.0	100.0	100.0

With regard to the destination of their migration, migrants from Mahudi mostly get work in the thriving Ahmedabad and Gandhinagar urban cluster and the major industrial cluster of Surat and its surroundings. At the same time, a small percentage (2.3%) of these migrants have obtained jobs within their district, with the local economy showing some signs of growth.

For migrant labourers, apart from low and stagnating wages, their working and living conditions during the period of migration especially for those involved in construction work are a major cause of concern. They have to bear harsh conditions of work with a very limited protection provided to them. As per the sample survey (see Table 7.10), 75% of them reported that they stay in open spaces (*Khullam*) without any kind of basic facilities to sustain them, forcing them to return frequently to the village. Although the proportion of migrants living in open spaces has come down as compared to the earlier period (81.6%), the number is still substantial. It also indicates the inhuman treatment meted out to these Adivasi migrants by the urban and the industrial sectors thriving merrily on such cheap and docile labour.

Overall, seasonal and circulatory migration remains the main form of employment for the Adivasis from Mahudi seeking to supplement their income from subsistence farming. The trap of circulatory migration has prevented vulnerable groups like the Adivasis from experiencing any kind of significant upward mobility in the past few decades. With high distress migration continuing for such a long period, obviously the livelihoods of these Adivasis would not have shown any major improvement. The

changes or improvements that may have occurred in the lives of Adivasis are examined in the next section with a particular focus on education, housing and access to basic civic amenities and to welfare schemes.

LIVING CONDITIONS OF THE ADIVASIS

While the nature of a community's sources of livelihood is a good indicator of its socio-economic status, the conclusions arrived at can be further corroborated by looking at various other indicators of development. In the section below we attempt to examine the first of a few such indicators namely the status of education which serves both as a means and a goal for improved social well-being.

Education and Skill Development

Among the Adivasis of Mahudi, there is an improvement seen in the (crude) literacy rate both among male and female members in recent years as compared to 1990s based both on the census data and our primary data. However, the literacy rate (see Table 7.12) as observed in 2011 in Mahudi is lower (42.21%) than the overall rural literacy rate of Gujarat (63.11%). There is also an increase in the gender gap in the literacy rate. Thus, going by even the basic indicator of literacy, Mahudi lags behind the rest of the state of Gujarat considerably and the improvements witnessed are only of a limited nature.

In order to examine other dimensions of the educational development of the community, we looked at few more aspects in the survey of 2019 (though we did not have similar kind of data for 1994) (see Table 7.13). The average years of schooling measured crudely⁵ is 4.87 years highlighting the overall poor status of educational attainment. The limited years of schooling is attributable to the high incidence of dropouts among the Adivasi children of Mahudi. 63 and 53% of males and females in the village have dropped out of school at some stage and discontinued their education. Only 3.7% of males and 8.2% of females from the village have reached or completed undergraduate and postgraduate levels of education. An overwhelming proportion of the Adivasis in Mahudi are unable

⁵ Measured by taking completed years of schooling for those who are illiterate, who have dropped out, those continuing their education, and those who have completed education.

Table 7.12 Literacy rate of Mahudi and Gujarat (Rural)

	<i>Mahudi</i>	<i>Gujarat</i>	<i>Mahudi</i>	<i>Gujarat</i>
	<i>1991</i>		<i>2011</i>	
Total	19.17	44.00	42.21	63.11
Male	28.03	55.31	51.48	71.67
Female	10.33	32.07	32.69	54.10
Gender gap	17.7	23.24	18.79	17.57
	<i>1994</i>		<i>2019</i>	
Total	29.95	–	56.21	–
Male	40.46	–	69.50	–
Female	19.54	–	42.34	–
Gender gap	20.92	–	27.16	–

Note 1991 and 2011 data are from respective Census Hand Books (Directorate of Census Operations, Gujarat, 1995, 2015); 1994 and 2019 data are from the author's primary survey. In both cases, the crude literacy rate is used for comparison purposes

to go beyond school-level education. A very small percentage of males (3.7%) and females (1.6%) have been able to pursue a professional diploma or degree. The lack of skill development is further accentuated by the fact that only about 1.57% of the population is formally trained in some vocational skill. Thus, the overall level of education and skill development in the study village remains abysmally low, which in a way is both the cause and the effect of their dire livelihood status.

Housing and Other Amenities

Housing is another amenity that indicates improvement in quality of life. Table 7.14 presents a comparative picture of households in the village between 1994 and 2019 in terms of the prominent amenities like housing, drinking water and fuel use.

With regard to housing, there is some improvement in the village as nearly 24% of households now have RCC/RCC-mix houses as compared to about 5% having such houses in 1994. Building a *pucca* (solid and permanent) house is one of the main aspirations of most households. They save and invest in building an RCC or *pucca* structure. In many cases, the construction work remains incomplete or it goes on for a long period due to the lack of funds. Housing schemes have, to a limited extent, helped improve the overall housing conditions of the villagers.

Table 7.13 Educational achievements of Mahudi (2019)

<i>Particulars</i>	<i>2019</i>
1. Average years of schooling (Crude):	
Total	4.87
Male	6.52
Female	3.27
2. Dropouts %	
Male	62.78
Female	53.33
3. % In or completed UG/PG	
Male	3.70
Female	8.20
4. % In or completed professional degree or diploma	
Male	3.70
Female	1.64
5. % with formal vocational skills	1.57

Table 7.14 Housing and other amenities (%)

<i>Amenities</i>	<i>1994</i>	<i>2019</i>
1. House type:		
Thatch	0.96	1.69
Tile/sheet/mix	94.23	84.74
RCC/RCC-mix	4.81	23.73
2. Average no. of rooms	2.10	2.98
3. Electricity	Yes (Few)	66.67
4. Toilet	NI	26.67
5. Bathroom	NI	40.0
6. Drinking water: ^a		
(a) River/Pond	3.8	8.33
(b) Public well	28.2	15.0
(c) Hand pump (HP)	50.6	61.67
(d) Both band c	–	8.33
(e) Private well/HP	31.3	15.00
7. Fuel: ^a		
Farm residue	98.0	83.3
Forest/CPR	27.2	21.7
Cow dung	94.9	45.0
Own trees	48.7	5.0
Fuelwood purchase	9.8	46.7
LPG	–	70.0

Note NI stands for No Information (here & other tables); ^aUses data from multiple sources

The house sizes are relatively bigger with an average of three rooms as compared to two in 1994. The increase is also necessitated by the rise in the average household size during the period under consideration. The majority of houses (66.67%) in the village have electricity although a sizeable number of approximately one-third households remain deprived of electricity. Although many houses now have toilets (26.2%) and bathrooms (40%), the majority still lack these basic facilities. Though there is some improvement in access to housing and related facilities, for the majority these basic amenities are still not accessible. Inadequacy of income and savings after meeting household needs is one of the main reasons why the majority are unable to improve their housing conditions and amenities.

Having access to clean drinking water is an important determinant of health especially with the village being drought-prone. As there has been no major attempt to provide tapped water, public hand pumps and open wells remain the main sources of water (84%) followed by private wells. There is also a marginal increase in the proportion of households drawing water from rivers and ponds which indicates the prevalence of water scarcity especially during summer.

Fuel is another area of importance. Compared to 1994, there has been a decline in the use of fuelwood derived from farms or the commons. A significant proportion of households are now purchasing fuelwood (46.7%) or LPG cylinders (70%) to meet their fuel needs. The LPG connection has been largely made available under a government scheme for rural households, though some families are unable to gain regular access to it. The declining size of land holdings and the reduction of on-farm trees have also led to a decline in the use of own sources of fuel.

The quality of life is also influenced by the use of various assets and devices for farm or household purposes. In the past, Adivasi households led a relatively simple life with minimal use of external or industrial-made assets. They relied on local resources and artisans for meeting such needs. Currently, many such assets have been substituted by industry-made goods even as many new consumer-goods have become part of their life. Though many desire to acquire these modern gadgets/durables, not all are able to do so. The comparative picture of the ownership of some such major assets during the period between 1994 and 2019 is given in Table 7.15. In terms of productive assets, an increase in the

ownership of tractors, bullock-cart, wells and pump-sets, and commercial vehicles can be noticed. However, only a small proportion of the population belonging to relatively better-off sections having more land or regular non-farm income are able to own such high-value assets which remain unaffordable for the majority.

Ownership of consumer durables constitutes another segment which indicates the changing life styles as well as the extent of affluence and comfort enjoyed by Adivasi households. Some of the durable assets used by a sizeable proportion of households in the village are motorbikes, simple/smart mobile phones, fans, bicycles, television sets, refrigerators, wrist watches wardrobes (*almirahs*) and chairs. In a way, motorbikes and mobile phones have almost become necessities, especially with increased mobility and migration. Products which are for relatively elite consumption such as computers, air-conditioners, and washing machines are not owned by the villagers. Consumer articles like toilet-soap, shampoo and slippers are used widely, although of lower grade quality. Consumerism has thus made an entry into the community in a fairly big way which may have helped improve living conditions while also increasing household expenditure. At the same time, a significant proportion of the population is unable to afford many of these common durables given their

Table 7.15 % of the population owning assets and consumer durables

<i>Items</i>	<i>1994</i>	<i>2019</i>	<i>Items</i>	<i>1994</i>	<i>2019</i>
Tractor/trailer	0.0	5.00	Fan	NI	45.76
Bullock cart	0.63	3.39	Cooker	NI	25.42
Well/pumpset	15.20	25.86	Refrigerator	0.0	11.86
Bicycle	7.91	22.03	Radio	5.38	3.45
Motorbike	0.0	44.07	Watch	18.03	27.12
4-wheeler	0.0	3.39	Chair	NI	40.00
Sewing machine	–	3.39	Wardrobe	NI	43.33
Television set	–	16.95	Toothpaste	NI	30.00
Computer	–	0.00	Toilet soap &/shampoo	NI	96.61
Simple mobile phone	–	86.67	Slippers/sandals	NI	100.00
Smart mobile phone	–	21.67	Cots	NI	100.00
	–	–	Average HH expenditure (Rs. pm)	–	8674

dire economic conditions indicated by the low reported average monthly household expenditure of ₹8674⁶ especially given the high household size.

Welfare Schemes

Developmental interventions become important, especially in the context of disadvantaged communities like Adivasis, to protect them from vulnerabilities as well as to enable them to climb the social and economic ladder. The broad comparative picture of the outreach of various welfare interventions is presented in Table 7.16. The outreach of schemes and interventions have increased in 2019 as compared to 1994. Schemes like the public distribution system (PDS) for food and those providing wage employment continue to be provided but with certain changes. PDS is now split between Below Poverty Line (BPL) and Above Poverty Line (APL) schemes where under the former the poor household gets a higher quota of subsidised food. In terms of livelihood generation, wage employment which is now offered under the Mahatma Gandhi National Rural Employment Generation Act (MGNREGA) had a very limited outreach (3.3%) in 2018–2019 as compared to 1993–1994. Despite the village being driven by massive distress migration, MGNREGA is implemented in the village at a minimal level indicating a disconnect between the program implementation and the reality at the grassroots. Coverage of schemes providing self-employment loans in 2019 has declined despite the presence of a flagship program at the national level. A limited number of farmers have been getting assistance for the construction of wells (6.6% in 2019; and 7.6% in 1994). The proportion of households accessing institutional loans has increased from 29 to 43% during the period with most of these new loans now being sourced from commercial non-banking financial companies (NBFCs) as compared to cooperatives in 1994.

Many new welfare-oriented schemes have been introduced and the coverage of pre-existing ones has been increased. Schemes providing housing and toilet facilities have been introduced, although with only a limited outreach. Anganwadis, that serve children at pre-school level

⁶ This is self-reported expenditure by the households incurred on food, health and such incidental expenses. Given the average household size of 8.45, the per capita expenditure works out to be Rs. 1027.

Table 7.16 Outreach of welfare interventions (% of households)

<i>Schemes</i>	<i>1994</i>	<i>2019</i>
BPL ration card	95.0	51.67
APL ration card	–	46.66
Housing scheme	–	10.00
Toilet	–	18.33
LPG	–	65.00
Wage employment (JRY/MGNREGA)	43.0	3.33
Self-employment loan	12.7	0.0
Well scheme	7.60	6.66
Institutional loan	29.2	43.33
Farmers subvention (PMKISAN)	–	63.33
Pension (old age & widow)	–	10.00
Anganwadi (ICDS)	14.50	48.33
Mid-day meal scheme	–	70.00
Bicycle for girls	–	18.33
Scholarship	–	3.33
Bank account (PMJDY)	–	91.67
Life/accident insurance	–	13.30
Institutional child delivery (JSY)	–	18.33

providing them with nutritional support, have continued with increased outreach (48.3%) in 2019 as compared to 14.50% in 1994. The mid-day meal scheme which encourages school enrolment and retention had a household outreach of 70% in 2019.

Incentive schemes like bicycles for girls (18.33%) and scholarships (3.3%) have also been introduced. Schemes have also been launched providing financial support to farmers and senior citizens. Under the farmers' subvention scheme titled Pradhan Mantri Kisan Samman Nidhi (PMKISAN), an annual payment of Rs. 6000 is given to farmers having land title which covered 63.33% of the households in 2019. On the other hand, under social security schemes pensions are given to senior citizens and widows having no support. The pension schemes served 10% of the households in 2019. As regards other schemes, 18.33% of households have availed of institutional child delivery services for which they get cash incentives and 13.3% have subscribed for different insurance schemes. Although on the whole welfare schemes have increased in 2019 as compared to 1994, as per the qualitative insights gained during the field survey as well as based on available evidence, there are several constraints that impede their successful implementation. Many

households complained of the erratic functioning of the PDS scheme leading in some cases to the exclusion of eligible families from availing of the scheme. There were complaints of corruption with regard to the schemes for building wells and toilets. Further, despite the need for employment, the implementation of schemes for wage employment and self-employment has been found to be highly unsatisfactory. With regard to the scheme providing bicycles for school-going girls, a common complaint was that boys are making use of the bicycles instead of girls. As regards institutional loans, much of it is accessed from commercial sources like NBFCs. With conventional institutional sources of loans like banks and cooperatives curtailing their outreach, households are forced to access loans from private and commercial sources including village moneylenders. A cooperative under the category of the Large-sized Adivasi-Multi Purpose Cooperative Society (LAMPS) which was functioning earlier in the village has been closed down now.

Overall, these schemes would have provided some protection to households even if their impact remains limited by constraints in implementation and by the expansion of their coverage especially under economic reforms. The modest achievements in terms of education, housing conditions and living standards as observed in this section along with the continued distress migration are invariably indicative of the limited impact of many of these welfare schemes on the Adivasis of Mahudi.

CONCLUSION

It is commonly observed that 'the more things change, the more they remain the same'. In a way, the present comparative study of an Adivasi village over an extended period of twenty-five years has led us to such an inescapable conclusion. The previous study conducted during 1993–1994 had concluded that the livelihoods of people in the study village had become diversified with a growing dependence of households on external sources of income and employment (Shylendra & Rani, 2005). The major form of diversification observed was the prevalence of distress seasonal migration with links to construction and other such sectors in need of unskilled and cheap labour. Livelihoods were mainly split between the meagre agricultural base of the village and labour work in urban centres and other prosperous areas. This pattern of livelihoods was found to be due to distress conditions manifested by way of mutually reinforcing socio-economic factors like the declining ability of small-scale rainfed

agriculture to support the growing need for food, population pressure leading to surplus labour, depletion of forest resources and the financial burdens of upholding social customs somewhat unique to Adivasis such as the practices of bride price and *chandlavidhi*. Their vulnerabilities have been compounded by an exploitative capitalist system which ensures that seasonal migration, despite its widespread prevalence, remains more a matter of survival than a means to any kind of consolidation or upward mobility for the bulk of the Adivasis.

The repeat study in 2018–2019 capturing the changed livelihood scenario in the village led us to a conclusion which more or less reiterates what we observed in the previous study. Except for certain changes and improvements, overwhelmingly the livelihoods and the living conditions of the Adivasis in Mahudi have remained the same leaving them in a continued state of impoverishment. The hypothesis of this paper proposed that the livelihoods of the Adivasis, which had been crippled owing to adverse colonial and post-colonial policies, are likely to get further debilitated in the post-reforms period pushing them to the brink of marginalisation as a community. This has been largely confirmed by this comparative study.

The marginalisation of the Adivasis is occurring on several fronts. The resource base of the Adivasis consisting both of common and private assets shows an overall decline. Landholdings have become smaller owing to a growing population putting pressure on households to explore alternative livelihoods. Common resources like forests and gaucher land have not only been degraded but are also not useful to meet even the basic needs for fodder and fuelwood. Due to the limited development of irrigation, households have neither been able to augment their land holdings nor ensure significant protection against uncertain climatic conditions. Agricultural technology adoption and outputs in the village have, at best, remained modest. Though a marginal increase is seen in livestock holdings, yet animal husbandry remains a subsistence activity. Agriculture and allied activities have been reduced to more of supplementary activities having lost their relative importance.

The growing pressure to sustain livelihoods even at a bare-minimum level has pushed an increasing number of Adivasis to resort to distress seasonal migration which had emerged as a crucial source of income support even before the reforms era. The intensity of such distress migration has increased with more households and their family members including women migrating in a significant way. Though some increase

is seen in other non-farm activities like service-based employment or trade and business, they overall remain too insignificant to make any major difference. The fact that by nature these forms of work are largely informal, casual and low paying has meant that they have not been able to contribute substantially to the incomes of households. Hence seasonal migration to pursue wage work in the construction and other similar sectors of the urban economy has become the prominent source of employment and income.

The Adivasis of Mahudi thus have been largely reduced to being itinerant migrant workers in towns and cities primarily confined to low-end unskilled jobs which offer them a bare-minimum income at enormous cost to their dignity and human development. The livelihood of these Adivasis has become a holding operation that perpetuates their state of precarity and ensures reproduction of labour for induction into the larger reserve army which is at the beck and call of the growing capitalist economic system. Their growing proletarianisation and marginalisation has been compounded by increasing casualisation and informalisation of their employment, further worsening their conditions.

Apart from the reasons identified from the earlier study for the impoverished state of the Adivasis' lives, the larger political economy driven by a reformist state has worked to further exacerbate their state of distress. The state has driven itself into a situation where it is unable to conceive of interventions capable of making any radical difference to the impoverished livelihoods of Adivasis. Despite a variety of welfarist interventions, the outreach and impact of the state remains limited as the interventions are neither universal nor deep enough to change prevailing socio-economic conditions. At the same time, the earnings of the toiling migrants are not high enough to enable them to save adequately to help consolidate their livelihoods. Neither having adequate productive assets nor possessing relevant education to move-up, the majority of the Adivasis have been forced to be 'footloose workers', losing in the process much of their identities.

While this longitudinal study of an Adivasi village has clearly brought out the imminent trend of the proletarianisation of the Adivasis, the policy interventions needed to reverse the trend are bound to face enormous challenges. The COVID-19 catastrophe, which hit the Indian economy badly, would have dented further the livelihoods of vulnerable populations like the Adivasis. As our assessment revealed, many of the forms of relief offered during the COVID-19 pandemic could reach only a

limited section of the population even in the study village (Shylendra, 2021). Future development interventions must necessarily factor in the ways in which the problems of Adivasi migrants have been aggravated by the pandemic.

Our analysis found that the declining land holdings and resource base of households is one of the major reasons for the prevailing distress of Adivasis. To the extent possible, there is the need to augment the local resource base of the Adivasis through multiple interventions especially based on a collective approach. Water harvesting and water conservation needs to be pursued including through tapping the village river and ponds. The forest land, which remains degraded despite conservation efforts, has to be necessarily regenerated using innovative approaches including those involving the community. Agriculture, both in terms of production and input services, could be collectivised to improve productivity as the current holdings are proving to be unviable to ensure adequate food. Linkages need to be established through cooperative dairying to enhance the scope and role of animal husbandry. Self-help groups (SHGs) and credit cooperatives, which can meet credit and savings needs affordably, have to be encouraged. The welfarist interventions of PDS and those meant to augment civic amenities have to be strengthened and universalised to enhance their impact. Education and skill development is another area which would require considerable investment towards improving the human development status of the Adivasis. All these efforts would require that the state reverses its adverse role assumed in the wake of liberalisation and become more development-oriented.

Simultaneously, there is a need to intervene proactively in urban and industrial pockets to improve the bargaining power and the working and living conditions of the distress migrants. Labour unions and civil society organisations need to be actively involved in such a mobilisation.

The cause of Adivasi advancement has to work for both the ends of protecting their cultural identities and raising their class consciousness lest they are annihilated as a community by getting submerged as the invisible workforce of the prowling urban economy, a glimpse of which was depicted by the present study.

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Transforming India's Agrarian Society in a Post-COVID World: Prospects and Challenges

Harbir Singh Sidhu

India recently completed 75 years as an independent nation. During this time, we have seen decades of hope and of high achievement interspersed with periods of hopelessness and frustration. The India of today is vastly different from India of that time. Life expectancy, education and incomes have risen dramatically and India is finally becoming an important member of the comity of nations. However, there remain sad reminders of our social and economic poverty when we see the high prevalence of child malnutrition and the poor state of public health in the country, a significant percentage of the population lacking access to quality education, wide prevalence of food and nutritional insecurity and the continued obstruction of justice for large sections of the population

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on account of social discrimination due to caste, gender, religion and tribal backgrounds.

The present work tries to look at some of the changes that have taken place and their impact on the people, both intended or otherwise. The focus is on the agrarian sector and the further changes necessary to improve the rural economy. The issues facing the agrarian sector and the need for change has come into sharper focus in the aftermath of the COVID-19 pandemic with the massive disruption of the Indian economy and the migration of millions of people from cities to rural areas serving as a stark reminder of the continued significance of agriculture in India's economy and polity. The attempt of the central government to pass the three ill-fated farm laws in 2020, the severe and protracted backlash that it provoked and the consequent decision to rescind these laws only served to bring the issues facing Indian agriculture further into the spotlight of public attention.

The paper attempts to trace the imperatives that have shaped the trajectory of the development of the rural economy in post-independence India including the social, cultural and political forces that constitute the matrix within which the processes and activities of the rural economy are carried out. It also explores the possibilities of social, cultural and political change based on a perspective that attempts to reconcile the imperatives of unity and social justice with a practical reading of the ground reality in India's villages.

EVOLUTION OF INDIAN AGRICULTURE

At the time of independence, perhaps the highest rate of poverty and the greatest disparity in the income of the haves and the have-nots existed in the Indian agrarian sector. Village societies were beset with many social evils such as the draconian caste system and those beliefs and practices that victimized the girl child and women.¹ The root cause behind this horrendous state of affairs was believed to be the lack of modern scientific knowledge and education, backwardness in technical progress, low capital formation as well as the skewed distribution of assets and income within the rural population. In the popular realm, all of these challenges

¹ Clearly poverty and social evils were not restricted to India's villages. Indian cities were not free of them. In fact, the mill workers were often malnourished, ill-housed and prone to epidemics and chronic diseases.

were in turn blamed on the exploitative nature of British imperialism. As the struggle for independence was spearheaded by the urban elite and as the landed elite had by and large remained sympathetic to the interests of the British and the princely states, among the earliest popular actions by a left-leaning Congress government was to redistribute land, confirm permanent tenancies by law in favour of tenants and in general to reduce the control of the big landowner and pass on his rights to the peasantry. Despite the intellectual leaning of the Congress to the Soviet model of development, land redistribution focused on the rights of the tenant-tiller but stopped short of removing individual rights over land and creating collective farms under the control of labourers. The peasant proprietor was the main beneficiary of these reforms and not the agricultural labourer. These reforms were not equally successful over all states of India but by and large, major inequities were reduced and, along with divisions through inheritance, Indian agriculture is now typified by very small holdings.

In the early years after independence, the government felt that transferring land to the tiller was the panacea for all the ills plaguing the agrarian sector. This reform definitely helped the Congress Party develop political inroads into rural society from its preponderant urban base but it did not transform the subsistence nature of the sector. To its credit, the government went one step further and invested in irrigation projects to increase the productivity of the agricultural sector. The government had taken very bold steps to follow a hybrid model for development which borrowed from the Soviet model of creating longer-gestation heavy industries at the cost of lighter industries. The heavy industries will take time to develop but will create the ability to develop light industries later. This was very much the thinking of the times and both Russia and China had taken an isolationist stand with respect to trade and followed communist/socialist directions for development. As a newly-independent nation, there was a natural antipathy in India to the colonial powers and complete distrust in dealing with them even in trade. The industrial houses in India were naturally in favour of these policies as it gave them a protected market. Unfortunately, before the good effects of these policies could come about, India faced a war with China in 1962, a drought and crop failures in 1965 and 1966 as well as lacklustre performance by the public sector enterprises. A falling rupee and rising inflation coupled with a foreign exchange crunch forced the government to take urgent action to increase agricultural production and bring prices of food items under control.

Apart from the redistributive land measures, the government focused on physical capital formation supporting land productivity through building canal networks, digging tube wells and the deepening of reservoirs. Newer strains of seeds were introduced and knowledge about advanced agricultural practices (together with fertilizer and pesticide usage) were disseminated. Subsidizing of these inputs came later—the initial thrust was on the creation of the infrastructure and the dissemination of knowledge.² The combination of these policies aimed at reforming and modernizing agriculture and increasing crop yields came to be known as the ‘Green Revolution’.

THE GREEN REVOLUTION

The immediate impact of these policies was on productivity which led to a rise in the income of the cultivator. The increased overall production led to a rise in the demand for labour. In the initial stages, wherever the Green Revolution took root, there was overall economic progress and there was a quantitative jump in the incomes of all the stakeholders in the agrarian economy. Irrigation and the high-yielding dwarf varieties with short duration to maturity made double cropping possible. The mechanization of ploughing and harvesting led to a virtual doubling of the cropped area in states like Punjab and Haryana. Mechanization reduced the need for draught animals. This reduction was compensated for by an increase in the milch cattle population. Such extensive growth kept the labour-reduction effects of mechanization at bay. The increase in the cultivation of rice (where planting is not mechanized so far) also kept the demand for labour buoyant.

The multifold increase in output through the extension of cultivated area, increase in cropping intensity as well as yield increase led to a spike in the demand of labour for the post-harvest handling of grains. The rise in the number of tractors, farming implements and tube wells (together with their engines and motors) opened up new career opportunities for artisans. The heightened volume of inputs and marketable surpluses gave rise to much better prospects for the traders. The general rise in prosperity also increased overall consumption with its concomitant beneficial effects on the expansion of the economy. However, most of this progress

² Initially there were no subsidies for tube well use, electricity or fertilizers and even canal water was charged for.

was visible largely in areas growing rice, wheat and sugarcane. These were the crops that formed the core of the Public Distribution System (PDS) through which grain and sugar were provided to urban centres at controlled prices, with a special focus on the economically-weaker sections of the population. At that time in the 1960s, India was short of food for its growing population and it faced a major foreign exchange shortage. Food-grain-surplus states such as Punjab and Haryana were cordoned off and not allowed to sell their surpluses outside their respective state boundaries. The entire surplus was mopped up by the central government at the so-called Minimum Support Price (which ironically was lower than the prevailing price in the rest of the country)!

This was the honeymoon period between the government and the peasantry as there was a technological revolution coupled with unsatisfied demand and a government which was proactively leading the change. This period lasted as long as there was a shortage of food grains but the equations changed when the country had surpluses in these crops. Populist measures kept raising the government-controlled prices leading to a situation where currently Indian food prices are higher than international food prices due to which the government cannot export its surplus procurement. The government at present wants to wriggle out of its role of a direct agent in the agricultural sector and let the private sector be the agent of change in the present scenario of India producing an exportable surplus. This was the background for the passing of the three farm laws. The massive protests that arose in response to these laws raises doubts about the government's ability to achieve a smooth transition to a new equilibrium for India's rural economy.

The rice-wheat crop cycle under irrigation produces a stable physical yield. This, stable yield coupled with a government-guaranteed price, makes this the preferred crop cycle. Unfortunately, the production of these crops today is way beyond India's needs and the continued government controls have not allowed an export market to develop. In fact, the hegemony of the government has been so persistent that even interstate markets have not developed in line with the size of the Indian market. While in the case of industrial policies, the government has reversed its isolationist and top-down policies, agricultural policies are still based on the principle of production for Indian consumption with trade only at the margins (plantation crops being a notable exception).

The adjustments required to achieve the new desired equilibrium in the rural economy could be started in the relatively developed areas where the

Green Revolution began. The future of Indian agriculture lies in turning these areas into major export-oriented regions where controlled irrigation and mechanization are widely available providing the right conditions for shifting to the cultivation of vegetables, fruits and specialty products for export such as Japanese rice and Basmati rice. This would also remove the unmanageable surplus. The attempt to modernize and improve the markets through the ill-fated farm laws is a sad example of change forced from above without a buy-in from the affected parties. Somehow the government failed to convince the peasantry about the desirability and the necessity of change and its commitment to make the changes in a phased and non-disruptive way. The lack of transparency (maybe the government itself was not clear about the details) about the road map being proposed led to a complete breakdown of the peasantry's trust in the government. However, the present uneasy calm and stand-off has not solved the long-term problem of an unwanted surplus production and procurement. The need for legislative changes and a shift to agricultural marketing in consonance with current demand (within India and internationally) is a much-needed change in this scenario but a road map for this change has to be evolved with a buy-in from all the stakeholders in the agricultural sector.

PREPARING THE GROUND FOR CHANGE

The average size of land holdings in India are so small that it is almost impossible to practice efficient farming on them. Investment in inputs such as tractors and tube wells cannot be justified on a vast majority of farms which are too small. As a result, factor markets have developed whereby tractors are available on hire and surplus tube-well water is sold to neighbours leading to better cultivation practices. However, the land tenancy laws are such that the direct leasing of land exposes the landowner to the danger of losing his or her land ownership rights. This has led to the rise of quasi-tenancy and has kept the corporate sector out of seed farming and production for the export market. Even among the peasantry, *Patwaris*³ are induced to identify a leased out property in the official records as self-cultivated land. People have found ways around the laws.

³ Village registrars of property ownership.

It is a reflection of the moral rot that has set in the legal and administrative system when people have to falsify records to fulfil contracts made voluntarily. Social justice becomes a risky affair in a system where business cannot be transacted transparently.

The first step necessary for the transformation of Indian agriculture is to accept that land is an economic asset and its ownership has to be in line with other means of production. Ownership rights cannot be treated as an overhang of antiquated tribal customs and wishful thinking about an idyllic rural society rooted in subsistence agriculture. It is time that land ceilings and tenancy laws are changed in favour of enforceable written contracts. Naturally, this would be for prospective actions and not with retrospective effect.

Somehow the image of a rapacious and super-rich landowner dominating a poor hapless worker has become ingrained in the popular psyche. This is not reflective of the present situation. Even in a prosperous state such as Punjab, there are very few super-rich farmers. Even a fifty-acre holding of top-quality, fully-irrigated land with full ownership rights and with the current subsidies for fertilizers, tube-well bills, canal water and assured buying by the government, earns for its owner-cultivator an annual income in the region of three million rupees. This would, of course, be further divided among the various members of the owning household. Most villages would have less than five such households who, in turn, would account for around 10% of the total village land. Gone are the days when a zamindar owned more than 50% of the village. Land and power are firmly in the hands of the peasant proprietors. In these developed agricultural districts, semiskilled workers also earn between two to three hundred thousand rupees per annum, while the median peasant proprietor probably has an income of eight hundred thousand to a million rupees per annum. The disparities in income in rural society are no longer as vast as in the past nor are they any worse than in the urban areas.

A certain basic level of prosperity has been achieved in the developed agricultural areas in India but it is by no means enough to justify being complacent. A major transformation is necessary to carry the good work forward. The government should re-examine its policies and take cognizance of the surplus of low-quality food grains which find few buyers at the international level. The government has also to stop its knee-jerk reactions of banning onion and cotton exports when prices go up in India. We have to stop treating agriculture as merely a means for feeding the urban population and providing raw materials for factories. We need

to accept agriculture as a productive business in its own right. Policies have to go beyond satisfying the urban vote-bank with low prices of all agricultural products. From among the traditional crops, groundnuts, higher grades of rice and onions are eminently exportable from India. However, there is no shift in their favour as the government gives inadequate premiums for higher qualities of grain in its procurement policies and there are no incentives for the export of any agricultural crops. If the export of any agricultural product leads to a domestic price rise in that product (and makes future growth possible) the government of the day will generally restrict exports to ensure lower prices for domestic consumption. This disrupts export contracts and does not allow India to emerge as a serious player in international markets.

Crops which are priced higher than the international market prices can also be exported by allowing the exporter to make a proportionate duty-free import of products which can be bought at lower prices from the international markets and sold at a premium in India such as oil seeds or vegetable oils. This would allow us to witness a shift to a more rational cropping pattern. The government already has experience in implementing such schemes since import-entitlement incentives were earlier given to industries to make them competitive. These incentives would also not run foul of the World Trade Organization rules.

Some of the current prescriptions being bandied about for the reform of the agricultural sector are completely at variance with sound economic principles and modern trade theory. It is being suggested that wheat should be substituted by mustard whereas the trade-off should be worked out not on the absolute price-ratio in India but on the international price-ratio of wheat and mustard. A simple reference to the theory of comparative advantage in international trade, as explained in any undergraduate economics textbook, will make clear that if within India one tonne of mustard can trade for more than three tonnes of wheat and in the international market the trade ratio is closer to one tonne of mustard to two and a half tonnes of wheat, then despite both the Indian prices being higher than international prices, export of wheat and import of mustard is justified. This is merely an illustration to highlight the shortcomings of our policies. The other major problem facing this sector is the prevalence of huge across-the-board subsidies. There is much to be said on the detailed policy prescriptions regarding cropping patterns, crop insurance, post-harvest technologies, transparent markets and shifting to higher value crops. However, at a fundamental level, it would be fair to

say that the primary requirement for sustainable development is a stable source of revenue in the hands of the state governments to enable them to play a leading role in implementing the changes required. Unfortunately, even the current levels of subsidies are beyond the means of the state governments making further investments unthinkable.

The state governments have taken populist measures such as abolishing land revenue, irrigation cess on canal water and subsidizing tube-well electricity bills and fertilizers. At the time of the introduction of these subsidies, India was short of food grains and these specific subsidies allowed the central government to procure grains at a lower price than would have been possible without the subsidies paid for by the state governments. These subsidies are currently unmanageable by the state governments but their removal is also, I believe, beyond any political party's ability.

Perhaps the only feasible way to raise money to pay for the subsidies is to levy a 5% state agriculture Goods and Services Tax (GST) which would accrue to the state government. At some stage, the rural economy has to come of age and stop depending on free-lunches. There is a tendency in India to find clever solutions and workarounds through executive fiat without addressing the core challenges head-on. Thus, a state-level tax exists in the form of a marketing fee but no GST is levied. The problem in this case arises due to the vested interests that have evolved in the Marketing Boards.⁴ The contentious farm laws tried to enable technological changes but raised more fears than hope in the minds of the peasantry. The fears evoked by these laws centred on the perceived backing away of the government from its role as a buyer of the last resort. There are many piecemeal and incremental changes required that would allay the fears of the peasantry and make the transformation of agriculture possible.

To take an example of the kind of wasteful and time-consuming practices that bedevil Indian agriculture due to non-adoption of modern technology, despite the millions of tonnes of food grains produced, handled, transported and processed, we continue to use manual processes for handling grains with unitized bags. Automated flow-based handling systems are not available due to which the sector is typified by wasteful handling costs. Practices such as bagging of grain prior to weighing and

⁴ These boards have outlived their purpose and are now a hindrance, rather than a help, for technological change.

selling them were progressive when first introduced but are now cost-enhancing and redundant. Special demonstration trial units could have been set up and glitches, if any, removed before rolling out the laws. Similarly, changes in the land ceiling and tenancy laws could have built a consensus for further change among the stakeholders in the agrarian sector including the local peasantry, local traders and processors, interstate and international traders, stockists and most importantly, the central and state governments.

THE FUTURE OF THE LANDLESS LABOURER

Government policies have, by and large, favoured the peasantry and assumed that the trickle-down effect⁵ would continue to improve the lot of the poorest sections of society. I am afraid this policy approach may not be as effective or efficient going forward as it was in the past. Virtually all agricultural operations are getting mechanized or substituted by chemical applications (such as manual weeding being substituted by the use of weedicides). The last frontier for mechanization seems to be rice-planting and cotton picking. This does not augur well for the future of landless labourers and marginal farmers. Traditionally, the periods of peaking labour demand were addressed by inducting female labour on a large scale for cotton picking and rice planting. Marginal farmers and landless labourers could earn a goodly sum during these periodic spurts in the demand for labour. The government is aware of the inadequacy of demand for labour apart from the peak demand periods and has accordingly put in place employment guarantee schemes such as the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) to serve as vehicles for rural upliftment. As a welfare measure MNREGA is commendable, but as a long-term strategy for harnessing the labour supply for raising the growth rate of the economy, it falls short.

The government has taken many bold steps for providing a safety net for the poor, albeit more has been done for the urban poor than the rural poor. However, it has largely taken a hands-off approach when it comes to planning for unskilled and semiskilled jobs. In the estimate of the State, it is the skilled labourers who will lead the change and remove the bottlenecks for growth. This assessment has merit but it leaves rural society

⁵ Refers to the assumption that benefits given to those at the top of the system will eventually pass down to those lower down the system.

uncared for and vulnerable. The creation of jobs (excluding the government and the public sector) has been so slow that despite a high growth rate, there remains a substantial strata of the rural population which lives in miserable conditions for want of gainful employment. As mentioned earlier, mechanization of farm operations as well as the mechanization of grain-handling will continue to displace labour from the agrarian sector. In the long run, as has been seen throughout the world, the food requirements of the nation would be produced by fewer and fewer people. Theoretically, it is anticipated that in such a scenario, new jobs created in the manufacturing sector and the burgeoning secondary sector would gradually absorb the excess labour from agriculture as the nation advanced towards prosperity. In this regard, unfortunately, the manufacturing sector in India has not emerged as dynamic and competitive in the international markets as was hoped.

Just as the agrarian sector finds it difficult to export its main crops of wheat and rice, the industrial sector is facing strong headwinds in its quest to compete for the export market and become a major export hub. There are many industries in which India has excelled and others in which it is coming of age. From gems and jewellery to pharmaceuticals and the manufacture of cars and other motor vehicles, India is being widely recognized in the world as a base for manufacturing. However, for a country the size of India, it is necessary to be globally competitive in manufacturing per se and not limited to a few sectors alone.

In our quest for creating opportunities for Indian industry and the workforce, there is a tendency to compare our costs of production and wage rates with those of developed and rich countries. The relevant comparison should be with the cost structure of our competitors such as China, Vietnam, Thailand and Bangladesh. A few decades ago, India had emerged as a major hub for the manufacture and export of textiles and garments. Currently, the major global hub for textiles is China. Bangladesh, Vietnam and Thailand have become the preferred centres for garments. Whereas it is natural for developed sectors to start paying higher wages than before, it still has to be capped by the forces of international competition. Minimum wages declared in India are often higher than those in our competing countries. The pro labour legislation and the salary structure of the workers employed in the organized manufacturing sector has improved the lot of the industrial workforce but also acted as a brake on the growth potential of this sector. Whereas this is a good thing for the already employed workers under Labour Union protection,

further growth of these sectors will spill over to other countries and the large number of unemployed/underemployed workers in rural India are left with no future.

Another way of looking at this problem is to examine the impact of the dollar-rupee exchange ratio. On the current account, there is a consistent trade deficit and on the capital account there is a consistent surplus. This capital account surplus has kept the rupee exchange rate higher than the current account deficit justified rate. Thus, the industrial sector, at the current wage levels, cannot produce goods that can compete with imports. Part of the problem lies in the inability to use the capital account dollar inflows productively for high employment-generating investments. The inflows are concentrated in the services and real estate sectors. Neither of these sectors has a high import propensity and the capital account surplus has grown and propped up the dollar-rupee exchange rate in favour of the rupee. The inflows remain focused on the India consumption theme and not on the produce-and-export theme. The point here is not that there is no investment or progress in exportable production but rather that it is inadequate and the exchange rates work against labour-intensive manufacturing enterprises. Minimum wages and associated benefits in Industry and Minimum Support Prices and associated subsidies have choked the export-potential of the manufacturing and agricultural sectors respectively by making Indian exports more and more unviable and imports more and more attractive. We import low-technology toys and the like for consumption without making a serious effort to make the same in India. Somehow consumer prices for the better-off urban population have taken precedence over ensuring employment for the unskilled and semiskilled workers. China, in its quest for world dominance, went through a long period of exchange rate control which boosted its exports even though it had very large capital account surpluses. Even though direct subsidies cannot be given for exports and import duties have to come down, duty waivers for imports funded partly from export earnings can effectively boost some manufacturing sectors without running foul of the rules of the World Trade Organization.

While the rise in wages for workers is a goal that every government should work for, it must also avoid election-eve populist measures which cause a rise in the uncertainties and disruptions in investment plans. This is not a critique of ensuring high wages and incomes for the poorer

sections but more a pointer to the stifling of the possibilities for growth. I once again point to the capital account and current account mismatch, the dollar-rupee exchange rate, and its disastrous effect on the production growth of the Indian manufacturing sector. The Reserve Bank of India (RBI) and the government will have to rethink their inflation targets by sector and dollar equivalences and come up with desired and predicted levels of production and trade along with wage levels and then ensure the agreed caps together with a time-bound plan to gradually shift to a market-based economy (A market-based economy, to be truly market-based and successful, cannot have state-advised wages!).

Certainly exploitation of labour is to be avoided but at the same time, investors should also not be exploited by the party going to elections raising minimum wages arbitrarily for influencing the voting pattern without considering the long-term consequences for industrial growth. Investments are based on future expectations and these need to be stable and predictable for sustainable growth. Over time, wages need to grow (and they are growing) but there should be no disruptive changes. Such disruptive changes are short-run measures that improve the lot of already employed workers but also close the door for new rural migrants by choking future demand. Unless employment in urban areas in the semiskilled labour sector grows significantly, there appears to be a poor future for the landless labourers in rural India.

On the employment front, a surprising change in the urban metros has been a rise in the income levels and social status of female domestic workers. The rise in the employment of women in the upper echelons of Indian society along with the rise in nuclear families has created more demand and better-paid jobs for female domestic workers. In fact, a female domestic help in a city such as Mumbai, earns as much as her husband earns as a watchman or a driver. This is a welcome relief for the poorer segments of the population and an example of the trickle-down effects of development with the added benefit of increasing the prestige of women in their households. However, at a national scale, this cannot be thought of as a future solution for rural surplus labour.

POLITICAL EMPOWERMENT IN THE RURAL SECTOR

The other early change in the socio-political landscape has been the introduction of grassroot democratic processes through the *Gram Panchayat*⁶ elections. While the redistributive impact of the Land Ceiling Act as well as permanency of tenancy reduced the importance of local Zamindars and increased the importance of the peasant proprietors, the introduction of elected *Gram Panchayats* has consolidated the political power in the villages in the hands of the peasant proprietors. These changes have allowed democracy to take strong roots in rural society and removed many of the exploitative practices earlier associated with agrarian India. Unfortunately, the introduction of elections in a relatively small society such as a village has also created rifts and cracks in the social fabric.

A village is a relatively small community where most people know each other. There are also bonds of kinship within the substrata of peasant proprietors, landless labourers, artisans and traders. The *Gram Sabha*⁷ elects *Panches* from its wards and the *Sarpanch*⁸ is elected directly by the entire village. The purpose of *Panchayat* is to bring about co-operation and self-determination among the residents of the village. Unfortunately, the outcome of this democratic process has created more factions and conflict than cooperation. Rule by the will of the majority is far more meaningful in a homogeneous society than in a village in India which has distinct subsets of landless labourers, artisans, traders and landowners. Some villages have divisions based on religious beliefs as well.

In virtually all the villages in India, the peasant proprietors constitute the dominant community both numerically and economically. Thus, it is no surprise that the *Gram Panchayats* are largely controlled by peasant proprietor *Sarpanches*. Most villages are populated with members/descendants of a few landowners, sometimes of the same clan, who have lived there for many generations and constitute the dominant political power group. The electoral process envisages the election of ward-level representatives called *Panches* and a village-level direct election for the post of the *Sarpanch*. As the population size of a village is

⁶ A basic village-level governing institution.

⁷ The *Gram Sabha* is the general assembly of the people of the village who constitute the electorate.

⁸ The *Gram Sabha* elects the *Sarpanch*, an individual who chairs the *Gram Panchayat* and acts as the village head.

small, often 200–300 families, the *Sarpanch* is known to everyone and he in turn knows the adult male population. This makes a direct election for the post a prestige issue and losing becomes a major ego issue for an influential elder. Two influential members of the same section, class and often of the same caste, contest and, after the election, split the village population into two factions who cease to cooperate and collaborate on common village causes. Instead of a committee of elders leading the village, the *Sarpanch* and the *Panchayat* have become the arm of state-level political parties and have created rifts within rural society reflecting state-level political divisions with political patronage for the supporting *Sarpanches* and their cronies.

In the past, the *Panchayat* used to elect the *Sarpanch* from among themselves and no direct election was held for this post. Naturally the question arises as to why this was changed and direct election for the post of a *Sarpanch* is now the norm? The answer does not lie in the preferences of the villagers but in the desire of the political parties at a higher level to divide the village into factions and ensure a committed cadre of voters who can be favoured in return for electoral support. The democratic process is strongly-entrenched but has grown in its confrontational avatar with the winner taking all.

Even in a small society it is common for the *Sarpanch* to take kickbacks out of the development expenditure earmarked for the village and, instead of being a leader and a village statesman who leads his village in a spirit of togetherness and harmony, he sinks to the level of a facilitator and active participant of the venal political system of the country. Another sad feature of grassroots democracy in India is the lack of an independent income source for the *Gram Panchayat*. All the development funds flow down from the state government and naturally the state machinery is in control along with the *Sarpanch*. I would estimate that the leakage in these funds is the order of 25% and is used to cement the loyalty of the political cadre and its leaders.

The first and foremost change required is to reduce the confrontation and animus in the election process. However, I think the politicizing of even the village society is so complete with the winner takes all mentality that I do not believe that the state and national-level political parties will ever agree to indirect elections even though the present system of partisan politics has destroyed the fabric of village society and given rise to an increase in violence and the rise of the police (under the control of the state ruling party) as a political tool to be used for partisan ends. The

social media revolution is also giving rise to personality cults rather than political manifestos focused on developmental issues. In fact, even the village residents may opt for direct elections if it were put to them because the winning majority would gain from it!

This does not augur well for the future happiness of the rural society in India. The only option to rehabilitate the losing but influential candidate is to have him as an ex-officio *Panch* provided he gets, say, 25% of the votes exercised. This may, at least to a small measure, reduce the political tensions in a village and reduce the polarization in agrarian society. However, it may be too late to undo the moral degradation of our society and my suggestion may not achieve much.

Perhaps it is time to change the time-honoured principle of an individual voter choosing one candidate and where a simple majority, however slim, confers absolute power for five years. Technology has made great progress and the smart phone digital technology can be used to enable different paradigms for voting. We can well imagine that smart phone access will be universal in the foreseeable future. The general population is also far more aware and educated than at the time of Independence and is, I believe, fully capable of taking more detailed and informed decisions. Preference-voting and proportional representation are easily achievable and at a low level of cost. The day may not be far when, with the help of technology, we can attempt to achieve innovations in the system of election to make it more issue-based and less driven by personality cults. The reform of the *Panchayat* system may well be the best place to start and test possible changes.

The current sources of revenue for *Panchayats* are a nominal household tax and income from *Panchayat*-owned properties. In general, the earning from this is minimal and of no consequence. As the role of the *Panchayat* is to arbitrate minor local disputes and to maintain and improve the habitation area of the village, it is felt that the revenue should also be derived from the same. House tax is minimal even in the cities and populist policies have focused on commercial activities as the primary source of revenue. As a first step, a business establishment tax on shops and workshops and house (not household) tax should be introduced. This may be extended to the entire village land and not just to the demarcated residential area (*Lal dora* land⁹). Naturally land revenue needs to

⁹ Lal Dora land or red tape property is the part of the village which comprises the village habitation.

be reintroduced. The amounts have to be reasonable. To make these taxes palatable, the revenue should not go to a faceless and bottomless consolidated government fund but directly to the contributors as a village fund controlled by the *Panchayat*. A large cooperative housing society in a city such as Mumbai is perhaps a good example to show the way ahead in local self-government in villages. A Mumbai condominium is often the size of a village, much wealthier and may seem an odd parallel or model to compare a village with. The important thing to note is that because the society is largely independent of grants from the government, it remains to that extent apolitical. Imagine a city with housing societies which are classified as the Congress, the Bharatiya Janata Party or the Shiv Sena societies with the consequent degradation of neighbourhood peace and tranquillity.

WOMEN IN RURAL SOCIETY

In seeking to address the challenge of social and cultural change in rural settings in India, this paper will focus on one particular issue that is highly pertinent for social and economic development goals—the plight of women in rural society. The status of the girl child and women in general has traditionally been poor in India and particularly so in the agrarian households. In earlier times, female foeticide, and female infanticide were common social evils in many parts of India. Various laws have been enacted by the successive governments of independent India to advance the status of women in Indian society. While these laws and regulations are well-intentioned, there are social and cultural norms that act as barriers to their implementation or even when implemented they have consequences contrary to the noble intentions that inspired their creation. To create receptivity to change among rural populations and to ensure that steps being taken have their intended positive effects requires cultural sensitivity, a deep understanding of history and context and an attitude of learning among those who conceive of and seek to initiate socio-cultural changes within a population. The example of efforts taken to uplift the condition of women will serve to illustrate this argument. Take for example the campaign against early marriage of the girl child and the drive to postpone the marriage age of the girl to ensure that she receives secondary and tertiary education. This policy while admirable in intent creates serious practical challenges for families in villages which cannot be ignored or dismissed. Rural society sets a very high value on the

chastity of girls and they are often brought up in a cloistered atmosphere. This could work in a society which accepted marriages at very young ages. The raising of the marriageable age to 18 and 21 for girls and boys respectively (there are proposals to further raise this to 21 for girls also) runs counter to the generally-acceptable norms of village society. Every village cannot possibly have educational facilities for girls of eighteen and most parents of girls in villages are loathe to send their daughters to nearby towns for fear of losing control and facing problems in the marriage of their daughters. In our desire to modernize our society we often forget the plight of poorer people and judge their actions out of context. We have passed laws which criminalize people for actions which are legitimate and prescribed in their society. We have done little to understand their problems, their desires and their compulsions but feel superior and morally justified by passing laws which criminalize them but offer no solution to their dilemmas. Social changes take time to establish and the dilemma between individual liberty and social acceptability is not easy to resolve.

In the case of some traditional practices, the contextual understanding would need to be historical in nature in order to appreciate the original intent of the practice which was inspired by principles of justice and social harmony but which has overtime been subverted and distorted by patriarchy. Such a historical appreciation of the wisdom of these practices can help us trace a path towards reform that retains some of the wisdom of those practices while seeking to change the aspects of it which have become oppressive. The rights of a girl to the property of her father have been legislated but her rights to her husband's property have been left vague. Most developed societies accept the norm of equal rights of husbands and wives to properties in either name. We, on the other hand, have accepted a primitive concept of a so-called 'Hindu Undivided Family' and then, over time, changed its internal mechanisms in favour of daughters. Thus, inherited wealth ceases to be an individual's property to bequeath and/or dispose of as per his wishes and he is limited to being a custodian of the property. All of this is somewhat haphazard and at times vague and incomplete. Most people have clear and unambiguous family traditions which they assume shall be implemented and find no necessity to write their wills. The current approach of the government has become a hodgepodge of legislation based on primitive customs and individual freedom and justice.

Giving a girl a share in the Hindu Undivided Family is fair and just on the principles of individual rights and equality of genders but runs contrary to the logic of the traditional practice of a girl receiving a dowry at her marriage. Dowry is a much-misunderstood social custom. The custom in rural societies in India is largely prevalent among castes who own substantial fixed and business assets. The original logic of the practice is clear. When a girl leaves her parental home, she takes her patrimony with her at the time of her marriage rather than at the time of her parents' death. It should be appreciated that the parental wealth is not idle and liquid cash that can be divided by some ratio, but rather a non-divisible part of an ongoing business in the case of traders and workshop owners and a non-transportable asset in the form of land in the case of peasants. Dowry is not a prevalent practice among the landless workers.

In the distorted form of this practice which prevails today and which the government has sought to prohibit, is the boy's family's power to threaten the girl with expulsion from their family unless she gets more money from her parents. When we add to this the continued prevalence of traditional gender roles which prescribe being a homemaker as the primary duty of the women and discourage her from working and being independent, it becomes possible to see how the desirability of a woman as a bride has become equated to her dowry and her family connections.

The major shortcoming in this practice lies not in the practice of dowry but in the fact that the money is handed over to the groom's father. The girl joins a new family and a new economic unit, she invests in it, but has no share in it! What needs to be done is to secure a girl a share in her husband's family assets upon marriage. If a girl becomes by law a member of her in-law's Hindu Undivided Family upon marriage, coercion and maltreatment of women may well cease. Currently, a wife who is disowned by her husband has a right to maintenance but little else. She has no share in his wealth. A major debate needs to be undertaken to understand the problem from different viewpoints and the rights of a married woman legislated and/or documented at the time of marriage.

The maltreatment of women grabs headlines and is seen as a major social evil. However, in my view, the lavishness of an Indian wedding with its parties, obligatory gifts and expensive clothing and jewellery, is itself a social evil. The mindset in an Indian wedding is not focused on the marriage of two individuals and their future but more on the present status and social prestige of their respective families. The necessary changes for shifting from joint families to nuclear families and from

housewives to earning partners have started in day-to-day lives but need time to become a part of the social consciousness.

Perhaps the litmus test for village society in India as it seeks to modernize is ensuring social and economic justice for its younger female population. There is an appreciation for the desirability of higher education both for boys and girls. Job opportunities for educated women are also growing. In the marriage market—for want of a better word— the desirability of working women as partners is growing and a further deepening of this process is the surest way to remove the maltreatment of women by husbands and in-laws. Just as awareness has been raised about female foeticide and the education of the girl child, a focus on the employment potential for women could go a long way to modernize the rural economy.

As the Indian economy and society face the headwinds of consecutive global crises of the twenty-first century such as the COVID-19 pandemic and climate change, our ability to navigate the challenges they pose will largely depend on the fate of agrarian society where the masses of our country still have their base. It is unimaginable that a strong, united and prosperous nation can be built with an impoverished agrarian sector plagued with social evils and without the full participation of millions of India's villages. The path towards change as suggested by this paper requires a combination of economic policies that increase the marketability of agricultural produce in India and abroad, that create jobs in the manufacturing sector to absorb unskilled and semiskilled workers displaced from agriculture and that address the need for social, cultural and political change in a manner that takes into consideration peculiarities of culture and context. The COVID-19 crisis has cast a glaring light on the problems facing India's agrarian sector and of rural society in general. With the challenges fully visible, perhaps they can now be fixed.



Impact of COVID-19, Lockdowns and Economic Slowdown on Food and Nutrition Security in India

Dipa Sinha

Many Indians have been facing a crisis of food security since the beginning of the COVID-19 pandemic. While the situation of food and nutrition security was always poor in India to begin with, as reflected in the low rankings in the Global Hunger Index (GHI) and other similar global rankings, in the last two years there have been multiple shocks which have further worsened the situation. The immediate impact of the national lockdown imposed in March 2020 was that a number of people, in the informal sector, lost their source of earning and with hardly any savings were soon faced with a situation of hunger. This was particularly the case in urban areas where workers in the informal sector were almost completely dependent on the market as a source of food, which meant that without cash they could not access any food. Further, given low levels

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of wages and savings, they also soon ran out of the stocks of food that they had at home. This, along with the pressure of having to pay rent as well as the fear of the virus, saw an exodus of migrant workers walking back to their villages.

Macro data as well as a number of field studies conducted in the period between late 2020 and early 2022 show that the pandemic and the lockdowns resulted in a fall in incomes for many. The national income in 2020–2021 declined by 7.4% compared to the previous year. Given this low base, the following year 2021–2022 did see a high growth rate but the per capita income by March 2022 had still not caught up with what it was in 2019, before the pandemic. Further, as being discussed by many economists, India is experiencing a K-shaped recovery where while the incomes of the rich are rising, that of the poor are continuing to fall (Narayana, 2022). Rural wage data for instance shows a negative wage growth in real terms for both agricultural and non-agricultural workers over the last two years (Himanshu, 2022). This continued strain on incomes of the poor is bound to have an impact on food security as well.

While the economy has not yet fully recovered, the food security situation is once again under threat because of rising inflation. The State of Food Insecurity (SoFI) report 2022 (Food & Agriculture Organization of the United Nations et al., 2022) estimates that about 70% of Indians cannot afford a healthy diet, this can only be expected to get worse with the increase in food prices and fall in real wages. Food prices have been rising since 2021, due to global as well as domestic factors. It is anticipated that this situation might worsen given that the production of wheat in India declined in 2022 because of heat wave conditions in many parts of the country and the rice production is also expected to be less than previous years due to drought as well as a ‘dwarfism’ virus that has affected the paddy crop in some parts. In this context the public support provided through programs such as the Public Distribution System (PDS) become even more important.

Longer term impacts on malnutrition are difficult to predict. Malnutrition is caused by a number of factors including inadequate diets. It is known that dietary diversity in India in general is very poor and infant and young child feeding practices are woefully inadequate. For instance, the recent National Family Health Survey (NFHS-5) data shows that only 11.3% of children in the age group of 6 months to 2 years receive an

adequate diet as defined by the World Health Organization (WHO). The NFHS-5 data (2019–2021) also shows that the rate of decline in childhood stunting (an indicator of chronic malnutrition) has slowed down compared to earlier periods. A number of international organisations have also estimated that as a result of the pandemic the prevalence of malnutrition will go up across the world. While an analysis of malnutrition and the impact of the pandemic on the same is beyond the scope of this chapter, an analysis of the situation of food insecurity and the government response to the same is included here.

It must however be remembered that the impact of the pandemic on hunger and the government response to it needs to be understood in this context of the high prevalence of malnutrition among people, poor dietary diversity and high levels of vulnerability. This chapter especially looks at the available evidence of food insecurity during the pandemic and the performance of the government schemes during this period. It is argued that while the response of the government to this hunger crisis has been inadequate, the crisis over the past two years has also exposed the strengths and weaknesses of India's social protection and welfare framework. Lessons from these could be used as an opportunity to strengthen the delivery of public services and the protection of the basic right to food security in the long term.

CONTEXT OF FOOD SECURITY AND MALNUTRITION IN INDIA PRIOR TO THE COVID PANDEMIC

The Right to Food campaign collected information on more than a hundred alleged starvation deaths reported during the period 2015–2019 (Right to Food Campaign, 2020). Fact-finding teams from civil society organisations that visited many of the families and communities where these deaths occurred recorded a situation of extreme deprivation and hunger. Family members reported that they had not eaten at all for a few days and had eaten very little for months on end. Further, it was found that in most of these cases, the existing government entitlements towards providing food, work and pensions had failed to reach the affected families (Choudhury, 2019). These reports came especially among vulnerable communities such as particularly vulnerable tribal groups (PVTGs), *adivasis*, single women and the aged (Newslick Report, 2019). It was also found that there was a spike in such incidents in this period after 2015, and that even in some of the poorest regions in the country reports

of starvation deaths were extremely rare in the preceding period. While it is legally and administratively almost impossible to prove a starvation death, what this did point to was that there was a situation of concern developing where many households were facing acute hunger.

Increasing hunger and food insecurity is borne out by other data that is available at the macro-level. A falling trend in growth rate has been recorded, with the Gross Domestic Product (GDP) growth being as low as 4% in 2019–2020 (GDP Growth Rate for 2019–20 Revised, 2021) and this has been attributed by many to the demonetisation in 2016 and the way in which the goods and services tax (GST) was implemented (Nagaraj, 2020). Particularly after 2013, India has been seeing a depression of wages and a decline in rural demand which is not because of the pandemic. There has been a collapse of real wages in rural areas which is again an indicator of well-being of rural working-class people since 2013 (Himanshu, 2017). Subramanian (2019) showed that compared to 2011–2012 there has been a deterioration in consumption and poverty levels in rural India using the leaked report of the Consumption Expenditure Survey (CES) conducted by the National Sample Survey Office (NSSO) in 2017–2018. Further, increasing inequality has been a feature of economic growth in India since the 1990s when the market-based economic reforms were introduced. This became even worse in the period post-2000s (Chancel & Piketty, 2019).

We also have data from NFHS-5 (conducted between 2019 and 2021, with a pause in the survey for a few months due to the pandemic), which shows that in the last few years there has been some reversal in the processes related to improving nutrition outcomes. While the NFHS-4 data from 2015–2016 showed that 38.4% of children were stunted (low height-for-age); it has declined by less than three percentage points to 35.5% in NFHS-5. A number of states show a reversal with an increase in prevalence of stunting (Drèze, 2020; Sinha, 2020a, 2020b). NFHS-4 on the other hand witnessed a ten-percentage point reduction in stunting compared to NFHS-3 (2005–2006), with no state showing an increase in stunting. Stunting is an indicator of chronic undernutrition. It not only reflects insufficient and/or poor-quality diets but also has to do with intergenerational factors. An increase in stunting represents some form of distress which is resulting in basic food and nutritional security not being achieved.

While malnutrition is also affected by multiple determinants such as sanitation, access to healthcare and women's status in society, given

the present context of food insecurity and the impact of COVID-19 on the same, in this chapter the other factors are not discussed. Similarly, while discussing food security there are also links that need to be made with food production and livelihoods of farmers. These have been much in discussion recently, especially in the context of the three farm laws introduced by the central government in 2020 and later withdrawn following farmers' protests. However, given the constraints of space these are not presented here. The main way in which the COVID pandemic has affected food security is through its impact on people's livelihoods and incomes. In today's world, where most people are dependent on the market for meeting their food requirements (80% of farmers are also net-consumers of food in India), a fall in employment or wages has a direct bearing on food security.

COVID-19 AND ECONOMIC SLOWDOWN: IMPACT ON FOOD INSECURITY AND MALNUTRITION

The initial national response of the government in India to the COVID-19 pandemic in India was the imposition of a strict national lockdown starting on March 24, 2020 which lasted for over two months. This was followed by localised curfews and lockdowns across the country during the latter part of the year depending on caseloads. In April and May 2021 with the second wave of the COVID infections, most states once again had lockdowns and curfews. Once again, in January 2022 there was the third wave of COVID-19. Although this time around the infections were less severe, there was still some disruption to economic activity with restrictions on movement and gathering. With the high proportion of informal sector workers in India, these disruptions have led to massive unemployment and an overall recessionary trend in the economy. Various surveys have shown that although there has been some recovery since the first lockdown, there has also been greater informalisation of the economy and lower incomes. The Azim Premji University estimated that by 2021 more than 230 crore people had fallen below the poverty line, defined on the basis of minimum-wages in the aftermath of the pandemic (Centre for Sustainable Employment, 2021).

A number of international organisations anticipated that across the world as a result of the pandemic there would be an increase in hunger and food insecurity. For instance, the International Food Policy and Research Institute (IFPRI) estimated that an additional 140 million

people will fall into extreme poverty of living on less than US\$1.90 per day (Laborde et al., 2020). The World Food Programme (2020) and United Nations Children's Fund (UNICEF) also expected there to be increases in hunger and malnutrition due to supply-chain disruptions, fall in incomes and interruptions in nutrition services (Fore et al., 2020). The *State of Food Security and Nutrition in the World 2022* estimates that in 2021 over 700 million people faced hunger across the world. Further, 150 million more people were hungry in 2021 compared to 2019, i.e. before the pandemic (Food & Agriculture Organization of the United Nations et al., 2022).

Although COVID-19 is receding, the situation of hunger continues to be vulnerable due to the shocks to supply chains, slowdown in economic growth and conflicts. The slowdown in economic growth across the world is continuing, with recent projections of the International Monetary Fund (IMF) indicating that globally the growth rates in 2022 and 2023 are expected to slowdown to 3.2 and 2.9% respectively (Gourinchas, 2022). The growth forecast for India too has been downgraded to 7.4% (Seth, 2022). As discussed above these economic impacts not only affect short-term food security and hunger but can also have more long-lasting effects on malnutrition among children. Studies have tried to project the increases in childhood wasting (acute malnutrition indicated by weight for height) due to the decreases in per capita incomes. For example, based on data for 118 low- and middle-income countries, a Lancet paper estimated that because of projected losses in per capita income childhood wasting (among children under 5 years) would increase by 14.3%. Such an increase in wasting could also result in increased mortality among children (Heady et al., 2020).

Due to the estimates of hunger due to COVID and economic slowdown are now added the figures of those who are expected to go hungry because of the disruptions in food supply to many countries, and the associated food price inflation due to the Russian invasion of Ukraine and the climate-change-related loss of productivity in early 2022. The number of severely food-insecure people in the world in 2022 are more than double compared to before the pandemic. The World Food Program (WFP) expects that by the end of the year the number of severely food-insecure people would further increase from 276 million in early 2022 to 323 million (U.S. Global Leadership Coalition, 2022).

Increase in hunger and malnutrition in India is therefore not entirely unexpected nor exceptional. However, there is still reason to believe that

the outcome need not have been as bad as it was. Firstly, as seen in the section above, India was one of the countries that started with a disadvantage of already having a large population that was poor, that lived in precarious conditions and that was malnourished. Second, the country had one of the strictest lockdowns in the world, which was an entirely disproportionate response compared to the threat posed to the country by the pandemic at that time. Third, there was a second wave which was much worse than the first and this came at a time when people were already living in a crisis-like situation for over a year. As a result of all this, the effect of the pandemic on lives and livelihoods in India has been quite severe.

As seen in the earlier part of the chapter, the impact of the national lockdown lasted not only in those months of April–May 2020 but continued well beyond the lockdown period because there were not enough jobs, demand was depressed and there was not enough fiscal stimulus from the government (Chakrabarty et al., 2021). The Right to Food Campaign’s first *Hunger Watch* survey (2021) found that more than half (53%) the sample of about 4000 households across 11 states reported reduced consumption of rice and wheat in October 2020 compared to February of the same year, and for about 1 in 4 respondents it had decreased substantially. Similarly, 64% of the survey respondents stated that their consumption of *dal* (pulses) had decreased and about three-fourth of the respondents shared that their consumption of green vegetables had reduced. A follow-up *Hunger Watch* survey conducted in December 2021 (in 14 states with over 6000 respondents) showed the situation of food insecurity continued with over 40% of the respondents reporting that the overall quantity and quality of food consumed by them currently was worse than what it was before the pandemic began in early 2020. Thus, people felt that their condition was worse even compared to the very poor diets they had before the lockdown (Right to Food Campaign, 2021, 2022). The results of the NFHS-5, which was partly conducted during the pandemic, in mid to late 2020, also shows a slow-down in improvements in childhood stunting and an increase in anaemia. The time this survey was conducted probably too early to witness the impact on nutrition outcomes, but it is worrying that the momentum of change had slowed down even pre-pandemic and the crisis could further

undermine the gains made in the previous decade in so far as nutritional outcomes are concerned.

In this context of increasing food insecurity, the role of government welfare programs become doubly important. Right at the beginning of the pandemic the heads of various UN organisations had given a call for a \$2.4 billion investment to protect and treat children from malnutrition. They emphasised on the need for action to ensure that access to nutritious diets were protected and promoted, investments in improving maternal and child nutrition continued, services for the treatment of childhood wasting were scaled up and activated, and that school meals, social protection measures and other essential services were safeguarded (Fore et al., 2020; Headey et al., 2020; United Nations International Children's Emergency Fund, 2020). A review of India's response would basically therefore have to look at the interventions of the government through the welfare schemes such as the Public Distribution System (PDS), mid-day meals in schools, distribution of food and nutrition services through the Integrated Child Development Services (ICDS) services and so on. The following sections provides a brief review of these programs during the pandemic. Certain other initiatives are also equally important, such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and old age pensions but these are not covered here and only the direct food interventions are discussed.

RESPONSE OF GOVERNMENT OF INDIA

Many state governments started feeding programs through community kitchens, in urban areas a few days after the national lockdown, when it was clear that there were many people who suddenly found themselves in a desperate situation, without work and wages. Soon, the Government of India also announced a relief package under the Pradhan Mantri Garib Kalyan Yojana (PMGKY) (Ministry of Finance, 2020). This included insurance cover for health workers, a cash transfer of ₹1500 for *jan dhan* account holders under Pradhan Mantri Jan Dhan Yojana, ₹1000 for poor senior citizens, widows and the disabled, front-loading of payments under the PM-Kisan Samman Nidhi Scheme and some relief for construction workers through state governments. A small increase in MGNREGS wages was also announced but many argued that this was nothing extra

and something that was anyway due in April 2020 as an annual increment to adjust for inflation. The biggest component of this relief package was the provision of 5 kgs free grains per person through the PDS for all those who were beneficiaries under the National Food Security Act (NFSA).

a. Public Distribution System

The PDS has played a critical role in providing basic food security during the time of crisis, at least to those people who had a ration card. The Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) with free grains and pulses for around 80 crore priority and Antyodaya ration card holders was first announced for a three-month period (April–June 2020, PMGKAY–I) and later this was extended up to November 2020 (PMGKAY–II). Although the distress continued even beyond this period the provision of additional grains was suspended. Following the second wave, PMGKAY–III was initiated, this time without the pulse component, initially for a period of two months (May and June 2021) and since then the scheme has been extended multiple times with the latest announcement continuing the scheme until December 2022.

The PMGKAY has been credited with keeping households away from starvation with different field surveys showing that the scheme has been quite effective in its outreach (Drèze & Somanchi, 2021). The *Hunger Watch* surveys also found that among those who had ration cards, 90% said that they did get free foodgrains (Right to Food Campaign, 2021). But the problem has been for those who do not have ration cards. Under the National Food Security Act (NFSA), 67% of India's population is to be covered by ration cards. Currently, number of ration cards have been allocated according to the 2011 population census. Just by updating the population figures, we see that it is actually only 59% of the population who are covered by NFSA cards and not 67% (Khera & Somanchi, 2020). Further, the regular process of updating of cards has not been taking place in many states and moreover there are also reports of cancellation of ration cards. The current beneficiaries are around 73 crores, whereas even based on 2011 population estimates the coverage is supposed to be 81.3 crore beneficiaries (National Food Security Portal, 2022). The Ministry of Consumer Affairs, Food & Public Distribution (2021) issued

an advisory to state governments asking them to speed up the processing of pending applications and identifying beneficiaries.

Moreover, there are also errors in identification in the sense that there are still many poor, particularly migrants and those without documents, who are left out of the ration card system because they did not get identified as being eligible. For all such people, the need for a ration card was felt more intensely than before. The only support that was available for such people was in the form of distribution of cooked food by Non-Governmental Organisations (NGOs) and governments, mainly in urban areas. For example, in Delhi the government in co-ordination with a number of NGOs distributed cooked food twice a day through schools and homeless shelters. This was useful but it was a very short-term measure. So, one big issue that does come out is the need to reach those people who are presently out of the PDS net.

An added problem is that migrants who hold ration cards in their home locations might still not be able to access rations at their place of residence. The government emphasises on this aspect of exclusion and has been repeatedly proclaiming that with the introduction of the One Nation One Ration (ONOR) scheme, this issue is now addressed. However, the data on the ONOR so far clearly shows that the scheme has hardly taken off and that there are a number of implementation-related questions that need to be answered. While there are many concerns with this scheme such as whether it would ensure parity of entitlements across states, how stock would be managed, how would benefits within household members living in different places be divided and so on, the main concern with ONOR is its exclusive reliance on the Aadhaar platform which could actually result in further exclusions because of the well-documented Aadhaar-related failures (Khera, 2020).

While ONOR may aid portability, it does not include those who do not have ration cards at all. Given the current economic situation, it is quite clear that there will be many who may earlier not have needed the PDS but do so now. While it is difficult to put a number to this, it is clear from the data on the economic situation that this is large. When the Delhi government opened a portal to register e-coupons for those who did not have ration cards but needed rations, over 65 lakh people (that is almost as many as those who already have cards in Delhi) applied. It is for this reason that many have argued that the best way to address the problem of exclusion, especially in the present situation, is to universalise access of the PDS to all citizens of the country. This is borne out

by the learning from states such as Tamil Nadu that have always had a universal PDS (Himanshu & Sen, 2011). This will not only save targeting costs but also ensure that every person who needs food can get access to it. Estimates showed that universalising the PDS with a higher quantity of 10 kgs per head for six months as an emergency response to the current situation was something that was very much within the realm of the possible (Sinha, 2021a). Despite reduced procurement of wheat in 2022, the stocks in Food Corporation of India godowns as on August 2022 (including unmilled paddy) is over 60 million tonnes. While there is a fear of a crisis in availability, as there was a 50% reduction in procurement of wheat and the paddy output is also expected to be less, given the situation of hunger as well as inflation there is a continued need for the government to intervene and provide universal PDS. With the additional grains distributed under the PMGKAY, the additional food subsidy in 2020 and 2021 remained under 1% of the GDP. This is an investment that is worth continuing.

At a broader level, this situation of hunger amidst plenty also raises a number of questions related to the food system in India. Issues related to decentralised and diverse procurement, better distribution systems, and so on also need to be looked into from this perspective. Therefore, while as an emergency measure the government must ensure the expansion of the PDS so that nobody is left behind, in the long term the issues of production, procurement, storage and distribution need to be taken up together in a nutrition-sensitive manner. The discussion around the three new farm laws and the reforms in the agricultural sector, among other things, is also missing such a nutrition lens.

b. Addressing Childhood Hunger and Malnutrition

Children are a very important group especially from the point of view of preventing and addressing malnutrition. Women and children are more vulnerable to malnutrition. Under the NFSA, through schools and Anganwadi centres pregnant, lactating women and children are entitled to one meal a day in the form of cooked meals or take-home rations. This support was disrupted for almost two years, because of closure of schools and Anganwadi centres. Further, all the services that are available for children and women were also disrupted throughout the pandemic period. While schools and anganwadis were re-opened in early 2022, the

supply of cooked food did not start uniformly across the country. There is a lot of research and evidence to show that schemes such as the Mid-Day Meal Scheme (MDMS) and the Integrated Child Development Services programme (ICDS) have in the past played an important role in at least ensuring one good meal a day to the children.

The Supreme Court in March 2020 directed that there should be no disruption in meal distribution even though Anganwadis and schools are closed and that alternative arrangements should be made (Supreme Court of India, 2020). However, field reports suggest that the implementation has not been even. While some states made provisions for home distribution and take-home rations, others gave a cash supplement in lieu of the food that was being given (food security allowance under the NFSA). A report by the WFP for the period January to March 2021 (i.e., before the second wave of the pandemic) found that MDMS was functional in one form or the other in 35 out of 36 states (all except Telangana). About 11 states were providing hot cooked meals, 16 were giving a package of dry rations and rest were giving grains and cash (World Food Programme [WFP], 2021a).

While there have been reports of irregular provision, on the whole dry rations seemed to be the preferable option over a cash-based food security allowance. The entitlement under the mid-day meal scheme is of 100 gms of rice and cooking cost of ₹4.97 per day. Considering about 25 working days in a month, the cash component came up to only ₹125 a month which is worth only about 1 kg of pulses. Children across the country were getting such small amounts of cash in lieu of one hot cooked meal. It has been argued the cash transfers should have been higher as the direct conversion of cooking costs into the food security allowance does not account for either the economies of scale involved in providing a cooked meal in school or the other costs related to infrastructure, salaries and monitoring which are provided for separately (Sinha, 2021b).

Under ICDS, all states were providing some form of take-home rations either by home delivery or requiring beneficiaries to pick them up from the Anganwadi centre. While this was the situation in the first quarter of 2021 (WFP, 2021b), it is known that these services were once again affected with the second wave. Further, even during 2020 it took many months before services were put in place. The WFP review is based on what is available in terms of the official sources such as department websites and interviews with government officials, however the implementation has been relatively tardy. The *Hunger Watch* survey in its

first round for instance showed that less than 50% of the households which had a child eligible to attend an Anganwadi, had not received any supplementary nutrition, and about 40% of children going to school had not received any take-home ration or cash in lieu of food (Right to Food Campaign, 2021). The situation improved by the second round of *Hunger Watch* which found that about a quarter of eligible households reported not having received mid-day meals in any form and 28% eligible ICDS households not getting any benefits.

It is not just the supplementary nutrition but also other services of ICDS, such as growth monitoring, referrals and nutrition counselling that are extremely important. While there is no data to assess the situation of these, it is known that with the Anganwadi centres mostly remaining closed throughout the period since March 2020, these services had been badly affected. The Health Management Information System (HMIS) data of the Ministry of Health and Family Welfare, for instance, showed that the number of children admitted in Nutrition Rehabilitation Centres (NRCs) in 2020–2021 were only half those admitted in 2019–2020. Similarly, in a response to a question in the Parliament, the Minister for Women and Child Development stated that identification and management of Severe Acute Malnutrition (SAM) is an on-going process and as per data made available by states and union territories from across the country the number of SAM children is less than 10 lakhs now (Ministry of Women and Child Development, 2021). However, the estimated number of SAM children in the country should be over 1 crore (based on the prevalence of severe wasting of 7.4% as given by NFHS-4 and estimated 15 crore children in the age group of under 5 years) (Sinha, 2021b).

Coupled with the data on reversal or stagnation in improvements in malnutrition during the period 2015–2019, there can be serious long-term implications of the situation that has emerged over the past two years—which is one of acute food insecurity on the one hand and reduced support through government programs on the other.

WAY FORWARD

As this review shows the COVID-19 pandemic has not only affected health and incomes of people but also the levels of food security and malnutrition in the country. Although there have been major gaps in the

government's response to this situation, there are some lessons that have been learnt from the experience both before and after the pandemic.

PDS has proven to be an effective system to reach out to people even during a time of crisis. But the issue of those excluded from the PDS remains. As many have been arguing, universalising the PDS where anybody who demands subsidised rations gets it has its own merits. This is justified at least in the short term while the population grapples with the process of economic recovery. Further, it is not only rice and wheat, but other items such as millets, pulses and edible oils that need to be included. This is also a way in which production, procurement and distributions systems can be brought together. The National Food Security Act already talks about including millets and the PMGKAY over six months has shown that including *dal* (pulses) in the PDS basket nationally is indeed possible. Pulses would be good crops to promote both from an ecological as well as nutritional point of view. If *dal* is to be included in the PDS, it will also mean that the Minimum Support Price (MSP) for *dal* and procurement for *dal* will also need to be effective. The same is the case for millets. This is one way to also push the system to procure crops such as millets and pulses giving assured prices to farmers which would then encourage farmers to shift away from monocropping.

Therefore, even a central program like PDS does not have to be centralised—it could be a decentralised program with decentralised procurement of what is grown locally and where what is ecologically good for an area is the crop that is procured at an assured price. The procurement must then be linked to distribution not just through the PDS but also through the ICDS and mid-day meals. It involves the reimagination of the entire food system. A re-imagined PDS which is not business as usual, but one that addresses both the farmers' demands towards increasing their incomes and on the other hand ensuring a more nutritious diet to people must be part of the long-term vision. Similar decentralisation in ICDS and the mid-day meal scheme would then be necessary where menus are decided in a decentralised manner. Enhancing the quality of these meals by also including items such as eggs, fruits and milk would also be warranted.

In the immediate period, while it is important to strengthen all these schemes and acknowledge the devastating impact that COVID-19 has had on food security, this could also be seen as an opportunity to introduce much-needed reforms towards ensuring a more equitable food system.

Unfortunately, the response so far, including the reduced budgets allocated for 2021–2022 and 2022–2023 for these programs, do not display such wisdom.

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Degrowth, Diversity and Decentralisation: Building Sustainable Food Systems for Food and Nutrition Security

Richa Kumar

INTRODUCTION

The COVID-19 pandemic has forced us to confront the hubris of modern society in dealing with nature. It has become abundantly clear that our modern agricultural and food systems are both environmentally unsustainable and damaging to our health (Kumar, 2021; Waitzkin, 2021; Wallace, 2016). India's agrarian policies over the last 50–60 years have promoted this extractive, chemical-intensive system of monoculture farming that has contributed to the loss of biodiversity, land degradation, ground water decline and the toxicity of our soil and water, and the high prevalence of toxins in the bodies of animals and human beings (Kumar

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et al., 2020; Shah et al., 2021). World over, this extractive model of agriculture has also contributed significantly to carbon emissions and climate change (Raina, 2011).

Furthermore, these practices were pushed in the name of obtaining food security but in the process, India compromised on nutrition security. The promotion of wheat, rice and sugarcane cultivation across the country through various input and output incentives, as part of the Green Revolution, led to a shift away from mixed cropping patterns consisting of millets/multiple cereals, pulses, oilseeds and other crops (Kumar, 2019; Shah et al., 2021). Over time, from field to plate, our diets narrowed from a diverse set of foods to highly polished rice, wheat and sugar. Even the plethora of processed foods we now find ourselves eating, including bread, biscuits, buns, noodles and fizzy drinks are all created out of the same basic ingredients (highly polished wheat/rice, sugar and refined edible oil).

There is an urgent need to replace our myopic approach towards food that divorces agriculture and food consumption from its ecological and human context. Drawing upon the idea of ecological embeddedness, I argue that we should consider three ‘Ds’—degrowth, diversity and decentralisation as we think about building sustainable food systems for food and nutrition security.

DEGROWTH

Our economic systems have been created and are functioning under the assumption that they exist outside of nature—that the ecological context of material extraction and waste creation does not matter. Concepts like growth and Gross Domestic product (GDP), which have become the primary ways of measuring what it means to be a successful society, fail to account for the fact that there are ecological limits to growth (Kothari & Shrivastava, 2012). We must recognise that all economic activities, and most importantly agricultural activities, are embedded in nature; we cannot work outside nature.

The irony is that when viewed through the lens of the concepts of growth and GDP, developments that would otherwise be considered as negative in nature are seen as positive. For instance, every time a child falls sick in the city of Delhi our GDP goes up. It grows because parents are paying doctor’s fees, hospital bills and buying drugs from pharmaceutical

companies, all of which count as a positive contribution to GDP which is a measure of economic activity. A positive growth rate hides the damage being done to our bodies. It has been heartening to note that some of our policymakers are also recognising this issue. At an ‘Agriculture in 2030’ event organised by the Food and Agricultural Organisation (FAO) in New Delhi in February 2021, Prof. Ramesh Chand of the National Institution for Transforming India (NITI Aayog) recognised the cost of growth and suggested that growth in itself may not be the best way forward. The discipline of ecological economics has looked at several of these conundrums (Daly, 1996), coming up with what is a small but increasingly vocal group calling for degrowth (Kallis et al., 2020).¹

Economic anthropologist Jason Hickel defines degrowth as ‘a planned reduction of energy and resource use designed to bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being’ (Hickel, 2021, p. 1105). The idea of degrowth rests on three pillars. First, how do we reduce the size of our material economy—how do we reduce our production and consumption to the point where we are fulfilling our needs rather than extracting, producing and pushing for higher yields just for the sake of improving the numbers associated with growth? Second, degrowth calls for the redistribution of resources. The top 1% of Indians own 40% of the wealth of the entire country (Shorrocks et al., 2021).² While there is constant talk of scarcity, whether it be of land or energy, what is not adequately acknowledged is the staggering level of inequity in terms of ownership and access to resources. Third, and most fundamentally, degrowth requires that we rework our value system. How do we prioritise care and wellbeing of all living beings and the environment over a value system that is constantly thinking of money? What would it take to shift towards an ethics of care? Instead of being concerned about their financial package at graduation, what would it take for students to be concerned about their society, their environment and even their own health?

The idea of degrowth requires us to fundamentally rethink the measures of success in our society, from the mindless pursuit of money to being concerned about the world we live in. This means challenging the

¹ See Escobar (2015) for bringing together the ideas of degrowth and postdevelopment. Also see Kothari and Joy (2017) and Gerber and Raina (2018) for an Indian perspective.

² In 2015, the top 1% of Indians earned 22% of the total income (Chancel & Piketty, 2019). Also see Kulkarni and Gaiha (2021) for trends in income inequality in India.

larger economic model that the State and corporations are pursuing and that our young people are aspiring to become a part of.

DIVERSITY

The second D is for diversity. Much recent work has shown that Indians had a lot of diversity on their farms (and on their *thalis* [plates]) in the past through the mixed cropping of millets, pulses, oilseeds and spices. They drew upon the broader landscape of trees, bushes, grasslands, wetlands, forests, riverbanks and even ‘wastelands’ for food (Bharucha & Pretty, 2010; Finnis, 2007). This was the case even in settled agricultural communities in the fertile Indo-Gangetic plains and across caste and class distinctions (Beck, 1994; Kumar et al., 2019; Menon & Vadivelu, 2006; Ravikanth et al., 2020).

However, agrarian policies brought by the Green Revolution which promoted rice, wheat and sugarcane monocultures drastically reshaped rural India. Not only was diversity replaced by uniformity on the farm, varied landscapes like forests, wetlands, grasslands and riverbanks were converted into agricultural fields, thus, reducing biodiversity and, as a consequence, reduced the availability of uncultivated foods from the commons (greens, fruits, vegetables, fish and meat), especially for underprivileged groups in rural areas (Bawa et al., 2020; Kumar et al., 2019). By the late 1990s, oilseeds and pulses had become inaccessible and unaffordable for the poor and the middle classes, as (a) India liberalised imports of soybean and palm oil, and prices of traditional oilseeds fell, (b) government support under the green revolution framework did not include oilseeds and pulses, which suffered disproportionately from volatile market risk and production risk and (c) this resulted in farmers diverting mixed crop land (growing cereals, pulses and oilseeds in combination) towards monocrops of rice, wheat and sugarcane (Ahlawat, et al., 2016; Vyas & Kaushik, 2020). Within the new scenario created by this policy environment, the Public Distribution System became an important source of food security to ensure bare minimum sustenance, but it provided only rice and wheat in most parts of the country.

While recent statistics may show the growing production of eggs, meat, milk and horticulture products for the market (and even export), it belies the fact that many of these items are unaffordable to the majority. Moreover, the decline of uncultivated foods like moringa, seasonal greens and the replacement of nutritious foods like *gur* (jaggery) with white

sugar and millets with highly polished wheat/rice have had adverse public health implications (Defries et al., 2018). Even in privileged urban households, the shift to ultra-processed and packaged foods has created a cause for concern—one in four Indians is overweight or obese according to the National Family Health Survey (NFHS) 2020 (up from one in five as per NFHS 2015).

So how do we bring diversity back into our farms and onto our *thalis*?

For this, we need to rework our agriculture system to remove the prevailing incentives for monoculture farming and encourage farmers to grow multiple crops on their farms. This will require, among other things, recognising and revaluing local and experiential knowledge of farming communities and their understanding of the local agroecology and seasonal food cultures.

At the same time, it also requires our scientific community to revitalise science in the service of sustainability and good health. Building local scientific research capacity and enabling locally-relevant research linked to agroecology and sustainability is urgently needed (Raina, 2009). We need to create systems where farmers are not seen as supplicants in front of scientists—the ‘experts’—but rather where both scientists and farmers recognise the embeddedness of human activity in nature and collaborate in the process of learning from nature.

Sadly, our scientific research capacity has been directed towards an agenda for scientific research that is set somewhere else (Raina, 2006)—and that is evaluated through Western yardsticks of single crop productivity—without recognising that these models and yardsticks have not worked in the West either. The emphasis on hybrid crops, followed by genetically modified crops has continued to push farmers onto a technological treadmill of higher costs coupled with overproduction and falling prices (Kramer, 1981). Moreover the ecological degradation wrought by industrial farms and the detrimental health implications of the corporate food system in the United States, for example, are there for all to see (Stoll, 1998; Wallace, 2016). As per Centre for Disease Control data in 2015–2016, 7 out of 10 American adults were overweight or obese.³

A major contributor to this health crisis is the kind of food that people have been consuming which in turn is related to the dominant form of industrial agriculture that is being practised in the United

³ See *Obesity and Overweight* reports by National Center for Health Statistics (2021) at <https://www.cdc.gov/nchs/fastats/obesity-overweight.htm>.

States. Corporate control from farm to fork has pushed ‘highly productive’ monoculture farming of a few crops (soyabean, wheat and corn) with their attendant environmental problems. But this overproduction needs markets and so consumption patterns have been transformed over time through advertising and other means towards processed foods built on these three raw materials (refined edible oil, refined wheat flour and high fructose corn syrup). This has resulted in overconsumption of sugar and refined carbohydrates across the board, and especially in children (Guthman, 2011; Nestle, 2002; Pollan, 2009). Lower income households and areas with underprivileged groups have found themselves in food deserts with fresh foods, unaffordable and inaccessible (Beaulac et al., 2009; Walker et al., 2010).

India has been hurtling down the same path. Processed foods like chips, biscuits and cola drinks reflect an aspirational form of consumption—a desire to be seen as modern (Nichols, 2017). Foods like millets, earlier known as coarse cereals, have been considered a poor person’s food or even being fit only for animal consumption. This has facilitated their demise from fields and plates. Another example is the denigration of *gur* (jaggery) and the promotion of white sugar through government policies that subsidised sugar mills. This built upon societal notions of white being better, and even *gur* began to be ‘cleaned’ chemically to lighten its colour to make it more acceptable to consumers. Class aspirations have also shaped the growing consumption of *dibbe ka doodh* (formula milk) which mothers in slums around the world were ‘encouraged’ to give their children instead of continuing to breastfeed them, because they were made to believe it was healthy and modern. These aspirations have been shaped by not only corporate advertising but also by ‘experts’ in the nutrition space, including governmental programs around the world which introduced this narrative of packaged foods being more safe and reliable. The enormous corporate profits that modern food systems have generated have also brought with them immense health costs for modern societies (Nestle, 2002).

How do we influence corporatized agriculture to move away from standardised foods and bring back food diversity? What would it take to provide a healthy millet *laddoo* made from the locally suitable variety of millet and jaggery in every village in India so that women can choose to buy that for their children instead of the sugar, salt and *maida* (refined wheat)-laden five-rupee biscuit packets? If we are able to create demand for these kinds of foods, then farmers will be incentivised to

grow them, and local value chains will be needed to process and market them. By creating these linkages between consumers and farmers, start-ups, students, corporations, and civil society organisations can enable this transformation at the local level.

But how do we change the mindset of consumers to begin to revalue foods that are local, seasonal and suitable for health? One way to begin is by regenerating conversations around food, especially with our grandparents or with other elderly people. For instance, in the winter season in north India, sesame and jaggery preparations were a staple across households. But nowadays, young people have not even heard of them, let alone had a chance to taste them. These foods provided warmth to the body in the winters. Today, neither of these foods are easily available and are expensive. Practices like fermenting, drying and pickling, which are being recognised as valuable in enhancing the nutritive value of foods, have disappeared with the advent of refrigeration and long supply chains. In Delhi, people eat cauliflowers in the summer and lady's finger in the winters, when they are off-season, as they come from Shimla and Bangalore.

Although there is a growing awareness of the need to consume unpolished cereals and pulses (modern processing technologies polish these grains to remove all the valuable fibre in the name of creating 'pure', 'standardised', 'clean' products), most urban Indians live far removed from local food cultures that drew upon local and seasonal cycles of agriculture and uncultivated foods (especially fruits, vegetables, mushrooms and greens). Rekindling such conversations in our own family and our communities can make us aware of our ecological footprint⁴ as well as the nutritive implications of our food choices and contribute towards re-shaping the larger discourse around food and nutrition.

DECENTRALISATION

Decentralisation is the third D, which is fundamental to achieving the first two Ds. What is produced and consumed in Bikaner is very different from that which is grown and is part of the diet in Belgaum. To produce crops

⁴ The concept of food miles or product miles is one way to become conscious of our ecological footprint (Van Passel, 2013). Thanks to refrigeration technologies, the Japanese are able to consume whales which have been fished off the coast of Antarctica, thus, consuming the longest food miles.

that are suitable agroecologically, we need to build local level capacity at the block level and district level which can support farmers, help create local supply chains, and facilitate the creation of markets. Government policies for agriculture, in terms of research, extension and marketing, have focused on specific commodities across geographies rather than on the integration of various crops within the same location. This has also facilitated the growth of monoculture farming, longer supply chains and it has created perverse incentives for farmers in dryland regions to grow, and even export, irrigated crops like rice and sugarcane.

Instead, we need the State to reduce national and state level incentives for select monoculture crops (chemical fertiliser subsidy, procurement of only rice, wheat and sugarcane, and research funding for technologies—whether gene editing or genetically modified—primarily suitable to monoculture farm practices) and empower farmers, scientists and local officials to support a transition to agroecologically-suitable farming practices (increasingly being described using an umbrella term ‘natural farming’). The primary constraints faced by farmers in the process of transition are related to knowledge: what cropping patterns and combinations of crops are most suitable to be grown in their location, where to source locally suitable seeds, how to revive fertility of the soil and source biomass, how to use mixed cropping techniques to deal with pests and diseases (and source bio-inputs), and most importantly, where to sell multiple products that can help cover costs and provide a decent livelihood. Further, natural farming is more labour intensive and the lack of small-scale machinery is a serious impediment. There is also an urgent need to create local-level demand for the multiple products that mixed farms would produce.

Addressing all these questions requires substantive resources and a few states like Odisha, Andhra Pradesh, Himachal Pradesh and Sikkim have made important steps in this direction. Through Odisha’s Millet Mission the State government has encouraged farmers to grow millets in Adivasi areas by providing a guarantee of purchase. They have created bulk demand by providing millets in the Public Distribution System (PDS) and through the Integrated Child Development Services (ICDS) and the

Aanganwadi systems. They have also created Millet Cafes in an effort to bridge the gap between consumers and producers.⁵

Over the last few decades, the PDS has become the most important means to stave off hunger across rural and urban India, and even more so after the passing of the National Food Security Act in 2014. During the COVID-19 pandemic it became the lifeline for a vast number of people. Across India, it is time to strengthen the nutrition score of the PDS by decentralising procurement and providing regionally-suitable grains (including millets), pulses and oilseeds. This will have the twin effects of generating demand and incentivising farmers to grow these crops, and in the process, improve the accessibility of nutritious food to India's underprivileged population.

FEEDING THE BILLIONS

The argument for sustainable food systems, and especially for diversity and decentralisation, is often dismissed by saying that these systems cannot produce enough food for everyone and industrial agriculture is the only means we have to feed the nine billion people who will inhabit the earth by 2050. This claim is propagated on the pretexts of efficiency, productivity and of food security. However, one of the painful realities of production in the last 150 years, especially in the United States, is that countries following this model have been constantly faced with the crisis of overproduction. In fact, post-World War II, the Marshall Plan for Europe and the Food for Peace program, better known as PL-480, for the rest of the world, were programs which helped the United States find markets for the large food surpluses that their farmers had produced, often giving away food grains for free. But in the process, these policies hurt domestic farm communities in Asia and Africa who found that demand for their food products had gone down.

We saw this happen in India due to PL-480 in the 1950s and 1960s with wheat and millet farmers, and the subsequent stagnation in wheat production (Cullather, 2010; Shenoy, 1974). In fact, the existence of PL-480 imports was used to argue that India could not feed itself at that time, and thus, the Green Revolution package was pushed in the name of food

⁵ See Odisha Millets Mission. (n.d.). *Homepage*. Retrieved January 17, 2022, from www.milletsodisha.com and Millet Mission Odisha (2017, October 21) *Millet Mission Odisha*. Retrieved January 17, 2022, from www.milletmission.wordpress.org.

security. This argument ignored the facts that India was importing PL-480 wheat not because of low production (it had been a wheat exporter in the past), but due to the colonial legacy of a malfunctioning food distribution system and a pressing need for industrialisation at all costs as a pathway to a better future for all decolonised nations (Kumar, 2019). In fact, the statistics used to claim that the country was food insecure only used rice and wheat. Millets, which were three times the production of wheat, were entirely ignored.⁶

Amartya Sen's work has already shown that hunger is a result of the failure of entitlements, and not a failure of production (Sen, 1981). A Malthusian perspective pitting food production against population growth does not take into account the question of entitlements and price, nor the diversity of foods that people are producing and consuming, let alone is able to address the issue of nutrition and health.

Even in the calculations for the amount of food required to feed 9 billion people, the assumption is that diets in the developing world will change to mimic the developed world, especially in terms of meat consumption. But if everyone eats the amount of meat that is consumed in the United States, we will all be sick!⁷ These assumptions about production cannot be made in a vacuum ignoring considerations of health and nutrition. Moreover, it is assumed that all this meat will be produced by growing corn or soyabean for animal feed and thus, more meat will require more land under grain. However, the older practices of integrated livestock farming where animals ate plant remains and humans ate the grain produced on farms across Asia and Africa have been entirely relegated to the dustbin of history.

Ironically, it is the greater amount of meat consumption projected for the developed world in 2050 (that too, meat produced through the grain-cattle-meat complex) which is inflating the cereal requirements for 2050. The developing world is still projected to consume far less meat in comparison. So, the projected need for feeding the billions of people in

⁶ There was a statement at the time that India only has 10 million tonnes of wheat for some 500 million people (Rajagopal, 2016). But we grew 30 million tonnes of millets and another 40 million tonnes of rice (Kumar, 2019).

⁷ See Kassam and Kassam (2021) and Economic Research Service. (2021, August 25). *Food availability and consumption*. U.S. Department of Agriculture. Retrieved January 17, 2022, from <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-availability-and-consumption/>.

2050 is, in reality, the need of the rich, rather than the poor (Tomlinson, 2013). Given that we are in a world of overproduction and yet people are going hungry, this myth of needing industrial agriculture to feed the billions must be challenged.

Finally, the claim that monoculture farms based on industrial agriculture practices are more efficient and productive must also be addressed. How is efficiency defined? If it is about producing food that is most efficient for our health or our environment, then this model is a spectacular failure. Not only are obesity numbers in the United States alarming, but the industrialised agriculture and its supply chains have created food deserts across the country where underprivileged groups are unable to access fresh fruits and vegetables (Beaulac et al., 2009; Walker et al., 2010).

But even if efficiency is defined as the least cost to produce the most output, the calculations for American farming are wrong—they don't take into account all the subsidies that are provided by the State and the over-extraction of groundwater, nor do they include the true cost of the petroleum being used on those farms (lifecycle costs from extraction to emissions), because petroleum is highly subsidised in the United States. Add to that cheap immigrant labourers working on farms across America who are not paid their rightful due, and the health costs borne by those affected due to the toxicity of the soil, food and water (Stoll, 1998). If all these externalised costs of industrial agriculture are added (and especially its impact on the global warming), the claims of efficiency will turn out to be hollow.

Efficiency defined on the basis of least cost-most output cannot be the only parameter to evaluate our food and agricultural system. We must broaden the discourse to consider what we truly value as a society.

CONCLUDING REMARKS: CHANGING THE MEASURES OF SUCCESS

Positing nutrition security and sustainable food systems as a luxury only for the rich constitutes epistemic and historic injustice to communities around the world who have grown, foraged, hunted, processed and eaten a whole diversity of foods as part of myriad food cultures. Recovering these knowledge-practices involves transforming our value systems away from the centrality of economic growth, and implies setting aside

the current obsession with ever-increasing productivity. So what do we measure instead?

From the perspective of resource use we must shift to evaluating the energy and water intensity of our cropping patterns (and more so, our urban consumption patterns). Instead of seeing how much grain is being produced per unit of land, we must evaluate the energy balance of the production system—are we getting more energy output than the required inputs? Studies have shown that industrial input-based agriculture—with its tractors, fertilisers and pesticides coming from factories to the farm—is a highly energy-intensive process with a negative energy balance, which is also contributing significantly to climate change (Harchaoui & Chatzimpiros, 2018; Nawn, 2016; Sinha, 1986). Shifting to a set of practices that is agroecologically suitable will minimise the energy intensity of this process.

Understanding water intensity is similarly essential. In many semi-arid areas of the country we are growing water-guzzling crops like rice and sugarcane which should not be grown in such terrain, and whose overproduction is creating perverse incentives to push it onto consumers, making them unhealthy, and even export it, and thus export away our precious groundwater (Shah et al., 2021).

Another measure to consider is ecosystem services, which is usually defined as ‘the functions and products of ecosystems that benefit humans, or yield welfare to society’ (Lele et al., 2013). While there is a need for a lot more public discussion on what comes in this category and how it can be measured (Indira Devi et al., 2017; Lele et al., 2013; Sharma, 2017), fundamentally this is about internalising the cost of pollution and valuing the benefits provided by nature. This approach prompts us to ask, how can we reward farmers for sequestering carbon in the soil by keeping cover crops or pursuing no-till farming, thus, mitigating the effect of global warming? How can we value the biodiversity on the farm and in the commons, and provide incentives for farmers and communities to enhance it? How can we put a value or a cost on the nutritious/toxic products from the farm and support farmers to transition towards healthier pathways? By putting an economic value on these ‘services’ of nature, it has been argued that farmers can be remunerated and this can help support a transition to natural farming. This can also be a way to subsidise healthier food for consumers to make it affordable and accessible on a much larger scale. Currently, naturally-grown organic food

is relatively expensive and not widely available. Due to this, it remains the prerogative of the rich who can afford it.

Yet, while these economic measures of value are important, they are incomplete. To address issues of social justice and epistemic justice, we need to recognise the power relationships that frame conversations around the questions of value. Who gets to decide what is valuable and how should systems be transformed? How do the voices of the marginalised get heard in these conversations? How do we begin to address inequality, when it is rooted in exploitative relationships of the past and the present—and which are continuing to benefit the privileged? More so, when these relationships work across nations (e.g. access to carbon space) but also within nations (e.g. displacement due to mining and infrastructure projects) and even within communities (e.g. lack of access to resources as well as a voice in decision-making for underprivileged caste groups and women).

Transforming our food and agricultural system towards sustainable and healthy practices requires revaluing multiple forms of knowledge, praxis and life, going beyond the economic alone. The three Ds epitomise this—redistribution of resources, revaluing diversity and decentralising systems of decision making are fundamentally about rethinking what we value as a society—about reframing relationships with each other and the earth from exploitation and extraction to sustenance and vibrancy. It requires conversations around food and agriculture to go beyond the domains of economics and public health, to include farmers, agricultural and social scientists, consumers, farm labourers, civil society groups, private sector actors, and the myriad actors of the State. Only then can we work towards ecological, social and epistemic justice in the context of the survival of our species on the planet in the face of climate change.

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Water Management Priorities in a Post-COVID World

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GROWING WATER SCARCITY

India is still reeling under the severe impact of successive waves of the Covid-19 pandemic. The pandemic outbreak has also exposed several structural weaknesses and vulnerabilities of our economy and society, especially that of the rural and agrarian India. The Covid crisis has opened up many issues related to water management in India. Most of these issues were waiting to be addressed for a very long time. The 2030 Water Resources Group of the World Bank characterises India's water security challenge as the problem of soaring demand, competing uses and finite availability of water (2030 Water Resources Group, 2015). If the current pattern of demand continues, about half of the country's demand for water will be unmet by 2030 (Shah, 2017). At least 54% of India has been identified to be highly to extremely water stressed and almost 600 million people are at higher risk of surface-water supply disruptions.

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Northwest India, the country's breadbasket, is facing high stress (Bhanja et al., 2017). Water quality issues are widely prevalent in the country. The water in 59 districts of the country, with a total population of 13.6 crore in 2011, have at least one pollutant which exceeds national safety standards. And more than 20 million people lived in the eight districts where at least three pollutants exceeded safe limits (Shiao et al., 2015).

With an average rainfall of 1105 mm, the country's land area of 329 million hectares, the annual estimated water resources of India are about 3880 billion cubic metres (BCM). Recent studies by Central Water Commission (CWC) over a period of 30 years (1985–2015) showed that the average annual water resource available is about 1999.20 BCM, out of which only 1122 BCM can actually be utilised (Central Water Commission [CWC], 2019). The current level of utilisation is a little over half of this number, which shows that we are in a comfortable situation. Per Capita Availability (PCA) per year of renewable water resources is a better indicator to capture the actual status of water in a country. The internationally accepted Falkenmark water stress index¹ proposes PCA of 1700 m³ as the water stress threshold and if the PCA falls below 1000 m³, a country is defined as 'water scarce' (Rijsberman, 2004). Extending this definition to various river basins in India, we find that except the Ganga–Brahmaputra–Meghna (GBM) basin and Narmada basin, all other river basins are either water stressed or water scarce. For example, the PCA of Mahanadi basin is 1662 m³ and Godavari basin is 1320 m³ whereas the PCA of Pennar and Kaveri is 688 and 571 m³ respectively. This indicates that river basins like Indus, Sabarmati, Pennar and Krishna are already becoming 'closed' basins, with little opportunity for further development (Gulati et al., 2019). This underscores the importance of taking water management seriously.

Water: Contrasting Approaches

Beyond these clear indicators of an imminent crisis, the relevant question is how did we reach here? Part of the answer lies in the manner in which we conceptualise water and its management. Here, we can distinguish between two radically different approaches to water. The first and currently the dominant view can be termed as the **extractive paradigm**.

¹ See Falkenmark et al. (1989).

In this paradigm, high rate of growth of the economy is identified as a policy goal to be pursued relentlessly. Greater extraction and utilisation of ‘natural resources’ like water, soil, forests etc., is seen as the way to achieve this policy goal. These are treated as ‘inputs’ to be utilised and converted into ‘outputs’ so that a steady flow of goods and services is assured. At the core of the paradigm is the anthropocentric view that the extraction of natural resources is for the enhancement of the well-being of human beings. This paradigm underlies many interventions in water such as building large dams in our rivers, constructing more and more wells and tubewells for extracting groundwater and interlinking rivers for a mega-scale transfer of water across river basins. Such efforts are far from over.

In contrast to the extractive paradigm, the **ecosystem paradigm** on naturally occurring substances emphasises their conservation and protection. The ecosystem paradigm of water fundamentally differs from the extractive approach in that it considers water as embedded in the ecosystem as an essential part of it. Water has its own agency and relationships. It is not a resource meant primarily for human consumption but follows the principles that guide the ecosystem, such as the hydrological cycle and linkages. From this point of view, water is a finite ecosystem substance and its availability is intricately related to variations in space and time. It is our duty to protect and preserve water for the future generations—the principle underlying the notion of ‘water stewardship’. The pandemic should make us fundamentally think about this principle and lead us to adopt water conserving approaches and practices. We can broadly identify **five priority areas** of action as far as water management in a post-Covid world is concerned.

FIVE PRIORITY AREAS

Agricultural Water Management

The current mainstream approach to agriculture emphasises an input-intensive path which has become entrenched since the Green Revolution of the 1960s. An important consequence of the Green Revolution agriculture is that it has firmly established a cropping system which is irrigation-intensive. A recent study by National Bank for Agriculture and Rural Development (NABARD) and Indian Council for Research on International Economic Relations (ICRIER) estimated that about 78% of

India's annual freshwater withdrawals is for agricultural purposes (Sharma et al., 2018). Food and Agriculture Organization's (FAO) AQUASTAT database puts this figure closer to 90% (Food and Agricultural Organization of the United Nations, 2016). Interestingly, drinking water accounts for only 5% of the total water withdrawals. The NABARD-ICRIER study further identified three 'water guzzler' crops, rice, wheat and sugarcane, which occupy about 41% of the gross cropped area and consume more than 80% of the freshwater withdrawals for irrigation. It has also been shown that occupying just 4% of cropped area, sugarcane uses up 70% of irrigation water in Maharashtra. This has meant grave inequity in the distribution of irrigation across crops and farmers and also a strong mismatch between existing water endowments and the water demanded by these water-guzzling crops.

The main reason why farmers grow such crops even in areas of patent water shortage is the structure of incentives. Public procurement of food grains at Minimum Support Prices (MSPs) has played a big role in entrenching such water-intensive cropping patterns even in water-scarce environments. Even a small reduction in the area under these crops, in a region-specific manner, that does not endanger food security, would go a long way in addressing India's water problem. The most important step in this direction is for the government to diversify its crop procurement operations to align with local agro-ecology and natural resource endowments. The best way of doing this is to start procurement of crops that were prominently grown in each region before the monocultures associated with the Green Revolution set in. India's cropping pattern before the Green Revolution included a much higher share of millets, pulses and oilseeds. These must urgently find a place in public procurement operations. As this picks up pace, farmers will also gradually diversify their cropping patterns in alignment with this new structure of incentives.

If we were to make such a switch in cropping patterns, to reflect the agro-ecological diversity of India, what volume of water would we save? In a recent paper, we carried out an exercise to estimate the quantity of water that could be saved by 2030 in 11 major agricultural states (Shah & Vijayshankar, 2021). Our results show that through seasonally appropriate agro-ecologically suitable crop replacements, we can save about 18–36% of water applied in agriculture. In our estimate, water saving could be high in states like Maharashtra (48%), Punjab (42%) and Telangana (43%). It must be borne in mind that the rapidly deteriorating water situation poses a very serious constraint to maintaining the productivity

levels of water-intensive crops in states like Punjab and Haryana. They have to be more conservative in their use of water. Another study showed that the Eastern states, which are safe in their groundwater reserves, are net importers while the water-scarce regions are net exporters of water (Francesca et al., 2020). This basic anomaly in water use in agriculture calls for immediate corrective action.

Groundwater Management

Over 65% of the irrigated area in India sources irrigation from groundwater through shallow wells or tubewells and tubewells alone account for over 40% of the total irrigated area. Stage of Groundwater Development (SGD) is a summary indicator showing the ratio of annual groundwater extraction to annual recharge. Assessment units (Blocks/Mandals/Talukas/Firkas) are classified as ‘Overexploited’ (SGD > 100%), ‘Critical’ (SGD 90–100%), ‘Semi-critical’ (SGD 70–90%) and ‘Safe’ (SGD < 70%). Recent data from the Central Ground Water Board shows that out of the total 6881 assessment units in the country, 1186 units (17%) are Overexploited, 313 units (5%) are ‘Critical’ and 972 are semi-critical units (Central Ground Water Board, 2019). This shows that in 36% of our assessment units, groundwater extraction has reached unsafe levels. Over 80% of the assessment units are in unsafe category in Punjab, Rajasthan and Haryana and over 50% in Telangana and Tamil Nadu. The latest Minor Irrigation Census (2013–2014) data shows that in Punjab, Haryana and West Uttar Pradesh, there is a visible shift towards deep tubewells (depth above 70 m), which now account for about 23% of all tubewells (moving up from 14% in 2006–2007) (Minor Irrigation Statistics Wing, 2017). We need to take groundwater management seriously, particularly since over two thirds of the tubewells are owned by smallholder farmers (with landholding size less than 2 ha). Well failure due to groundwater overextraction will permanently push these farmers into deep poverty. As the occurrence and movement of groundwater is governed by the characteristics of the underlying rock strata, we need to adopt the aquifer as the basic unit of management and map it carefully. We need to understand the properties of rock strata and assess how much groundwater can be safely drawn from the aquifer system annually. This would enable us to arrive at some protocols for sustainable and community-based management of groundwater.

Protecting River Systems and Wetlands

The third large area where urgent attention needs to be provided is the improvement in status of our rivers and wetlands. Rivers are supposed to be the arteries and wetlands and forests are often called the lungs of India. Irrigation has played a crucial role in raising agricultural productivity and dam building is an important intervention that we have done with our river systems. As per the National Register of Dams, India has constructed over 5000 large and medium height dams and is the third largest dam builder in the world (CWC, 2019). According to the Central Water Commission, the capital expenditure and working expenses on Major and Medium Irrigation (MMI) systems were Rs. 36,597 crore and Rs. 21,853 crore respectively, in 2013–2014 in current prices (CWC, 2015). Despite this, the water stored in these dams does not reach the farmers, especially at the tail-end of canal networks. There is a growing divergence between the Irrigation Potential Created (IPC—113.5 million hectares) and Irrigation Potential Utilised (IPU—87.9 million hectares) (Gulati et al., 2019). The IPC-IPU gap is as high as 50% in states like Telangana, Punjab, Jharkhand and Goa (NITI Aayog, 2019). Bridging this gap is one of the critical areas in water management in India. This gap reflects the fact that the water distribution within the irrigation command is highly unequal and tail-end irrigation deprivation is a widely observed fact. Along with this, we must use allocations from programmes like Mahatma Gandhi Rural Employment Guarantee Scheme and use it on a watershed basis for river rejuvenation, wetland protection and flood mitigation.

With many major river systems reaching a level of full development, more dam construction is now envisaged in the Himalayan region, which is one of the most fragile ecosystems in the world. Himalayan rivers have high sediment load and due to climate change the predictability of river flows is extremely uncertain. Recent events in Uttarakhand and Nepal show how environmental disasters get compounded by construction activity in the Himalayan region. The most recent event in Chamoli district of Uttarakhand on 7 February 2021 clearly showed how dumping the excavated material in the river bed and obstructing its flow path can add to the disastrous consequences of glacier melt. Similarly, it is well-known that the wetland systems in places like the North East used to act as flood cushions. However, due to human interventions and encroachments, the area of wetlands has gone down, leading to more disastrous

consequences when flood waters rise. These again raise a big management challenge of reducing and controlling human interventions in natural systems.

Water Quality and Drinking Water Security

The fourth area in water management, which needs prioritisation, is water quality and drinking water security. Jal Jeevan Mission is a large rural development programme with the special objective of providing drinking water to rural areas. However, we are still very far from realising this goal of drinking water security. Though the share of domestic use of water in total national water consumption is only 5%, intensive work in other sectors and especially agriculture is required to even ensure that this minimal amount is available for drinking and other domestic purposes. There are strong indications of increasing pollution load in the rivers. A recent CWC report showed that there are 67 water quality hotspots on the peninsular rivers in India where Biochemical Oxygen Demand (BOD) exceeded 3 mg/l, the permissible limit for outdoor bathing. Out of 67 sites, 14 sites were severely polluted, with BOD > 30 mg/l and 12 sites were substantially polluted (BOD ranging between 10 and 30) (CWC, 2017). The major reason for declining water quality in river systems is the discharge of agriculture and domestic wastes directly into rivers. There are also many big and small industrial units discharging their untreated effluents into rivers. Industries and cities have historically been located along rivers because the rivers provide transportation and have traditionally been a convenient place to discharge waste (CWC, 2017). Groundwater is the mainstay of rural drinking water supply as 90% of the supplies are sourced from groundwater. Water quality indicators of groundwater also show severe pollution load, which is also partly on account of increasing groundwater extraction and lowering of water levels.

Legislative Action

The fifth area of priority action in water management is to create a strong legal framework for water governance in India. The absence of a strong legal framework is one of the major reasons for growing conflicts on water in many parts of the country. The National Water Framework Law, 2015 (NWFL) is an attempt at enshrining some basic principles of justice in water governance. The NWFL highlights the fact that water

is (a) the common heritage of the people of India; (b) essential for the sustenance of life in all its forms; (c) an integral part of the ecological system; (d) a cleaning agent; (e) a necessary input for economic activity such as agriculture, industry, and commerce; and (f) means of transportation and recreation. It recognises water as ‘an inseparable part of people’s landscape, society, history and culture; and in many cultures, a sacred substance, being venerated by some as a divinity’ (Ministry of Water Resources, River Development and Ganga Rejuvenation, 2016, p. 3). Recognition of these should help us formulate laws that enable equitable and sustainable management of water, with the participation of local communities. Since water is a provincial subject in India, the NWFL can only lay down the basic principles which have to get enacted by the provincial governments.

India has been making laws regulating the use of groundwater from 1970 onwards. Many provincial governments have made efforts to make their own laws, but they seldom come out of the command-and-control framework. In India, groundwater access is the precondition of the survival of smallholder farmers and there are an estimated 30 million wells and tubewells, mostly owned by private individuals. It is clear why a command-and-control approach cannot work. Groundwater is an open access resource that does not respect individual rights over land. Water flowing underneath land in an area may not have originated from the recharge of that particular piece of land. When many users simultaneously pump groundwater, complex interference occurs between different pumps if the wells are located close to each other and tap the same aquifer. Such complexities require that the aquifer strata must be carefully mapped and the properties of the aquifers should be clearly understood. Such an approach is adopted in the Model Groundwater (Sustainable Management) Bill, 2016 as well as in the Atal Bhujal Yojana.² These schemes also emphasise the aspect of participatory management of groundwater, since communities are involved at scale in the use of water.

² Atal Bhujal Yojana (<https://ataljal.in>) is a recently launched Central government scheme which aims to demonstrate community-led sustainable ground water management which can be taken to scale. The major objective of the scheme is to improve the management of groundwater resources in select water-stressed areas in identified states like Gujarat, Maharashtra, Madhya Pradesh, Uttar Pradesh and Rajasthan.

CONCLUSION

As mentioned earlier, the priority areas in water management identified in this paper are not altogether new. The pandemic outbreak only highlights the issues that need urgent attention. It revealed the pervasive inequalities in the access to water, across class, caste and gender. Since the government has to take up corrective action on all these priority areas, the critical role of the State in water management cannot be overemphasised. The State's role is not only of regulation but also in incentivisation of critical transformations in the water sector. For example, agriculture water management will not be possible without the State offering incentives in the form of public procurement at minimum support prices of less water-requiring crops and their marketing. Further, overexploitation of groundwater in many parts of the country like North West India is a direct consequence of the availability of subsidised electricity. Availability of cheap power encouraged highly water-intensive cropping patterns in states like Punjab and Haryana. So, sustainable and water-efficient cropping systems will remain a distant dream unless this nexus between water and energy is broken. In the context of high virtual water transfers occurring between the provinces within India and between India and the outside world, the State has to step in with proper incentives to regulate such trade and channel it along beneficial lines. Like the financial crisis of 2008, the Covid crisis of 2020 also sharply brings out the hollowness of the neo-liberal dictum that the best government is that which governs the least. On the contrary, we can firmly say that the best government is that which governs the most critical areas to avoid the excesses and wastages of private monopolies on naturally occurring substances like water.

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Principles for Water Governance in a Post-COVID World: Water Sector Needs to Be Embedded in Environmental Justice

K. J. Joy

INTRODUCTION

Water is an important social determinant of health and well-being. The literature on social determinants of health does emphasise that even in ‘normal’ times access to nutritious food, good quality potable water and non-polluted air are all important for good health and well-being. A situation like the COVID-19 pandemic that we are going through since early 2020 has brought the importance of these social determinants of health much more sharply into focus. Thus, the relevance of having

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access to good quality as well as sufficient quantity of water cannot be overemphasised.

This leads to the question of whether the people, especially the poor, are being provided with water in sufficient quantities and with adequate quality for life and livelihood needs after 75 years of independence. The answer is clearly no. The Composite Water Management Index (CWMI) of NITI Aayog which came out in 2018 provided disturbing figures in this regard. It mentions that India is suffering from the worst water crisis in its history and millions of lives and livelihoods are under threat. The report also states that nearly 600 million people, i.e., half of the population, face high-to-extreme water stress. According to the CWMI, nearly 2 lakh people die every year due to inadequate access to safe water. By 2030 the country's water demand is projected to be twice the available supply implying severe water scarcity for hundreds of millions of people (NITI Aayog, 2018). Those who are in the water sector already know these numbers. But coming from the NITI Aayog, the report provided a certain sanctity and legitimacy to the numbers. The COVID-19 pandemic needs to be considered a wake-up call to the dire need to restructure and re-configure the water sector along more equitable, sustainable and democratic lines so that everybody can get access to water to enhance their health and well-being.

My main proposition or argument in this paper is that—merely tinkering with water sector policies and programmes is not going to help address the deep-seated water crisis. Situations like the pandemic—COVID-19 today and something else tomorrow—further reinforces this. Instead, what is called for is a radical reform of the water sector informed by the environmental justice framework. Prior to elaborating on some of the important principles of water governance, I will discuss a few concepts, namely, Anthropocene, climate change/crisis, the concept of Hydraulic Mission and the idea that water flowing to the sea is a waste. The discussion of these concepts will provide important contexts for reconceptualisation of the water sector.

ANTHROPOCENE AND WATER

The word 'Anthropocene' is being increasingly used to describe the present times. Anthropocene, as we know, is the new and current geological epoch in which the human being has become an agent of planetary changes. In earlier times, probably human interventions did not make

that much of an impact on the planetary system in relation to other types of systems or ecosystem processes. But today we have come to recognise that human intervention in nature is becoming an important factor in changing natural processes (Espíndola et al., 2018). Climate change, or rather a climate crisis, is very much part of this change. These changes come with several endangering consequences for the survival of not only human beings but also other species.

Thus, when we talk of reconfiguring water, we need to take into account Anthropocene as an important reality today so that it will force us to rethink the interventions we make in nature especially on our river systems in the form of dams, massive diversions or the linking of different river systems. The type and quality of return flows generated by different water uses have implications for the health of human beings and for maintaining the balance of the whole of nature. Unregulated groundwater extraction through millions of wells and borewells is depleting groundwater stock that has taken probably thousands of years to recharge and fill. It is time we relook at the type of interventions we are making in nature to ensure that water remains available for different uses including ecosystem uses.

CLIMATE CHANGE/CRISIS¹

Closely related to the Anthropocene is the phenomena of climate change or climate crisis. The Report of the Intergovernmental Panel on Climate Change (IPCC) (Joy & Srinivasan, 2020) states that observational records and climate models provide abundant evidence that freshwater resources are vulnerable and likely to be strongly impacted by climate change, with wide-ranging consequences for human societies and ecosystems. Several global assessments of climate change indicate that the Indian subcontinent in particular will be hard hit. Climate change has now come to occupy centre-stage in most discussions on water. In recognition of this close relationship between climate change and water, the Government of India has set up the National Water Mission (NWM) under the National Action Plan on Climate Change (NAPCC).

The emerging discourse on climate change and water in the country has three broad trends. The first trend as Wine and Davidson observe

¹ This section on 'Climate Change/Crisis' draws heavily from Joy and Srinivasan (2020).

(as cited in Joy & Srinivasan, 2020) sees climate change as *the problem*, under which all other issues and changes are subsumed and are increasingly being labelled as climatisation. Everything that is happening in the water sector—be it a drought or a flood—is seen as a result of climate change. The second trend talks about multiple stressors acting on the water sector and sees climate change as one of the stressors. This position also maintains that climate change has its own specific impacts on water. It gives equal emphasis to both anthropogenic (for example, land-use changes) and climate change stressors, and takes the position that we need to engage with both. The third trend sees climate change as a convenient ‘peg’, even an opportunity to confront all concerns about water. It uses the climate change argument, more in an instrumentalist fashion, to reform the water sector. My point of view is similar to the second trend that frames the climate change–water relationship from a multiple stressors’ perspective.

According to the recent Sixth Assessment Report (AR6) of the IPCC, released on August 9, 2021, the global average air temperature may rise by more than 1.5 °C mark over pre-industrial levels between 2021 and 2040 (Intergovernmental Panel on Climate Change [IPCC], 2021). Keeping the global temperature under 1.5 degree Celsius as compared to the pre-industrial (1850–1900) levels has been the target agreed upon in the 2015 Paris Climate Change Conference. There is a general agreement that maximum temperatures have increased in most parts of India. Rising temperatures can push up the demand for water and also can affect the hydrologic cycle primarily through the impact on evaporation and evapotranspirative demand by vegetation. There is no dispute about the anticipated rise in sea levels. Ragettli et al. (2016) demonstrate that climate models consistently predict a strong decrease in glacier area around the Himalayan sites (as cited in Joy & Srinivasan, 2020), with a concomitant increase in temperature and rainfall. While Shreshta et al. (2010) confirm Glacial Lake Outburst Flood (GLOF) is related to climate change and deglaciation (as cited in Joy & Srinivasan, 2020). The stream flow is likely to increase significantly as a result of increased precipitation and ice melt. Also, peak flows may increase leading to floods. Though there are inconsistencies between models and observed trends in relation to rainfall, studies by Guhathakurta et al. (2011) and Krishnamurthy et al. (2009) support the hypothesis that the frequency and intensity of extreme rainfall events all over India have been increasing over the last

century (as cited in Joy & Srinivasan, 2020). Thus, it seems clear that we must prepare for a future of harsher droughts and floods.

In the process of climatisation or ‘naturalisation’ of climate change, the hardcore political economy choices the State makes, such as the type of development paradigm we are pursuing or the type of interventions we make in nature are never problematised. Also, there are huge variability and uncertainties that climate change brings in and this needs to be factored into our thinking. Things that we had taken for granted are being questioned today. Take the concept of stationarity, a concept traditionally used in water resource assessments. It essentially means that natural systems fluctuate within an unchanging envelope of variability—both in terms of rainfall and stream flow—and are employed to design water infrastructure and policies. For example, dams, interstate water-sharing agreements and storm water drains are all designed based on 50 or 75% dependable yield of the basin. However, climate projections make it clear that the assumption of stationarity is unlikely to hold in the future (Joy & Srinivasan, 2020; Milly et al., 2008). This has also implications for knowledge production in the water sector. Human beings need to be humble enough to accept that what we know today about water, especially in the context of climate change, is very limited. The high variability, uncertainty and partial nature of our knowledge about water need to be factored into both water governance and management.

HYDRAULIC MISSION

Towards the end of the nineteenth century, we see the emergence of a new approach to water that marked a complete departure from the approach and worldview of traditional water systems. This approach is generally called the hydraulic mission. It combines scientism, an anthropocentric ideology of the domination of nature and a reliance on technology as the means to achieve it. Large dams, power generation and huge transmission networks and large-scale water resource development especially for irrigation are the outcomes of this approach. This is seen as “a defining feature of the twentieth century” (Molle et al., 2009, p. 328). For various reasons—ranging from the need to increase food production, raise rural incomes or strengthen State building and the legitimacy of the state governments—all countries seem to have adopted the ‘hydraulic mission’ mode and entrusted the entire edifice to centralised, powerful

water bureaucracies, more colourfully called hydrocracies (Molle et al., 2009).

Allan (2006) locates hydraulic mission within the shifting paradigms of water management. He identifies five such paradigms. The first paradigm is associated with pre-modern communities and traditional systems. The second paradigm is associated with industrial modernity which is characterised by the centrality of science and technology. It involves massive State and private investment into the water sector paving the way for large water infrastructure, generally known as the hydraulic mission of the mid-twentieth century. Allan (2006) says that ‘the hydraulic mission proved to be readily exportable to the global South in the second half of the twentieth century’ (p. 48). The third paradigm is related to the changes in water allocation priorities that are informed by the green movement or environmental concerns. This does not seem to have got exported to India as readily as the second one and only very recently have environmental concerns entered the water discourse in India. The fourth paradigm is more informed by economics bringing to the forefront the economic value of water. Water seen as an economic good, and one of the Dublin Principles,² fits into this paradigm. The fifth paradigm, which is also the newest, sees water allocation and management essentially as political processes. Allan (2006) includes Integrated Water Resource Management (IWRM) /Integrated Water Resources Allocation and Management (IWRAM) as part of this paradigm. He places the five paradigms temporally over a period from 1850 to 2000 and

² The Dublin Statement on Water and Sustainable Development, more popularly known as the Dublin Principles, was adopted in the International Conference on Water and the Environment (ICWE) held in Dublin, Ireland, on 26–31 January 1992. About five hundred participants, including government-designated experts, from a hundred odd countries and representatives of eighty international, intergovernmental and non-governmental organisations attended the Conference. The Statement includes four guiding principles for the management of water and the fourth one states, “Water has an economic value in all its competing uses and should be recognised as an economic good”. The Statement and the Conference Report provide recommendations for action at local, national and international levels, based on four guiding principles. The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in June 1992, urged all governments and world leaders to study carefully the specific activities and means of implementation recommended in the Conference Report and to translate those recommendations into urgent action programmes for water and sustainable development. The Dublin principles are available at <https://www.gdrc.org/ucm/water/dublin-statement.html> retrieved October 26, 2021.

plots the trajectory of hydraulic mission over space and time. Interestingly, he points out that while the global South is still continuing with hydraulic mission (basically industrial modernity), in the global North, since the 1980s, focus on hydraulic mission has given way to reflexive modernity (essentially the third, fourth and fifth paradigms). In India, since the 1990s with liberalisation, privatisation and globalisation (LPG), we find the second paradigm (industrial modernity) and fourth paradigm (economic value of water) going hand in hand and in the process reinforcing each other.

Today even to meet decentralised and dispersed needs, for example domestic water needs that would require 5–6% of available water, the State in India builds centralised water grids and huge water infrastructure. The Telangana government has already embarked upon ‘Mission Bhagiratha Project’, a massive water grid to provide piped drinking water to the people with a financial outlay of Rs 42,853 Crores. At the national level, there is the ‘Jal Jeevan Mission’ to provide safe and adequate drinking water through individual household tap connections to all households in rural India by 2024 with the attractive slogan ‘*har ghar jal*’ (water in every house). There is already cynicism creeping in about this very ambitious infrastructure project as there are many who say that there will probably be taps in each house but whether those taps will have running water is another question. I think the provision of drinking water can be done in a much more decentralised and community-based manner with the harvesting of local rainfall and its proper prioritisation by privileging drinking water. We do not need such massive infrastructure projects for this. We need to get out of this mindset of hydraulic mission. Though Western society has moved out of this, India is still stuck in this paradigm.

There is a particular worldview, mindset and system of ethics that underpins the love for such massive infrastructure projects which irreversibly transform nature and its elements like rivers. I have always liked this quote from Iyer (2012):

rivers are not human artefacts, they are natural phenomena, integral components of ecological systems and inextricable parts of cultural, social, economic and spiritual lives of the communities concerned. They are not pipelines to be cut, turned around, welded and re-joined. (p. 37)

Prof. Ramaswamy Iyer had written this in the context of interlinking of rivers which, according to him, was a tailoring effort where engineers cut and stitch. We all know that river systems, and for that matter nature,

cannot be treated like this. But, unfortunately, the dominant paradigm around water sees rivers and aquifers from this perspective.

WATER FLOWING TO THE SEA IS A WASTE

Flowing from the hydraulic mission mode is the engineering maxim: water flowing to the sea is a waste. This assumption has guided the water establishment in the country since colonial times. ‘3000 TMC (Thousand Million Cubic Feet) of water of Godavari flowing to the sea as waste will be tapped by constructing the Polavaram dam’ (‘Govt to Utilize Water from River’, 2018)— thus stated the then Union Minister for Water Resources, Shri Nitin Gadkari, at an event organised by the Confederation of Indian Industries in 2018. This is very clearly seen in the efforts to augment the supply of water for human use by damming, diverting and linking our rivers and mining our aquifers. The underlying thinking is to use every drop of water for human use leading to a maximum abstraction of water from our rivers to the extent that some of them have stopped flowing to the sea. Some of our rivers, especially the peninsular ones, do not reach the sea in many years. We also hear more about ‘closed or closing basins’ meaning the entire flow has been allocated for different uses and there is no more freshwater in the river. This has led to the destruction of a number of riparian habitats and it has affected the livelihoods of downstream communities. This discourse has now attained hegemonic proportions in the sense that it has become part of popular imagination and every time there is a flood or a drought in any part of the country this discourse gets reproduced and gains legitimacy.

The idea of wasted water closely follows the colonial construct of a ‘wasteland’ which came into use during the period of British rule in India.

In the early colonial period, following the Lockean logic, any land that did not yield revenue to the Crown was labelled as ‘waste’. This included the community lands too. Land which is not assigned by the sovereign belongs to the sovereign (*res nullius*) that included no man’s land (*terra nullius*). These lands which were termed as ‘wastelands’ were to be used for revenue generation by the colonial state. But in the ethno-history of the ‘people’ who practised usufruct cultivation, land left fallow were to be used by the community in future. (Chakraborty, 2012, cited in Joy et al., 2018, pp. 20–21)

Drawing from this discourse around the wasteland, one can say that any water that does not yield revenue to the State is seen as a waste. Thus, any water which is not put to ‘economic use’, and instead allowed to flow to the sea, is seen as a waste. The concept of ‘non-revenue water’, often used in the context of water supply schemes to mean water that is unaccounted for and hence not paid for, also reflects the same idea of wasted water.

There is now scientific evidence available which should deter us from tampering with water run-off in ways that could have a significant impact on freshwater flows into the sea. The 2014–2020 Ministry of Earth Sciences’ multi-institutional Ocean Mixing and Monsoon (OMM) Programme has come out with evidence to confirm that river flows into the Bay of Bengal aid the formation of a deep warm layer by enhancing penetration of sunlight below the thin mixed layer and inhibiting energy transport to the sub-surface ocean by internal waves (Shah et al., 2021b). The shallow, fresh layer of river water and the ocean’s sub-surface warm layer together cause significant changes in the way the sea surface temperature of the Bay of Bengal responds to tropical cyclones and monsoons. Shah et al. (2021b) describe the adverse impact of tampering with water run-offs:

Reduction of flows from major rivers would affect the salinity and depth of the upper mixed layer and modify the temperature of the Northern Bay of Bengal. This could impact variations of rainfall, including rainfall carried inland by monsoon low-pressure systems and depressions born in the Bay of Bengal. It is, therefore, almost certain that tampering with run-off from major rivers will impact coastal upwelling, basin-scale ocean temperature, upper ocean mixing, ocean biology and dissolved oxygen concentration, as well as monsoon rainfall, in unknown and unanticipated ways. (p. 2)³

A scaled-down version of this mindset of stopping all flows operates at the micro-scale too. For example, there is this popular saying in the context of the micro-watershed development—‘*gaon ka paani gaon mein, khet ka paani khet mein*’ (the water or rainfall of the village should remain in the village, the water or rainfall of the field should remain in the field). It may help us conserve water but it also exhibits the same mindset that every drop of water needs to be used and should not be allowed to flow. It

³ This quote in a slightly modified version is available in Shah and Vijayshankar (undated).

does not really capture the complexity of water as an ecosystem resource embedded in ecosystem processes. The type of forest and land-use in the catchments to a great extent determine how much freshwater one gets. Thus, we need to realise that water is essentially an ecosystem resource and is not easily manipulable and cannot be mined like minerals.

Looking at the last seven and a half decades of water governance in the country (from independence till now) in terms of policies, laws, institutions and preoccupation with supply-side options especially in the form of large projects, it can be said that we have continued with and also taken to further heights the same colonial paradigm that sees water flowing to the sea as a waste.

ENVIRONMENTAL JUSTICE AND WATER⁴

The above discussion clearly indicates that we need to have a radically different worldview and approach to water especially in times of the pandemic, Anthropocene and climate crisis. It is in this context that environmental justice (EJ) as an approach to redefine human–nature and human–human relationships in a more just manner becomes relevant.

EJ originated in the 1980s in the United States as a revolt against dumping of toxic waste with race as its focus. It addressed the issue of how environmental burden was unequally distributed. Later water justice emerged as a sub-set of EJ. Water justice, in the beginning, was mainly seen as a label for movements against water privatisation. Now water justice or the broader concept of EJ is used for movements against large dams, displacements, or unequal sharing of costs and benefits. In fact, it embraces a much larger canvas and can tie together both environmental and social justice issues. It is also about re-allocation of incomes, resources and power. To quote from Joy et al. (2018),

The trivalent conception of EJ—distribution, recognition and participation—can help us move away from the increasing depoliticisation of the discourse around water (techno-management and efficiency fixes, tendency to universalise and naturalise, etc.), a tendency that is gaining ground in all sectors including water with economic reforms since the 1990s.

⁴ For a detailed treatment of this theme, see Joy et al. (2014).

Instead, the need is to foreground questions of justice, equity, sustainability, contestations, conflicts, participation/democratisation around water governance... (p. 16)

This can provide us with a different set of governance principles around water.

GUIDING PRINCIPLES OF WATER GOVERNANCE

Flowing from the above discussion, I discuss below a few principles of water governance that are in line with the EJ framework which can also restructure water on more sustainable, equitable and democratic lines.

Interventions as per the Contours of Nature

Our intervention in nature or river systems needs to be as per the contours of nature. This is one of the important lessons that I have learned working in the water sector for the last 30–40 years. It is time we recognise that we need to get out of the hydraulic mission mindset and see that the interventions we make are in line with ecosystem processes. The issue is how we as a society make informed choices about the interventions we make to meet our water needs. We need to factor in the integrity of river basins and their carrying capacity in all our development planning. Related to this is the precautionary principle. During times of Anthropocene and at times such as this when knowledge about phenomena like climate change is incomplete, or when there is conflict within the realm of knowledge itself or among knowledge systems, it is important to call on the precautionary principle which states that even if we fail, we ensure that we fail on the safer side.

Another principle that can guide our interventions in the river systems is the subsidiarity principle. According to this principle, if the water needs of a particular community can be met at a lower scale like a micro-watershed or at a village level, then water should not be demanded or imported from a higher scale. This can go against the whole grain of thinking related to large dam-based irrigation projects, inter-basin transfers, or interlinking of rivers (ILR). The idea is to build a water balance from below. It means water required to meet different needs of the community must come from the water that can be generated at the scale

of the community like the micro-watershed. It involves matching needs and availability in an iterative process.

Rights of Nature; Rights of Rivers

A right-based discourse around rivers as part of the wider discourse on the rights of nature is gaining ground in many parts of the world. The recognition of the rights of nature gets expressed in many different ways both formal and non-formal. A few countries have granted legal personhood to nature and its elements like rivers. In 2008, Ecuador recognised the rights of nature in its constitution. In 2010, Bolivia held the World People's Conference on Climate Change and the Rights of Mother Earth, where the *Universal Declaration on the Rights of Mother Earth* was issued and has been submitted to the UN for consideration. New Zealand adopted *Te Awa Tupua Act* in 2017 which granted the Whanganui River legal rights. In India, the Uttarakhand High Court ruled on 22 and 30 March 2018 that the Indian rivers Ganga and Yamuna, their tributaries, and the glaciers and catchment areas feeding these rivers in Uttarakhand, have rights as a 'juristic/legal person/living entity'. On 7 July 2018, the Supreme Court stayed the operation of this order in response to a plea by the Uttarakhand government. In 2018, the same court recognised the rights of the entire animal kingdom and granted it legal personhood status. Many other countries such as Colombia, United States, Mexico and Scotland have also adopted policies and legislations recognising the rights of nature. Very recently Macby river in Canada has been given legal rights with the local people being seen as the custodians of the river system.⁵ The issue of the rights of nature and the rights of rivers are coming to the foreground very forcefully. Since this is a relatively new idea, one does not yet know what its implications will be in practice.

A related concept or a part of the rights of the river idea is the right to flow. Environmental flow can be seen as part of this, although the concept has not been articulated as a right in this manner. Policy prescriptions in India talk about 'minimum' environmental flows. I think we need to reframe this idea as 'minimum extraction and maximum flow'. This is important for downstream communities and also for the entire riverine ecosystem. I would also strongly suggest that the Government of India

⁵ The above brief review of rights of nature is based on Bajpai (2020).

should hold extensive consultations on rights of rivers among all stakeholders to draft a ‘Rights of Rivers Act’ to provide comprehensive legal protection to our rivers including their right to flow, right to meander, right to flood and the right to meet the sea.

From Supply-Side Options to More Demand Management Options

All water-related policies are focussed on supply-side options or resource augmentation measures. I think we need to emphatically shift to a demand-side management strategy. In the background of climate change-induced uncertainties, there is increasing clamour from certain quarters to build large storage structures, revealing a tendency to equate water security with per capita water storage. Alternatively, per capita water (surface) storage is taken as an indicator of development. To quote Briscoe and Malik (2006): ‘Arid rich countries (like the United States and Australia) have built over 5000 m³ of water storage per capita, middle income countries like China have 2500 m³, ... and India can store only about 200 m³’ (p. xv). Anthropocene and climate change in fact should push us to privilege ‘green water’ as compared to surface storage. Green water is the rainwater that gets stored in the soil as soil moisture which can be directly used by the vegetation. Grey water, or the return flows generated by different water uses, can be recycled and reused. We can shift some of the water uses that do not demand strict quality standards to grey water thus reducing the demand on freshwater.

There is also a whole spectrum of options available to reduce the demand for freshwater or reduce the overall water footprint. Agriculture accounts for about 85–90% of the water-use in the country. Three crops—rice, wheat and sugarcane—account for the bulk of agriculture water-use. Reduction in water-use in these three crops can result in substantial water saving. Changes in agronomical practices and aligning cropping pattern to the local agroclimatic conditions can result in water saving and hence need to be incentivised and promoted. For example, the System of Rice Intensification (SRI) and the Sustainable Sugar Initiative (SSI) have demonstrated that water-use could be brought down considerably without compromising productivity. It is argued that by ‘adopting the SRI method, India can easily meet its future demand for rice while reducing more than 30% of the current water usage in paddy cultivation’ (Gujja & Shaik, 2019, p. 225). Shifting the base of the Public Distribution System (PDS) and the supplementary nutrition and meals

provided under the Integrated Child Development Services (ICDS) and Mid-Day Meal scheme from water-intensive cereals like wheat and rice to locally grown millets, pulses and oil seeds which do not require much water, can create an enormous market for these millets which have a low water footprint (Shah & Vijayshankar, 2021; Shah et al., 2021a). This will incentivise farmers to diversify their crops. This shift can save water as well as create nutrition security. Similarly, there are options to reduce the water footprint in industries too. Thermal power accounts for the highest levels of industrial water-use. To save water, one option could be shifting from an open-loop system to a closed-loop system so that much of the water can be reused and recycled. Thus, there are many interesting possibilities for saving water and reducing water footprint that need policy incentivisation.

Reconceptualising Water-Use Prioritisation

Every water policy has a section that deals with water-use prioritisation. Priority is usually given to domestic, agricultural and industrial use in that order. One exception to this was the Maharashtra State Water Policy of 2002 which accorded the second priority to industrial water-use pushing agriculture water-use to the third place. Due to civil society action, the Government of Maharashtra was forced to bring back agriculture water-use to second priority. Also, the water policies both at the centre and at state level have brought in environmental-use in the list of water-use priorities.

Though it is important to privilege domestic water over other uses, there is also a need to problematise how this prioritisation of domestic water-use plays out in real life. For example, water has been diverted from agriculture for urban domestic use in many parts of the country. In Maharashtra 2885 TMC (thousand million cubic feet) of water has been diverted from agriculture mostly for urban domestic use over a period of seven years between 2003 and 2010 affecting 3,57,621 ha of irrigated area (Prayas, 2010).

Drinking water is also used to justify large water infrastructure projects without paying adequate attention to the environmental and social costs. The case of *Narmada Bachao Andolan v Union of India and Others* illustrates this. As Srinivasan and Joy (2019) noted in their paper:

The Supreme Court, in a majority verdict pronounced in October 2000, permitted the Sardar Sarovar Nigam to proceed with the construction of the Sardar Sarovar dam. One of the justifications provided for the construction was the need to meet the drinking water requirements of the people in the drought-stricken regions of Gujarat and Rajasthan under the right to life provision in the Constitution. (pp. 16–17)

It is common knowledge that the bulk of the water provided under the rubric of domestic water is used for non-essential and luxury uses like washing vehicles, watering lawns or filling bathtubs and private swimming pools. Hence, there is a basis to argue that domestic water needs to be disaggregated into lifeline water and luxury uses and it is the former that should be privileged over other uses. Grey water, as mentioned earlier, can be used to meet luxury uses. This would reduce the amount of water diverted from agriculture use to urban areas.

There is a need to reconceptualise water-use prioritisation. Not getting water-use priorities right can endanger the access millions of people have to water for their everyday needs and their livelihoods. The first priority should be water-for-life. This entails the provision of adequate water of acceptable quality for drinking, cooking, sanitation and hygiene for all people and animals. The luxury uses, as discussed above, should be serviced using recycled water. The second in order of priority should be water to achieve food security, support sustenance agriculture, sustainable livelihoods and ecosystem needs. The next priority area would be water for socio-cultural and spiritual needs of different communities so that they can maintain their ways of life with a provision for non-discrimination, equity and social justice. The fourth priority could be water for other agricultural, industrial and commercial uses with a proviso that water-intensive commercial farming must progressively adopt water-saving technologies. Similarly, industries and commercial establishments can make claims on freshwater only after exhausting measures like recycling and re-use, efficiency measures in processes and local water-harvesting options, moving to a paradigm of ‘socially responsible’ water-use. The fifth priority should be water for adaptation to change which means keeping reserves and margins for ongoing and emerging uncertainties related to changes in demography, economic conditions, land-use and those arising from climate change. Care should be taken that the use of water for second-to-fifth-order uses must not compromise the satisfaction of the first-order water-for-life of any individual or group.

Similarly, it is important to ensure that these uses of water are consistent with the objective of sustaining aquifers and ecosystems indispensable to the long-term sustenance of the resource. Except for the first- and second-order priorities, different river basins can have the freedom to work out their own priorities as per their specific circumstances and requirements.

Equitable Access to Water

Redistributive justice is an important element of EJ. The core issue here is how do we ensure a social minimum for all in terms of access to water in order to address historical or structural inequities and locational inequities. Class, caste, patriarchy, ethnicity and religious and other forms of minority status are important axes of exploitation and inequities in society. Caste is an important reality in Indian society that determines access to resources. In many parts of rural India there are different drinking water sources for those belonging to the upper castes and for the lower caste peoples, especially for Dalit groups. Water sources, especially drinking water sources, are sites of violence and exclusion. This discrimination and exclusion are very well captured by Namdeo Dhasal when he says:

*You⁶ will draw water upstream,
And we⁷ downstream,
Bravo! Bravo! How you teach chaturvarnya⁸ even to the water in your
sanctified style!*
(Namdeo Dhasal, *Golpitha*, 1972, translated from Marathi by Dilip Chitre)

Locational inequity refers to the differences in access to water determined by the location of one's land. In the context of watershed development,

⁶ 'You' here refers to the upper castes.

⁷ 'We' stands for the Dalit people.

⁸ 'Chaturvarnya' refers to the overarching division of society into a hierarchy of four varnas: the brahmin on the top, followed by kshatriya, vaishya and shudra varnas and also functions as an ideological justification of the caste system and its hierarchy. The erstwhile untouchables (the Dalits) are outside the varna system.

all conservation work takes place in the upper part of the watershed and the recharged water appears in the valley portion of the watershed. Thus, if one is lucky to have one's land in the valley portion then one would get access to water, whereas the cost of conservation is borne by those whose land is in the upper portion of the watershed. This is an example of environmental injustice in the form of the unequal sharing of costs and benefits. There are also evidences that historical inequities map on to locational inequities as, very often, the land in the valley portion is owned by those belonging to the upper castes and the land in the upper portion of the watershed is by and large owned by the poorer, lower caste people. Also, conventionally water rights go with land rights and as part of equitable water distribution, it is important to break this nexus of land rights and water rights and tie water access to life and livelihood needs. This is what pioneering equitable water distribution movements like the *Pani panchayat* in Pune district tried to do and the Shramik Mukti Dal Equitable Water Distribution Movement in South Maharashtra is presently trying to do.

Adaptive Management

In light of the uncertainties around and the partial water knowledge due to climate change, and other changes that are taking place both in the water sector and in society at large, the conventional bureaucratic command-and-control style of management is ill-suited to managing this complex reality. The unpredictability of the current situation calls for a flexible approach to water management. Such a management system must be able to engage with the rapid changes taking place in bio-physical conditions as well as social settings. Adaptive management allows us the flexibility to make changes in the way water is managed in light of the improved understanding of bio-physical and social systems, new information resulting from changed or unforeseen circumstances, and new or updated models and stakeholder preferences. It uses uncertainty as an important factor in decision-making (Joy & Srinivasan, 2020).

The adoption of an adaptive management system calls for a radical reform of water-related institutions in the country. At present, these institutions are fragmented often functioning at cross-purposes with very little coordination between them. Integrated and democratic institutions, with the participation of all stakeholders at different scales starting from the smallest unit of a micro-watershed to sub-basins and basins—in a nested institutional framework are the need of the hour. The recommendations of the Mihir Shah Committee to restructure the present Central Water Commission (CWC) and Central Ground Water Board (CGWB) into one integrated National Water Commission (NWC), with divisions of specialised functions and with a regional presence at river basins, can be considered a good starting point for this institutional reform process.⁹

Democratisation of the Water Sector

The main purpose of institutional reform is to democratise the water sector in terms of creating legally mandated institutional spaces at different scales—from the micro-watershed to a river basin cutting across the state and sometimes even national boundaries—so that people can participate meaningfully, share data, information and experiences and decide on allocational issues in a participatory manner. It also provides a forum to resolve contestations and conflicts. One of the major gaps in the water sector has been that we do not have any mandated institutional spaces where people can come together, dialogue and negotiate. The democratisation of knowledge production or what is nowadays called co-production of knowledge through stakeholder interactions and participation, and through common access to data and information is an important pre-requisite for the democratisation of the water sector.

I would like to end this essay by referring to Antonio Gramsci's idea of counter hegemony. According to him, it is by developing a counter hegemony to the hegemonic discourse of the State that one can challenge its legitimacy. Thus, as part of the process of democratisation, we need to involve the people to develop alternative discourses around water to the State's hegemonic discourse. This is a big task and it can be done

⁹ See Committee on Restructuring the CWC and CGWB. (2016). *A 21st Century Institutional Architecture for's Water Reforms*. Retrieved 2021, September 24 from, http://cgwb.gov.in/INTRA-CGWB/Circulars/Report_on_Restructuring_CWC_CGWB.pdf

Report submitted by Committee headed by Mihir Shah.

only if concerned academics and activists work in tandem and deepen the conversation around water (Joy, 2021).

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Seeing Water Differently

Vishal Narain

INTRODUCTION

The upheaval and disruption caused by the Covid-19 pandemic have unsettled established paradigms and practices in a whole range of fields and it has opened a window for new ways of thinking about long-held challenges. In the thinking around the water crisis in India, the pandemic offers a similar opportunity to question some basic assumptions about what constitutes India's water crisis, to present an alternative 'narrative' of this crisis and to look at what kinds of solutions, and paradigmatic departures are needed to tackle the challenges that are being currently faced. Such a breakthrough in discourse and practice would require recognising the role narratives play in framing public policies and a consequent effort at changing the narrative about the water crisis in India. Narratives shape our understanding of what the 'problem' is and this in turn determines the kind of solutions that are proposed in response to it. The solutions proposed to address a problem essentially relate to what the problem is framed to be in the first place.

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The pandemic has highlighted both how indispensable water is as a basis for hygiene and health and the stark differences in Indian society that make access to essential resources like water easy for some but very difficult for others.

In this paper, I argue that it is this unequal access to resources that should constitute the narrative of India's water crisis. I look at how this unequal access is a basic determinant of water insecurity. This has to be a point of departure in how we think about tackling the water crisis. In the context of the Covid-19 pandemic, we have been talking about coming back to a new normal; though we still do not know when that will be, or what the new normal will be. The questions to ask are whether we would go back to all our old ways, or whether we would want to do some things differently even after the 'new normal' has been reached. The openness to change created by the pandemic can provide us an opportunity to revisit how we have conventionally approached development challenges such as the water crisis.

NARRATIVES AND POLICY CHOICE

In the development and public policy literature, a narrative is defined as a story with a moral, that establishes the superiority of certain ways of intervening (Jones & McBeth, 2010; Miller, 2019; Narain, 2018). It is a representation of causality that tells us what the problem is out there; based on our understanding of the cause–effect relationship, we establish ways of intervening to address the public policy challenge. In linear models of the policy process (see, for instance, Thomas & Grindle, 1990), agenda-setting is typically considered to be the first step. The concept of narrative helps us understand what the agenda is. The starting point of studies of public policy therefore is really analysing what the underpinning narrative is—what is the framing of the problem? What is its articulation of the cause–effect relationship?

This can be explained by using an analogy of visiting a doctor in times of medical illness or health crisis. It is based on our narratives of what we are experiencing that the doctor makes a diagnosis of the medical problem and then suggests an appropriate prescription.

A classic example of how resetting the narrative in a field can suggest new policy choices is Amartya Sen's presentation of the cause of famine (Dreze & Sen, 1990; Sen, 1987). Sen maintained that famine is caused by the lack of entitlement, rather than by the physical absence of food.

Increasing food production in itself will not cause the problem of famine to cease; the issue is about improving entitlements. Similar is Mearns' (1991) analysis of the fuelwood crisis in Africa being caused not by the absence of fuelwood, but rather by the fact that women who collect fuelwood did not have access to plantations where the fuelwood was available.

In Narain (2018), I have argued that it is possible to see the process of policy evolution overtime by looking at it as a struggle among competing narratives. At any point of time, there can exist multiple framings of the same problem. The dominant framing shapes the policy choices and the courses of action. Narratives can be socially constructed, but new narratives can also emerge based on new scientific evidence. In the 1960s and 1970s, the narrative of the relationship between the application of high-yielding varieties of seeds and other agricultural inputs on the one hand and increased agricultural productivity on the other paved the way for policies to support the Green Revolution. Over time, with declining productivity of soils and falling water tables, the narrative shifted in favour of organic farming. In the early years of planned economic development the 'infant industry' argument provided a rationale for strong protection to our industries. However, several decades of such protection yielded an industry that was weak and uncompetitive. During the economic reforms of the 1990s, the narrative that such protection had stifled competition paved the way for liberalisation of the economy and increasing competition and foreign direct investment. It is in this sense that narratives provide a legitimacy to policy choices.

This concept of narratives is therefore very important to understand how we look at water, at water problems and correspondingly then identify the different kinds of solutions that are possible to address them. Historically, in the phase of planned economic development, in India, we have seen water crisis as a physical one and we have assumed that water scarcity is really a physical problem and so we have focussed on ways to address the water crisis in terms of technological or physical solutions, be it in terms of supply augmentation, building new infrastructure, laying down pipes and other ways of provisioning water.

We need to reframe our understanding of the water crisis as predominantly a crisis of distribution, as a crisis of unequal access because the water crisis is not the same for everyone (Shah & Narain, 2019). It is not experienced uniformly by all Indians rather it is experienced differentially by different groups of people. Understanding the socially differentiated

access to water requires an understanding of the institutions—the norms, practices and codes of conduct (North, 1990)—that shape how water is accessed, allocated and distributed.

Recent studies in the political ecology of water have pointed out that water is appropriated by those who are socially, economically and politically at an advantage (Karpouzoglou & Zimmer, 2016; Karpouzoglou et al., 2018; Swyngedouw, 2009). Water flows where power flows. In modern metropolises and urban agglomerations, we notice stark differences in water access between high-rise, gated communities and people who may live in informal settlements or rural areas just a few metres away. This points to the fact that the differential access to water is the result of the prevalent societal institutions. Water may be physically present, but there are differences in access across different social groups: men and women, lower and higher castes, ethnic groups and minorities.

It is in this sense that the water crisis needs to be seen as an institutional one, which brings to the fore the kinds of distributional issues that the pandemic has once again drawn our attention to. There is a need to work at understanding the prevalence of the unequal distribution of water, and the kinds of interventions needed in order to correct those imbalances. It requires us to ‘reframe India’s water crisis’ (Shah & Narain, 2019, p. 76). Rather than see the water crisis as a physical one, to be addressed by augmenting the physical availability of water, we need to see this as an institutional one. This then gives rise to new ways of addressing it.

Mainstreaming Gender

If we understand the water crisis to be an institutional one, rather than a physical one, what implications does this have for policy interventions? How do we address the water crisis based on this understanding of the causes of this crisis?

This brings us to the second point that I wish to turn to in this paper, which is about looking at water through a gendered lens. Gender refers to the socially defined norms of what it constitutes to be a man or a woman (Ahmed, 2008). It is customary to distinguish between sex, which we see as referring to the biological differences between men and women, and gender, which is a social construct that refers to the social meaning attached to these differences. It is widely recognised that gender remains one of the organising principles of social life (Kimmel & Messner, 2004).

It joins race and class as one of the central mechanisms through which power and resources are distributed in our society.

When we talk about unequal access to water, gender is the most basic axis of social differentiation. Increasingly, studies show that all aspects of water access, control and distribution are gendered. However, gender in itself does not give a complete picture of the socially differentiated access to water. It intersects with other axes of social differentiation such as caste, class, age, marital status and religion. The social constructs of gender and patriarchy appear to be important at the household level while caste issues arise within communities (Khadka, 2014).

The sway of patriarchy ensures that men have more power and influence in decision-making than women including when it comes to institutions around water such as water users' associations. The structural subordination of women in male-dominated institutional architectures and practices prevails widely in South Asia (Goodrich et al., 2019; Khadka, 2014; Rai, 2003). Gender inequality is widely seen in processes of decision-making, the different work types of men and women; in gender-segregated roles and responsibilities; and inequities in access to and control over resources. Regmi and Fawcett (1999) show how though both men and women were part of water management committees in Nepal, men took decisions, and women accepted them even when they were against their interests.

In a study of water users' associations in large-scale canal irrigation systems in Maharashtra, Narain (2003) demonstrates that even though there were seats reserved for women, they were often represented in the meetings of water users' associations by their husbands or other elderly male relatives. In water users' associations in Haryana, when a management committee had to be constituted, this was done by drawing representation from each *thola* (an ancestral family unit) nominating the senior most member from each *thola*, suggesting its constitution to be patriarchal.

Water supply interventions have gendered impacts (Narain, 2014b). While these interventions may bring water sources closer to homes, they often result in an increased burden of water-carrying for the women, as the expectations that men have for the use of the 'new water' undergoes a change. In my research in the Morni-Shivalik Hills in the North Indian state of Haryana (Narain, 2014b), I found that when piped water was made available to a cluster of settlements, though it reduced the drudgery that women faced of walking steep mountain slopes to collect water,

women ended up carrying more water on their heads, as men who earlier bathed at public water sources, now expected to bathe in the privacy of their homes.

Further, diminishing access to such natural resources as springs and forests also causes increased drudgery in resource collection for women (Goodrich et al., 2019; Khadka, 2014; Narain, 2014b; Narain & Singh, 2019; Rai, 2003). This may further deepen the social divides in access to natural resources.

In the operationalisation of a gendered lens in water provisioning, an important challenge is to sensitise the State agencies, the providers of water, to look at water provisioning not simply as a task of infrastructure creation but also through a lens of gender and intersectionality. As argued above, gender in itself does not give us the complete picture of the socially differentiated access to water, but as an analytical tool gender becomes relevant when we look at it along with other axes of social differentiation. In her research in Uttarakhand, Joshi (2014) found that lower caste women faced the greatest struggles in accessing water. Further, on the days on which they were menstruating their level of impurity was considered to have increased. In my own research and fieldwork in Gurgaon in North-West India, I noticed that in queues for accessing water, when higher caste women fill their water containers after lower caste women, it is customary for them to clean the stand-post, which is considered to have become impure after being used by lower caste women (Ranjan & Narain, 2012). Drew (2014) threw light on the gendered nature of environmental protests, demonstrating that men and women had different grounds for protests against large dams, but also differed in the means that were used to protest.

Somehow for many policy-makers and practitioners, as experienced by the author of this paper, the word 'gender' is assumed to equate with women. This is a major conceptual fallacy, especially when it concerns State agencies. Water bureaucrats and policy-makers somehow assume that gender is about women's issues rather than seeing it as having to do with the differences between men and women. When we look at water from a gendered lens, we are trying to understand how men and women have different experiences in relation to water; how men and women experience the 'water' world differently, and how this difference has to do with their being men or women. At a fundamental level, this has to do with the gender-based division of labour around water collection, but as noted above, it pervades all aspects of water governance, access

and control. Therefore, while talking about distribution issues in water or unequal access to water, gender presents itself as a very important conceptual entry point.

As part of an initiative carried out by the author in collaboration with TERI School of Advanced Studies, the author of this paper was involved in conducting a series of management development programmes where we sensitised State agencies in five different cities in India engaged in provisioning water to address gender issues in their work. In one of the workshops, organised in Jaipur, one of the engineers said, ‘why are we talking about gender? What is natural should be left to be natural’. And then it took a lot of explaining to say that there was nothing natural about gender, that gender was a social construct.

Providing a conceptual lens of gender, intersectionality and equity is necessary for reorienting the State agencies engaged in water provisioning. This requires a departure from their engineering orientation, which trains them to see water provisioning simply as a task of water infrastructure creation. The issue of intersectionality is fundamental to understanding the unequal distribution of water and it needs to be made more explicit and visible because that is what shapes the differential access to water.

Straddling the Rural–Urban Water Divide: Attention to Peri-Urban Spaces

Another way in which water will need to be seen differently is to see it across the rural–urban spectrum. Operationally, this implies the need to steer away from the rural–urban dichotomy in water provisioning and to find ways to integrate rural and urban water planning and provisioning.

In the last two decades or so, much research in India and in the Global South shows how rural–urban boundaries are getting increasingly blurred (Leaf, 2011; Narain & Nischal, 2007). It is no longer easy to classify areas as rural or urban by the conventional criteria. In the context of water, a growing body of literature on the peri-urban spaces in the Global South has challenged the view that rural and urban water supply can be viewed as separate conceptual entities when it comes to planning. Much recent research in South Asia shows close linkages between rural and urban water supplies given that much of the expansion of the urban water supply takes place at the expense of the rural water sources. For instance, when we talk about the loss of water commons like tanks, lakes and wetlands to support

big cities (Nagendra & Ostrom, 2014; Prakash et al., 2011; Vij & Narain, 2016), the flow of water from rural to urban areas by way of water tankers (Vij et al., 2019), growing competition over groundwater for rural and urban use (Gomes & Hermans, 2018; Narain, 2014a), it demonstrates the close linkages between rural and urban water supplies. In view of the blurring boundaries between rural and urban exemplified by the growth of peri-urban spaces, ‘rural water supply’ and ‘urban water supply’ as distinct conceptual or planning categories will lose their relevance.

One example of how water flows are related across the rural and urban spectrum is the use of urban wastewater for irrigation. There has been much discussion around water quality issues and waste generation in cities. While we talk about wastewater and quality-related issues, the other side to it is that there are a large number of farmers in the country using wastewater as an input into their agriculture. Thus, much of the research on peri-urban agriculture in the country draw attention to the value of wastewater.¹ Especially in a context of changing precipitation patterns and changing access to water in peri-urban spaces, much recent research on peri-urban agriculture and irrigation draws attention to how widely wastewater is being used as a means of irrigation in the absence of other alternative sources (as an example, see Narain & Singh, 2017). The presence of local norms of co-operation further allows wastewater to be used by a large number of irrigators.

The pandemic is in fact one more reason to focus on peri-urban spaces which constitute a mixed rural–urban landscape. When we look at expanding metropolises such as Gurgaon, a large number of ‘containment zones’ in the aftermath of the Covid-19 pandemic happened to exist in what was called ‘urban clusters’. Many of these were village areas in the middle of cities where both rural and urban characteristics and features co-exist, where rural settlement areas co-existed with urban high rises and gated communities. These were areas characterised by high population density, poor access to water infrastructure, a strong movement between the settlement areas and other cities in other parts of the country and of course the high prevalence of the informal sector and wage earners. Much of the conditions that were conducive to the spread of the pandemic and that create high vulnerability of people to the pandemic as well as to the effects of the lockdown imposed to contain its spread, could

¹ Of course, the use of wastewater irrigation has its own adverse health implications for the producers and the consumers of food grown in this manner.

be found to exist in peri-urban spaces. The pandemic has therefore drawn renewed attention to improving water access and security in peri-urban spaces. There are two challenges here: one, to steer away from the rural and urban dichotomy in water provisioning, and second, to give more attention to water security issues in peri-urban spaces.

THE CHANGING NATURE OF WATER RESOURCES EDUCATION

A development that gives us some hope that in the future water will be 'seen' differently is the changing nature of water resources education in the country. Conventionally, a large chunk of India's water professionals especially those manning State agencies engaged in water provisioning were trained as civil engineers. This perhaps explains the technical orientation that focusses on supply augmentation, infrastructure creation and provisioning.

In recent years, however, the nature of water resources education has changed with many institutes in India and South Asia having developed interdisciplinary water resources education programmes. As examples of this, one could think of the new programmes offered by such institutes as the TERI School of Advanced Studies, New Delhi; the Shiv Nadar University, Greater Noida, Uttar Pradesh and Tata Institute of Social Sciences (TISS), Mumbai. The curricula of these programmes cuts across the natural and the social sciences.² This means that the future generation of water professionals is likely to see water in a more interdisciplinary way than their predecessors; they will look at water not only in terms of provisioning, supply and infrastructure but will be able to approach it more in terms of its management and governance dimensions.³

² For instance, the M.Sc. Water Science and Governance programme at TERI School of Advanced Studies has courses on *Water resources, Institutions and Governance; Gender, rights and equity perspective in water resource management* and *Water security, conflicts and co-operation*. The programme offered by Shiv Nadar University has a module on the *Historical, Social, Institutional and Legal Dimensions of Water*.

³ Other than the launch of new interdisciplinary programmes, even within some conventional engineering-oriented programmes, there has been some reorientation to interdisciplinary programmes. Under an initiative led by South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS), Secunderabad, India, the water resources education programmes in our South Asian institutes were reoriented as interdisciplinary water resources programmes, with an effort to also bring more female students at

This generation of water professionals will likely be able to ‘see water differently’. If the nature of water resources education changes, what we see as water sector, what we see as constituting the water crisis will also change. This should hopefully let us reimagine the water sector.

CONCLUSION: TRANSLATING THESE IDEAS INTO PRACTICE

So then how do we translate the above-presented ideas into practice? If addressing India’s water crisis is based on an alternative framing of the water crisis, that of an institutional problem rather than of a physical one, what would be the points of departure in terms of operationalisation of the approach to tackle it? First, it is very important to sensitise water planners, managers, and researchers especially State water provisioning agencies on aspects of gender and intersectionality. Water provisioning needs to be seen not simply as a task of infrastructure creation, but as a task of responding to the differential needs of different groups of people. Further, it is important to recognise rural–urban links in water resources and planning. There is a need for strong advocacy and efforts to challenge and halt the encroachment and acquisition of water commons—lakes, wetlands, ponds and tanks—for urban expansion. Much of this work is being done by some Non-Governmental Organisations (NGOs) and needs to be carried forward. It is important to emphasise and to take forward current efforts to reform water resources curricula to move towards more interdisciplinary water resources education that is very important in terms of how the future generation of water professionals sees water. Finally, we need stronger partnership among academics, researchers, State agencies and civil society organisations in researching and documenting the causes of unequal access to water and supporting action research to correct the imbalances.

the Masters level. This has happened under the aegis of their South Asian Water (SAWA) Fellows Program. Reorienting the curricula has envisaged introducing such courses as *Gender, Water and Society* and *Interdisciplinary field research methodology*. Another salient feature of the initiative has been a thrust on getting women scholars to pursue their Masters level education on interdisciplinary analyses of gender, water and climate change.

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Reclaiming Their Place in the City: Narratives of Street Food Vendors of Bengaluru During the COVID Crisis

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INTRODUCTION

The first wave of the Covid-19 pandemic in India and the nationwide lockdown that was imposed in its wake was an unprecedented moment of disruption in the lives of Indians of all classes, especially the socially and economically underprivileged. It exposed the vulnerability of millions of people whose very survival was threatened by a crisis of this magnitude. The period of lockdown with its harsh restrictions witnessed hundreds

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of thousands of people from India's urban centres walking back to their hometowns and villages to avoid hunger and poverty due to the loss of income. The vast majority of these reverse migrants worked in the urban informal sector. This crisis thus foregrounded the precarity of the lives of those employed in the informal sector who, although offering essential services for the sustenance of cities, lacked social protection and livelihood security.

The extent and magnitude of the ongoing crisis call for a more granular understanding of the impact of the pandemic on various segments of the informal economy. While statistical data on the loss of jobs for those in the informal sector provides an estimate of the condition of the economy during the pandemic, the picture of the reality on the ground remains incomplete without qualitative insights. To this end, this paper focuses on the impact of the pandemic on one segment of the informal economy—urban street food vendors and it seeks to capture in their own words their predicament during the pandemic. The insights that emerge would not only serve to inform better-tailored and more effective interventions to address underlying vulnerabilities of this segment of the informal sector but also shed light on the related phenomena of rural–urban migration and urban inclusion.

One of the earliest studies which had a great influence on theorising the emergence of the informal sector was Arthur Lewis' work on surplus labour (Lewis, 1954), which postulated that labour migrated from the traditional subsistence farming sector characterised by low productivity and low wages to modern industrial centres. However, the Harris-Todaro model (Harris & Todaro, 1968) proposed that not all labour that moved from the rural areas to urban industrial centres were productively employed as this mobility was mostly based on expectations of employment rather than actual availability of employment opportunities. Such expectation-based mobility of labour led to high unemployment in urban centres. The term 'informal economy' was introduced in the literature by Hart (1973) who suggested that the surplus labour in urban centres was not exactly 'unemployed', but rather was positively employed, even if often for erratic and low returns.

Rural–urban migration has thus immensely contributed to the growing urban informal sector which, even though largely invisible, has become the backbone of any urban economy. It is estimated that there are nearly 2 billion workers in the informal sector worldwide (International Labor

Union, 2020).¹ In India, nearly 90% of the total workforce is employed in the informal sector which contributes to half of the country's Gross Domestic Product (Department of Economic Affairs, 2021). Sixty-nine per cent of workers in the non-agriculture sector in India are in the informal sector.²

The urban informal sector typically comprises contractual labour, casual labour and those self-employed through informal enterprises which are unorganised³ and unincorporated. Street vending is an example of an informal enterprise that is a significant part of the urban informal sector generating a livelihood for more than 10 million people in India. Street vendors play a key role in supplying essential goods at affordable prices to low-income households.

Street vending, particularly the vending of food, is also an important part of the urban socio-cultural fabric. Selling food on the street is one of the oldest forms of street vending activities. It not only provides cheap and inexpensive food to people from different economic classes, especially the urban poor, but also represents the cultural and social acceptance of different types of cuisines and cultures (many street food vendors are migrants, who often sell food belonging to their own region).

Street food vending is an attractive livelihood option especially for migrants to the city because it involves minimal investment and has low entry barriers. However, this line of work is not without its inherent insecurities such as those that arise over their claim to the public space which leaves them vulnerable to harassment and threat of eviction from civic authorities, police, residents and other vendors. Migrants have the added insecurity of being perceived as outsiders.

In such a scenario, the first wave of the Covid-19 pandemic and the consequent 8-month lockdown was seen to have a devastating impact on these vendors. Not only did it indefinitely cut off their source of income during the lockdown but it also imperilled the sustainability of their business after the lockdown by increasing the insecurity of their access to the

¹ Refer *ILO Monitor: COVID-19 and the world of work. Third edition. Updated estimates and analysis*, Table A3 for the number and percentages of informal workers, including those significantly impacted by level of risks associated with sectors and size of enterprises published on 29 April 2020.

² See National Statistical Office (2020), *Annual report, Periodic labour force survey (PLFS) 2018-2019*.

³ Unorganised enterprises are those with less than 10 workers.

public space and diluting their regular customer base. Through in-depth interviews with street food vendors in Bengaluru city, this paper seeks to capture, in the words of the vendors, the consequence of the pandemic on their lives and livelihoods. In so doing, it also sheds light on the broader question of the plight of the migrant to the city and his or her challenging and often disheartening struggle to belong to the city and integrate into its social, economic and cultural milieu.

LITERATURE REVIEW

Politics of Space

Street vending as a livelihood activity is dependent on the vendors' access to, and claims over, the 'street' which is a public space. The use of public spaces for informal economic activities has always been contentious.

There has been much contestation among different urban classes about who 'owns' the city and who has the right to use public spaces. This has often taken the form of a power struggle between the formal and the informal sectors (Sassen, 2015) and the affluent and the deprived classes of society. The affluent class is concerned with 'control over space'. Such control seeks to minimise offensive smells and sights from that space, often through strategies that seek to invisibilise people of lower classes, their livelihoods and economic activities, even though their presence in the city is 'indispensable for affluent consumption' (Baviskar, 2002, para. 12). Further, the imagining of a street in India appears to be informed by Western notions of modern streets and urban landscapes which views footpaths 'as sites of circulation rather than livelihood' (Tucker & Devlin, 2019, p. 460) and this is in conflict with the street practices in India which are seen as 'something that needs fixing' (Anjaria, 2012, para. 23). This coupled with the 'aesthetics of class purity' of the middle class led to increased demands for socio-spatial separation with the working class (Fernandes, 2006, p. 144). Middle-class organisations such as resident welfare associations (RWAs) exercised their clout with local State machinery to clean-up the city and reclaim public spaces for 'proper citizens' from squatters and encroachers (Chatterjee, 2006) as is evident in civil society movements for clean cities (Taguchi, 2013), pedestrian-friendly footpaths (Mariswamy, 2018) and resulting evictions of street vendors (Guha, 2020; Sripad, 2014).

Belongingness to the City—Space and Place-Making by the Street Vendors

While one strand of literature views the space struggle as tightly hinged on urban class struggle, another strand emphasises that access to physical space is not only driven by economic relations but also through the social relations that determine the use of space (Brown, 2006; Ho & Douglass, 2008).

Urban geographers often make a distinction between ‘spaces’ and ‘places’. Eminent urbanist William H. Whyte in his acclaimed research *The Social Life of Small Urban Spaces* (Whyte, 1980) highlights that while the architectural landscape designs the urban space, it is the dynamic human interactions that inhabit them which define the place. The same distinction can be extended to our understanding of the street as a public space. Streets are not only defined by the administrative boundaries but have a strong historicity to their definition and are also characterised by the cultural sensibilities of the people who use them. Such sociability of urban spaces, in our context the streets, makes them into urban places. However, streets in India are imagined mostly as a space for vehicular movement, and not so much as a shared space for interaction of walkers and hawkers. This reduces the recreational aspects of the street (Anjaria, 2012).

For street vendors, the struggle to secure their access to public spaces is not just a livelihood necessity but also a means for securing their place in the city. By drawing insights from Lefebvre’s theory of the production of space (Lefebvre, 1991), one begins to view the social relations that the vendors create through their business as their effort to produce a space which includes them in the social fabric of the city. This form of ‘place-making’ by street vendors is an outcome of their spatial practices and the social interactions that they have with other stakeholders of the public space such as their customers, fellow vendors, residents of the area, civic authorities and so on. The concept of place-making in the context of public spaces thus is at the centre of the issue of the belongingness of these vendors to the city.

Negotiating with Multiple Stakeholders

Given the limited recognition of street vendors’ rights to the city and to public spaces, vendors have to navigate the intricacies of urban middle-class aesthetics and negotiate for access to contested public spaces on

a daily basis with officials of the State, residents and shopkeepers. The eviction and relocation of vendors by the State have been the preferred strategy in cities across the world to regulate informal economic activities, reduce congestion, or ‘clean-up’ cities (Stutter, 2017). Both eviction and relocation result in acute financial stress for the vendors. In the case of temporary evictions, vendors suffer a loss of income for a period of time and in many cases the spoilage of goods. In the case of relocation, there is the additional stress of losing their regular customer base and having to re-establish their business in a new and often unfamiliar location. These challenges are exacerbated in the case of migrant vendors who lack strong social networks in the city. They tend to be seen by local vendors as competitors who do not have a claim over public spaces in ‘their city’. Further, as they are also viewed as ‘outsiders’ often without the necessary documents to establish their domicile in the city, support from local authorities or associations is usually absent. On the whole, it is almost impossible for an individual vendor, whether migrant or local, to negotiate their right to space in the city with the multiple stakeholders involved.

As has been learned from the experience of other members of the informal economy, forming collectives can give street vendors the courage to claim access to public spaces and defend their claim (Charanji, 2019), redefine the nature of their relationship with the State (Salès, 2018) and win greater legitimacy for their mode of livelihood. The International Labour Organisation (ILO) convention 154⁴ recognises the importance of collective bargaining and social dialogue in ensuring decent work conditions for vendors. Collectivisation enables vendors to come together for a common cause and also network with organisations which protect or secure the street vendors’ rights to accessing street space (Salès, 2018).

According to Saha (2010), one of the reasons for the lack of the formation of unions among vendors in Mumbai is the ‘heterogeneous nature’ of street vending activity; the same street can be shared by different vendors at different times of the day vending a variety of goods. The fact that many of the vendors are recent migrants to the city, without a long-term strategy for their means of livelihood, makes unionisation on any common ground very difficult.

⁴ Refer to *Collective Bargaining Convention, 1981 (No. 154)* published by ILO available at https://www.ilo.org/dyn/normlex/en/?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C154.

Street Vending in India

Street vending is one of the oldest informal livelihoods in India. Often called as hawkers and squatters, street vendors have been considered illegal as they use public spaces for commercial purposes, and have been subjected to multiple episodes of evictions and other kinds of harassment both by the authorities and citizens.

To address the struggles of the street vendors and to give them a ‘legal’ identification at the national level, India was the first country to introduce the National Policy on Urban Street Vendors in 2009, and eventually the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act 2014 (henceforth called The Act or SVA) was passed. The objective of SVA is to protect and regulate street vending by giving them the right to the space on the street. The Act defined street vendors as:

a person who offers goods or services for sale to the public without having a permanent built-up structure but with a temporary static structure or mobile stall (or headload). Street vendors may be stationary by occupying space on the pavements or other public/private areas, or may be mobile in the sense that they move from place to place carrying their wares on push carts or in cycles or baskets on their heads, or may sell their wares in moving bus etc. (p. 11)

For the first time in the history of street vending in India, the livelihood got its legitimacy, and the vendors were protected against eviction. Even though the Act is yet to be implemented fully in most of the States in India, and some loopholes remain even after implementation, nevertheless, it tries to address the common prejudice against the street vendors by allowing them ‘rightful’ space on the street (Indorewala, 2017).

ABOUT THE STUDY

This paper is part of an ongoing study initiated by the authors in 2019 of street food vendors (SFVs) in Bengaluru across three themes: the socio-economic profile of SFVs, the challenges faced by the vendors in light of their day-to-day negotiations with State and non-State authorities, and the issue of dignity and inclusion associated with selling ‘food’ on the street. The respondents for the larger study were identified from 11 well-known street food vending locations in Bengaluru.

This paper specifically looks at the lives and livelihoods of street food vendors during the lockdown beginning in late March 2020 in response to the first wave of the Covid-19 pandemic. As a recent survey conducted by the Azim Premji University highlighted, close to 80% of informal workers lost their livelihoods due to this pandemic (Centre for Sustainable Employment, 2020). This loss of livelihood was particularly severe for the street vendors whose workplace, the street, was completely shut down without any prior intimation.

This study is based on two rounds of in-depth interviews conducted with 26 street food vendors (16 male vendors and 10 female vendors) about their struggles and coping strategies during the pandemic in light of their loss of livelihood. Our respondents, most of whom are migrants from villages and small towns, have been vending in the city for more than ten years and have established their lives in the city.

SURVIVING THE PANDEMIC—NARRATIVES FROM THE GROUND

Vending food on the street is an informal enterprise which requires low skill and minimal investment. This makes it a promising livelihood option for migrants coming to the city. Bengaluru has witnessed a significant growth in street food vending over the last few decades. With a bustling economy that attracts job seekers from all over the country, this cosmopolitan city offers street food vendors a vast pool of potential customers.

Food carts in Bengaluru range from hawkers selling quick snacks on foot, to mobile food carts or motorised food vans, as well as semi-permanent structures made with tarpaulin sheets on the street sidewalks. Even though the carts were mobile, the vendors preferred to sell at the very same location. Some of the vendors were selling in the same location for more than 10 years, till they were evicted for some reason. Having such permanency of vending space is important for the vendors to create a loyal customer base and also creating an identity for themselves linked to their space of vending.

The 11 locations chosen for the study also varied from being up-market residential areas to areas with formal office complexes, and industrial areas harbouring many garment factories. The type of area defined the customer base and hence the type of food sold—local traditional food in the industrial areas and a mix of cosmopolitan and traditional food near

the office complexes and residential areas. The vendors in each of these locations would rarely change their place. Even after a few events of evictions in some of these areas, vendors preferred to move to a nearby side lane in the same location, rather than changing their location.

Among the vendors who were interviewed for this study, many were involved in other casual, informal jobs before taking up street food vending, while a few were employed in the formal sector which they gave up to sell food on the street. There seemed to be two reasons behind the relative popularity of this line of work, notwithstanding its informal nature. On the one hand, as mentioned earlier, it is relatively easy to start a food cart with a small investment. On the other hand, selling food is often viewed as dignified and respectable work that can ensure the vendor a reasonably stable customer base and can serve as a means for a migrant to get assimilated and socially accepted in the city. Many food vendors have been running their businesses for decades together. The seeming viability of this livelihood option has prompted many vendors to remain in this line of work for a long time and in most cases, they involve other members of their families in this business making it the sole means of income for the household.

Shantamma,⁵ a woman in her late 40s who for the past 20 years runs her food cart with her husband and her son in one of Bengaluru's most popular food streets located in one of the up-market residential areas of Bangalore, narrates, 'We both (husband and wife) work in this (food cart). My husband does not go to work in other places as we have faith in this 'footpath hotel' ... Our sustenance completely depends on the footpath hotel.'

Similarly, Girish has been vending in the same location for the past 8 years and it is the only livelihood activity of his household. Given the relatively good earning from this business, he was not only able to meet his family's usual expenses but was also planning to enrol his children in a better school. However, due to the pandemic, Girish lost his livelihood. After several failed attempts of reviving the food cart or getting an alternate livelihood, he had to eventually migrate back to the village to escape the mounting debts. Not only Girish, but for all the vendors who had to migrate back to their villages in distress, it was a compromise on their urban dreams and aspirations, pushing most of them down into poverty.

⁵ The names of all the respondents have been changed to protect their anonymity. The interviews were conducted in local languages which were then translated into English.

Most food vendors are still reeling from the losses incurred due to the pandemic-induced lockdown, and many are struggling to restart their lives. The crisis has brought out the vulnerability of these vendors.

Anandhi, a woman vendor who has been selling food on the streets of Bengaluru for 35 years and whose business was thriving prior to the pandemic, narrates, ‘For the past 35 years I have been working on the footpath quite well. Now, it looks like my hands are tied and I am not able to do anything. Suddenly all of Bengaluru has become empty.’

Anandhi’s predicament was shared by all the street food vendors that we spoke to. What was expected to be a disruption of a few days turned into an extended lockdown that stretched on for many months. The troubles for many SFVs in Bengaluru started much before the onset of the Covid crisis, with eviction of these vendors being carried out in different parts of the city.⁶ The loss of income due to repeated evictions and an extended lockdown increased the vulnerability of these vendors for many of whom food vending is the main economic activity of the household. With the high cost of living in Bengaluru, mounting expenses, depleting savings and no other means of income, most of these vendors found themselves staring at the prospect of high levels of indebtedness.

The following section seeks to illustrate the plight of these food vendors and their coping mechanisms during the Covid crisis by drawing on the narratives of a few among them.

Quest for Alternative Livelihoods

As mentioned previously, for most of the food vendors their enterprise was a livelihood activity involving all members of the family. With the lockdown, many of them lost their only means of livelihood and were not able to compensate for the loss with an alternative source of income.

We found that the experiences of male and female vendors were quite varied with respect to finding alternatives. While the women vendors tried

⁶ In January 2020, there was an eviction drive in Hosur–Sarjapur Road Layout, Bengaluru to evict illegal encroachments from footpaths (documented by Times of India and our Citizen Matters article, Guha [2020]). This was followed by a spurt in cholera cases in early March 2020 due to which Bruhat Bengaluru Mahanagara Palike (BBMP) evicted SFVs and other street vendors allegedly to minimise transmission of the disease, thus blaming them for lack of cleanliness and hygiene.

to seek work either in garment factories or as domestic workers in individual households, the men tried to look for casual employment in the informal sector. One of our women respondents Aruna, a food vendor who came to Bengaluru from a neighbouring village and has been living and working in the city for several years now, and Anandhi, who has been vending for the past 35 years, stated that they looked for alternative jobs as domestic helpers or as workers in garment factories but were unsuccessful. Factories were laying off their existing employees and many among the upper classes were reluctant to hire new domestic helpers for fear of contracting the virus.

Take the case of Mahadeva, a vendor from a small town near Bengaluru and the sole breadwinner of the family; when he lost his livelihood, his wife, who was never engaged in paid work before, was compelled to find work as a domestic worker to take care of the family finances. As Mahadeva narrated:

When we had the cart, our life was good and there weren't any problems ... once I lost the job it was difficult to manage rent and the children's education. So my wife had to work. She is working in houses (as a domestic help). Poor lady, she is not educated so she can't do anything else. Earlier she was helping at home with the food cart and was taking care of the children. She has never gone out to work. Now she is forced to do this so that there is some income for the family.

Even for men, it was difficult to find casual work in any sector, as the lockdown had significantly reduced the labour demand. Yet a few vendors who were able to find casual jobs in the gig economy as delivery personnel soon gave up due to the uncertain nature of the work and due to the lack of a sense of agency.

While these experiences are varied, there is a thread connecting each one of them. The vendors have always looked upon food vending as a respectable work which is always put on a higher hierarchical platform when compared to other kinds of informal work. Also, vending gives them an agency over their work, which is not found in any other kind of wage employment, whether formal or informal. Hence for the vendors who did manage to find casual wage work, they saw it as a compromise on their dignity and agency of work.

Some of our respondents even tried starting other kinds of small informal enterprises. For example, one vendor opened a small shop selling

condiments. But he was not able to sustain it due to low footfalls. Most of them were apprehensive of starting a new business, fearing that it might not work. Rajeev, a vendor from a small town near Bengaluru, said:

It is difficult to look for another option or business in this situation Also, we are afraid to try anything new. This work (food vending) is easy for us as we are experienced in it. If we try a new business, in case it doesn't work out then we will be at a bigger loss.

With very few alternatives and mounting expenses, many vendors were forced to go back to their native villages. This was not an easy decision given that most of these vendors had spent decades building their lives in the city.

Channakeshava, who had been vending food in Bengaluru for the last 15 years, had to make the hard decision of returning to his village. Although he knew there weren't many opportunities for work in his village, he felt he and his family could at least survive over there. Unfortunately, when he reached his village, he fell seriously ill and was not able to work. His children, who were earlier receiving an English-medium education in Bengaluru, had to drop-out of their colleges in Bengaluru and join regional colleges in nearby towns. This was perceived by him as a compromise on the standard of education but also on their urban aspirations which are often hinged on English-medium education.

In contrast with the above narratives, one of the vendors who was educated was able to find alternative employment, but not without challenges. Sumit, a vendor from Bihar had an interesting story to share. He had left his stable formal sector job as a junior employee in a reputed company to sell *Bihari*' food on the streets. As a street food vendor, not only was he able to make more money than he did as an executive but he was also able to establish a strong customer base owing to the unique cuisine he offered. However, the pandemic dealt a serious blow to his business. With his food business shut down and with mounting expenses of his children's education and his wife's medical treatment, going back to his native place seemed like his only option. He was determined not to go back. Expressing his reluctance, he said, 'My children get a good education here, we have built our lives here ... I cannot go back.'

He tried out many alternative livelihood options to stay afloat during the crisis. As he narrated:

I made food at home and sold it through websites like Swiggy, Zomato, Dunzo... And there are few friends in HSR to whom I directly deliver food. However this was not enough ... Our house rent pending payment has reached up to Rs 3 lakhs. Even the ration expenses were mounting. Since I had the experience of working for a formal sector company, I applied in 3 to 4 companies and one of them called me for an interview. I got through it. So I started working there from 6 am to 2 pm and came back home and continued with the food business.

While being educated and having prior experience in the formal sector helped Sumit get an alternative job, he continued to be in the food sector as much as he could, with the hope that once things stabilised he would be going back full-time to vending food on the street. This shows the resilience and the faith the vendors continue to have on street food vending, as most of them still want to continue with vending food on the street as the situation improves.

For many vendors, the only option open to them in this situation of financial distress was to borrow money to meet their unavoidable expenses such as house rent, educational fees and medical expenses. Some vendors incurred huge debts from local moneylenders, often on very unfair terms. Without a steady source of income, these vendors were most likely getting caught in a debt trap.

Streets Without People: The Streets Have Opened, but is It Business as Usual?

After 8 months of lockdown, the streets of Bengaluru opened and vendors were gradually allowed to vend on the streets. Those who tried to restart their businesses after the city began to unlock were confronted with two challenges.

With the food vendors running their businesses over the years from the same location, they had established an identity for themselves and created a regular customer base. These customers came from different socio-economic backgrounds including those working in the formal sector and informal workers like delivery personnel and even wage labourers from nearby construction sites. The vendors and their regular customers developed a relationship of mutual trust. For the vendors, their customers were an important source of social capital, which not only provided them an entry into urban society but also acted as a source of support whenever

they faced a crisis. One respondent narrated how his customers protested and came to his aid when the civic authorities tried to evict him. Many vendors commented that if they did not open their food carts for a few days their customers called them to enquire about their well-being.

As mentioned earlier, as a consequence of the pandemic, vendors were faced with the dissipation of their regular customer base. Even after the streets were opened at the end of the lockdown, vendors found that their customers were not back for various reasons. In the case of some customers, their workplaces remained closed or employees were asked to work from home. Udaya, a vendor from a village near Bengaluru running his business for the past 2 years, and Sathisha from a village near Kolar, Karnataka vending in Bengaluru for the past 8 years, said that they do not even get half the number of customers they used to have prior to the pandemic. Udaya mostly catered to employees of hi-tech companies in the vicinity and Sathisha's customers came from nearby paying-guest accommodations. With the lockdown most employees of hi-tech companies were working from home and those staying as paying guests had returned to their native places.

Another respondent Muniraju, a migrant from a village near Tumkur in Karnataka who is vending food in an industrial area in Bengaluru for the last 10 years, stated that even though factories had reopened, as part of the pandemic protocol, these factories were observing a limit on the number of people who could work at any given time. Due to this, his customer base has significantly reduced.

The pandemic had also engendered a growing mistrust of street food among people. Scared of contracting the virus, people were avoiding eating out or buying food from outside the home, particularly from a street food cart. Many companies had explicitly asked their employees to avoid street food. For example, Muniraju mentioned that the factories around where he was vending food gave strict instructions to their workers to avoid street food and this injunction was strictly enforced with the threat of expulsion for those who violated it.

Apart from the erosion of their customer base, vendors also struggled with reclaiming their place on the street after the lockdown. A street being a public space has multiple claimants. Thus, when their carts were off the streets during the prolonged lockdown, their space on the street was appropriated for other purposes. In some cases, it was used for construction activities. In other cases, it was used as parking space for private cars.

Some vendors reported being harassed by civic authorities or by other vendors when they returned after the lockdown to restart their businesses.

Simi, a woman *momo* vendor from a state in North-East India who has been engaged in this business for the past 8 years mentioned, ‘I couldn’t keep the cart where I was keeping it earlier. A building is being constructed and the owner is not allowing us to keep the cart. So I am searching for an alternative place now.’

On some streets, vendors mentioned that nearby residents were no longer allowing street vendors in the area fearing that they might spread the virus. Changing the location of their business would mean losing their regular customer base.

Seeking to Live with Dignity

Prior to the Covid-19 pandemic, street food vending was a reasonably lucrative business and those who were engaged in it did not have reason to seek welfare benefits meant for the poor from the State or civil society organisations as they did not see themselves as ‘poor’. During the pandemic, however, when they had to stand in queues to receive relief packages, many commented that this felt as a profound blow to their dignity. As one of our respondents said, ‘Earlier we were providing food to others and now we are the ones who have to ask for it’.

Among food vendors, those who were migrants mentioned that at times they were perceived as outsiders and on these occasions, there was less empathy shown to them and it was felt that they should seek relief or welfare benefits in their native places and not in the city. Interestingly, while many of the recent migrants (who had migrated into the city in the last 2–5 years) went back home as soon as the lockdown was announced, long-term migrants were reluctant to go back. One of our respondents mentioned, ‘We no longer belong to the village—our home is the city’.

With their families in the city and the lack of strong social networks in the village to rely upon, it would be difficult for them to relocate to their hometowns and villages.

FINDING A WAY FORWARD

One of the important reasons apart from the economic motive for the vendors to choose food vending over any other kind of informal work is their perception of dignity in food vending. One of our respondents mentioned that ‘feeding people is a sacred job’ and that they consider

this as respectable work. One of the vendors also mentioned that people from different classes (from software engineers to construction workers) all of them eat street food from their carts. Food vending also gave the vendors agency and ownership over their work, which is not there in any wage work. Hence there are a few vendors who have transitioned from formal wage employment to street food vending.

Along with dignity and agency, the vendors were able to secure not just a space but a place in the city. Their belongingness to the city is highlighted by the strong trust-networks that the vendors were able to build with their customers. This helped most of the vendors sustain this livelihood for several decades, helping them move out of poverty, and harbouring urban aspirations of providing 'English-medium' education for their children and living a good life in the 'city'.

However, the pandemic was a severe blow that crippled their livelihoods for several months and pushed them into a state of penury. Their precarity was further aggravated due to lack of any social security. It was not only an economic loss but also an erosion of their dignity as well as urban aspirations. A few vendors who were able to find some casual work had to opt for jobs that they considered as menial and less dignified as well as low paying. For many of them, it was a compromise on their consumption standards, children's education etc., and for many others, it was the end of their urban dreams as they had to go back to their villages after spending several decades in the city.

Such examples of vendors, living in the city for several decades and having to go back to village due to distress, not only highlight their precarity but also make us question the belongingness of the vendors to the city.

The catastrophic effects of the pandemic on street food vendors could have been prevented if they had a better social security network. Another much-needed step is the collectivisation of street vendors to increase their bargaining power and to help them find solutions to their common challenges. Due to a lack of collectivisation, during a crisis, whether it be the current pandemic or episodes of eviction, vendors have to fend for themselves alone and seem to be left out by the city. This is especially the case for those who are migrants.

The immediate implementation of the Street Vendor Act (2014),⁷ which aims to provide street vendors with limited rights to public space would be a clear step to bolster the claim vendors have to the public spaces where they carry out their businesses. The Act has provisions for collectivising vendors under Town Vending Committees (TVC) which are responsible for protecting the rights of vendors, legitimising the claims of vendors over public spaces and mediating between the State, civil society and vendors. However, the implementation of the Street Vendor Act in India has been slow with mixed performance across various states. Many states are yet to notify schemes and rules and a few states are yet to constitute TVCs. In some states where TVCs have been constituted, vendor surveys have not been completed and/or vending certificates have not been issued (Bedi & Narang, 2020).

While the Act is a novel step in legitimising street vending, the way the Act is currently imagined purely uses a spatial approach, with no attention given to the social aspects of street vending (Bandyopadhyay et al., 2012). There are a few serious lacunae that need immediate introspection. Firstly, the Act through zoning aims to create vending and no-vending zones in the city, and street vendors will be legally allowed to operate only in the vending zone. The creation of vending zones is largely guided by the commercial aspects of the place as well as the aesthetics of the place. Such zoning thus may leave out a large number of vendors, who might be operating in the non-vending zones and reluctant to change their space, making such vendors illegitimate.

Secondly, the Act has made the role of the TVC supreme. The main purpose of TVC is to present a collective voice of the vendors in deciding on the zones. Forty percent of the TVC members are supposed to be from street vendors associations. However, in reality there are a majority of vendors who work individually and are not a part of any collective organisation. Thus, the TVC represents the voices of the already organised vendors and not the independent ones, who in fact form the majority.

Thirdly, the Act has no mention of migrant vendors, and the migrant vendors are clubbed together with the other vendors. This creates a two-step hurdle for the migrant vendors as neither are they part of any local association nor are they formal residents of the city.

⁷ See official publication of the Street Vendors Act (2014) available at eGazette portal: <https://www.egazette.nic.in/WriteReadData/2014/158427.pdf>.

Thus, to enable street vendors to sail through the crisis, it is not only enough to implement the SVA but also to ensure that these lacunae are addressed and that the Act is made inclusive by bringing in the voices of all the vendors, including the migrants.

During the pandemic crisis a financial stimulus—Prime Minister Street Vendor’s AtmaNirbhar Nidhi (PM SVANidhi) Scheme—was announced for the street vendors, which entitled them to avail of an interest-free loan of Rs. 10,000. However, in our study, we found that many vendors were not aware of the scheme. Out of the few who were aware, we did not find even a single food vendor availing the scheme. This was partly because they saw this as another debt and were wary of taking any further loans. The other reason, as many of our respondents cited, is that while such financial help is welcome, what the vendors would want was some kind of stability and security to their livelihood. One of our respondents worried that, when they open the carts after lockdown, regaining the trust of their customers—which was deeply impacted by the pandemic and people stopped having outside food—was not going to be easy. The irony was that while the government laid out detailed guidelines about re-opening of formal eating spaces like restaurants and other eateries, there was no mention of informal food places largely comprising street food vendors.

The food vendors in our study had already carved out a place for themselves by creating a relationship between their food and the customers. The policy should aim at protecting this relationship, especially during the time of a crisis. While the SVA will give the vendors spatial access to the city, it is important to orient the policy towards the social dimensions of street food vending, making them more inclusive in the urban fabric, which in turn will strengthen their ‘belongingness’ to the city.

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The Impact of the COVID-19 Pandemic on Female Domestic Workers in an Urban Setting

Nomita P. Kumar and Kavita Baliyan

INTRODUCTION

That India under the COVID-19 pandemic has been trapped in an unprecedented crisis is widely acknowledged (Jha & Kumar, 2020). Various findings elaborate on the plight of those who are the most vulnerable such as workers in the informal sector. The employment and livelihoods of a large majority of domestic wage workers faced a huge shock and instability due to the imposition of multiple spells of lockdowns and restrictions on economic activities during the two waves of the pandemic in 2020 and 2021. All informal workers in general, and urban domestic wage workers in particular, struggled through labour market

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shocks during the lockdowns. The lockdowns practically swept away all avenues of employment for the domestic/daily wage workers in the unorganised economy. Not only has the pandemic eroded the earnings of the domestic workers but it has also left them with unsurmountable levels of debt. Studies by Bussolo et al. (2021) and Jadhav (2021) show that even in cases where domestic wage workers resumed their earlier work, they had challenges regaining the confidence of their employers.

While the impact of the pandemic has been debilitating for all domestic wage workers, it was particularly devastating for those who were compelled to migrate from neighbouring districts, many of whom were landless labourers leaving rural areas in search of employment prospects in the cities. Migrants in search of livelihoods from neighbouring rural areas who lack specialized skills and educational qualifications throng urban centres where they settle in slums and find employment in the informal sector as domestic workers, rickshaw-pullers or domestic servants. As Vishwanath (2020) observed, since they lack a basic education their work is most often low-paid, vulnerable and invisible.

Although the first wave of the COVID-19 pandemic progressed more slowly in India than in many other countries of the world, by February 2021, the second wave penetrated throughout the country more aggressively with a flood of cases and thousands of deaths due to the inadequacy of the existing public health infrastructure and the virulence of the Delta strain of the virus. The cumulative impact of the two waves of the pandemic has resulted in high mortality across the Indian population in addition to social and economic devastation, more acutely felt by vulnerable and marginalised people. Amid the sustained surge in COVID-19 cases during the second wave, migrant workers in the city, who had come back to the urban locations a few months back after the first wave, were forced to return to their villages yet again due to the pandemic-induced lockdown during the second wave. For most urban slum dwellers, the second phase of restrictions meant a loss of livelihood for the second time within a year wreaking havoc on their financial stability, threatening their very existence and forcing them to take refuge in their hometowns or villages.

While the condition of urban migrant workers received much media coverage, one group that was often left out of the discourse was domestic female workers living in urban slums and facing the double burden of the health crisis caused by the pandemic and the loss of income due to the stringent lockdowns.

Domestic female workers faced unprecedented health and socio-economic crises globally including in India during the pandemic and the consequent deep slump in the economy. The persistence of the pandemic exacerbated the problems of women informal workers who were already disadvantaged because of deeply entrenched discrimination of different kinds in the labour market. Specifically, the lockdowns widened the existing gender inequalities and limited the opportunities for women (De Paz et al., 2020; United Nations Sustainable Development group, 2020; UN Women, 2020).

The present paper probes the impact of the COVID-19-induced lockdowns on the livelihoods and physical and emotional well-being of domestic female workers during the two waves of the pandemic thereby exposing the fault-lines in our society. By capturing the many woes and challenges faced by these domestic workers during this public health crisis, this paper suggests measures for policy interventions to help ameliorate their state of precarity, protect their livelihoods and enhance their long-term resilience to social and economic shocks.

The paper is organised as follows: section “[Research Design and Data Source](#)” explains the research design, data source and methodology of the study; section “[Demographic Profile of Domestic Workers](#)” examines the demographic profile of domestic workers and their household characteristics; section “[Household Characteristics and Reasons for Taking Up Work as Domestic Workers](#)” attempts to connect their demographic profile with their reasons for joining the workforce as domestic workers; section “[Deepening Economic Distress and Domestic Workers’ Increasing Precarity](#)” reflects on the surge in challenges faced by domestic workers during the two lockdowns and in their aftermath and section “[The Need to Bolster Public Support and Livelihood Security for the Vulnerable](#)” presents a suggested roadmap for the well-being of this neglected section of the population through policy interventions.

RESEARCH DESIGN AND DATA SOURCE

This paper is the extension of an ongoing study sponsored by the Indian Council of Social Science Research titled *Employment Vulnerabilities Faced by Women in Urban Unorganised Sector in Uttar Pradesh*. It attempts to assess the plight of already surveyed respondents employed as domestic workers in Lucknow city during the pandemic. During the first

and second waves of the pandemic, interviews were conducted by telephone using a brief questionnaire. Further, focus group discussions were conducted by our investigators with the objective of assessing the vulnerabilities of the respondents during the first and the second waves of the pandemic and the ensuing lockdowns.

We aimed to contact 100 sampled respondents (domestic workers) from Lucknow city but could interview only 72 of them spread over different locations of the city. The remaining 28 could not be traced even after the lockdown was relaxed. It is probable that they left the city due to financial pressures. A brief questionnaire on the livelihood challenges faced during and after the lockdowns was shared with the respondents.

DEMOGRAPHIC PROFILE OF DOMESTIC WORKERS

To understand the impact of the lockdown on domestic workers it is essential to gain an accurate picture of the socio-economic conditions in which they live and work. Our study confirmed that domestic work is mainly performed by women who have migrated from rural to urban areas (in the case of this study, from districts neighbouring the city of Lucknow). Many of the domestic workers in Lucknow come not only from the bordering villages but also from the far-off rural areas of eastern Uttar Pradesh where high levels of poverty push people to search for their livelihoods in urban centres such as Lucknow.

In terms of the age profile of the respondents, women in the middle-age segment of 30–59 years constituted 58.33% of the respondents (Table 15.1). Of them, 37.5% are in the age group of 15–29. Only 4.16% of the domestic workers interviewed are above 60 years of age. In our sample, 4.16% of the respondents were unmarried women who were found to be working as maids. Of the domestic workers interviewed, 15.28% were widows, and one was divorced; 86.11% of the domestic workers were uneducated, while 13.89% had finished their primary education; 62.5% of them belonged to the Scheduled Caste category, 30.6% to the Other Backward Caste (OBC) category, while only 6.9% belonged to general castes. A little over 10% (11.11%) of the respondents were Muslims.

Table 15.1 Demographic profile of the sample of female domestic workers in Lucknow city

<i>Demographic variables</i>	<i>General (%)</i>	<i>OBC (other backward caste) (%)</i>	<i>SC (scheduled caste) (%)</i>	<i>Total (%)</i>
<i>Age groups in years</i>				
15–29	3 (11.11)	12 (44.44)	12 (44.44)	27 (37.50)
30–59	2 (4.76)	10 (23.80)	30 (71.42)	42 (58.33)
60 and above	0 (0.0)	0 (0.0)	3 (100)	3 (4.16)
<i>Religion</i>				
Hindu	5 (7.81)	18 (28.13)	41 (64.06)	64 (88.89)
Muslim	00 (0.00)	4 (50.0)	4 (50.00)	8 (11.11)
<i>Educational status</i>				
Uneducated	4 (6.45)	17 (27.42)	41 (66.13)	62 (86.11)
Educated	1 (10.00)	5 (50.00)	4 (40.00)	10 (13.89)
a. Primary	1 (14.29)	4 (57.14)	2 (28.57)	7 (9.72)
b. Middle/secondary	0 (0.00)	1 (33.33)	2 (66.66)	3 (4.17)
<i>Marital status</i>				
Married	1 (1.754)	19 (33.33)	37 (64.91)	57 (79.16)
Unmarried	2 (66.66)	0 (0.0)	1 (33.33)	3 (4.16)
Widow	2 (18.18)	2 (18.18)	7 (63.63)	11 (15.28)
Divorced	0 (0.0)	1 (100)	0 (0.0)	1 (1.38)
Total	5 (6.94)	22 (30.55)	45 (62.5)	72 (100.00)

Source Data based on field survey, 2020–2021

Note Figure in brackets shows percentage to total

HOUSEHOLD CHARACTERISTICS AND REASONS FOR TAKING UP WORK AS DOMESTIC WORKERS

Examining the household conditions of these marginalised groups, we found that they live in cramped spaces which makes them vulnerable to infectious diseases such as COVID-19 since maintaining social distancing norms and following hygienic practices becomes difficult in their circumstances. The frequent washing of hands and clothes is not feasible in these conditions due to little or no water supply. With the loss of income, obtaining sanitizers and soap was also out of their reach. They were not able to strictly observe the prescribed precautions to remain healthy.

The main reasons driving the respondents to work as domestic workers are all linked to poverty and lack of income-generating opportunities for their household members. Almost 40% of the respondents interviewed indicated that the necessity to economically support the high number of dependents in their families was the major factor influencing their decision to enter domestic work. The lack of jobs in their villages and hometowns and the need to earn money to pay off debts were also mentioned as factors forcing them to enter the labour market. Moreover, being landless was mentioned by the respondents as an important reason to start working as a domestic worker. The focus group discussions held revealed that several domestic workers prefer the job they perform to other occupations such as construction work. Domestic work is considered as having better and safer working conditions. Often accommodation and health assistance are provided by the employers, while in construction work the risk of getting sick because of working in open spaces is higher (Table 15.2).

Table 15.3 highlights that 56.94% of the respondents belonged to the household income category of ₹5001–₹10,000 per month. Households with a relatively high income were less in number. Of the respondents, 44.4% reported that they could save a meagre amount of ₹1001–2000 per month while only 8 respondents said that they were able to save ₹3001–₹4000 per month which was subsequently exhausted during the lockdown (Table 15.4).

Not only was the income of domestic workers badly hit, their meagre savings made the survival of their families extremely difficult. The lack of savings also adversely impacted their ability to establish a foothold in the few available alternative livelihood avenues during the lockdowns. These developments coupled with the arrival of a few million return migrants

Table 15.2 Household characteristics of the sampled domestic workers

<i>Activity status</i>	<i>Female (%)</i>	<i>Male (%)</i>	<i>Total (%)</i>
Employed	84 (57.14)	89 (58.55)	173 (57.86)
Unemployed	1 (0.68)	10 (6.58)	11 (3.68)
Housewife	7 (4.76)	0 (0.00)	7 (2.34)
Student	43 (29.25)	38 (25.00)	81 (27.09)
Child	12 (8.16)	15 (9.87)	27 (9.03)
Total members in household	147 (100)	152 (100)	299 (100)
Total dependents	63 (42.85)	63 (41.45)	126 (42.14)
<i>Type of employment</i>			
Permanent	1 (1.19)	10 (11.24)	11 (6.36)
Temporary	73 (86.90)	24 (26.97)	97 (56.07)
Daily wage labour	10 (11.90)	55 (61.80)	65 (37.57)
Total	84 (100.00)	89 (100.00)	173 (100.00)

Source COVID-19 survey, 2020

Table 15.3 Income profile of domestic workers in Lucknow city

<i>Income category</i>	<i>Family income (monthly) (%)</i>
Below 1000	0 (0.00)
1000–5000	12 (16.67)
5001–10,000	41 (56.94)
10,001–15,000	16 (22.22)
15,001–20,000	3 (4.17)
Total	72 (100.00)

Source COVID-19 survey, 2020

Table 15.4 Savings profile of domestic workers in Lucknow city

<i>Savings category</i>	<i>Family savings (monthly) (%)</i>
Zero savings	19 (26.39)
Below 1001	32 (44.44)
1001–2000	9 (12.50)
2001–3000	4 (5.56)
3001–4000	8 (11.11)
Total	72 (100.00)

Source COVID-19 survey, 2020

in their states, the unpredictable behaviour of their employers during the lockdowns and the need to maintain social distancing pushed them into a trap that eventually led to the loss of their household assets and wages, a fall in consumption levels, and high indebtedness.

Various scholars have drawn attention to the particular challenges women face among those employed in the informal sector on account of the pandemic. Samantroy and Sarkar (2020) have observed that the ongoing COVID-19 pandemic has provided “a new dimension for understanding informality with increasing vulnerability of women workers. No doubt this is more pronounced for the ‘domestic workers’ who enter the informal labour markets in the urban cities” (para. 2). We chart how the pandemic has exacerbated the problems of women domestic workers, who were already in a disadvantaged position in the labour market which is replete with pre-existing inequalities based on patriarchal social norms.

Lockdowns caused multiple problems for this deprived lot. Not only were they deprived of income, with all shops and markets closed due to the lockdown, but they also had problems in meeting their daily requirements unlike those from the middle classes who could store food and other requisites for their consumption. Further, they faced the compulsion of having to pay a monthly rent on their homes which forms a substantial part of their total monthly expenditure. Moreover, workers in urban areas often must spend time and money travelling to the workplace as noted by Mitra and Singh (2020). The absence of public transport during the lockdown significantly reduced their ability to go to their workplaces. Domestic workers without identity proof or address proof faced difficulties accessing public services such as the public distribution system. These issues made the urban informal workers more vulnerable to employment and income shocks.

During the lockdown, most households did not allow their domestic maids to come to work, which left most of these workers deprived of monthly wages as noted by Samantroy and Sarkar (2020). Most domestic workers live in slums with very poor living conditions with no space to maintain social distancing norms. Our study found that while on the one hand these women lost their livelihoods, their deplorable living conditions and the challenges with maintaining COVID-19 norms only made their lives more miserable. Besides, they shouldered the extra responsibility of doing domestic work within their own households and finding resources for the household when income sources dried up.

These domestic workers living in slums often have to travel quite a distance to reach upper class colonies and apartments for work, often cycling to their destination or spending money on transport. With lockdowns being relaxed, many of these workers who sought to recommence work were not able to do so due to curtailed transport facilities or due to housing societies restricting them from entry due to fear of them being carriers of the virus. Several respondents testified to these problems.

DEEPENING ECONOMIC DISTRESS AND DOMESTIC WORKERS' INCREASING PRECARIETY

The COVID-19 pandemic in its first wave pushed millions of Indians into poverty caused by the nationwide lockdown which took away their means of livelihood thus pushing millions of people below the poverty line and increasing informality, poverty, debt, and inequality in India (Pickard et al., 2020). Findings of the Pew Research Centre's study, a US-based think tank highlighted that:

... the Covid-19 recession has worsened inequality, the increase in the number of poor is likely greater than estimated. ..., and the decrease in the number who are high income is likely less than estimated. The middle class may have shrunk by more than projected. ("Coronavirus Pandemic May Have Doubled Poverty", 2021, para. 8)

Amidst the dwindling prospects for work during the pandemic, domestic/daily wage workers across the nation faced relentless struggles to meet their family's basic needs. The second wave only added to this distress. Scholars have noted the total impact of the pandemic on the informal economy in terms of poverty and unemployment has not been captured in existing data (Bhatt et al., 2021; Drèze & Somanchi, 2021).

Drèze and Somanchi (2021) state that the pandemic triggered a fresh wave of unemployment in the country as over 7 million people were out of work in April 2021 itself (Drèze & Somanchi, 2021). Such economic shocks were particularly debilitating for poor and vulnerable informal workers, especially women who were usually employed as daily wagers

in the construction sector, agriculture, as street vendors, and home-based workers.¹

Similar to the first wave, the second wave also saw an exodus of migrant workers from cities to towns and villages as soon as states started announcing containment measures and lockdowns (India Today Web Desk, 2021). The sudden spike in cases of COVID-19 and lockdowns in states like Gujarat, Maharashtra, and Delhi led to many migrant workers being stranded in railway stations, at bus terminals or at their places of work (Misra, 2021). Many of these workers are unfortunately excluded from formal government support and during the lockdowns they had limited or no access to basic facilities such as food, water and sanitation (Oxfam International, 2021). Due to the pressure of the lockdowns, employers stopped these workers from coming to work. Only a few were assured full payment of their salaries during this period; others received no payment or only a partial payment of their salaries.

The survey conducted by us threw light on the impact of the pandemic on the personal and occupational lives of female domestic workers and the steps these workers were taking to cope with little or no support from the government. All the respondents mentioned that although their work does not provide them job security, yet they value it because it has helped them support their families, gain respect in the community and, as women, it has made them independent and outgoing. The restrictions on work imposed by the outbreak of the pandemic have thus deprived them not only of a source of income but also of the positive social, emotional and mental support that they derive from their work.

As Table 15.5 shows, over three-fourths of the respondents were adversely impacted by COVID-19. Nearly 44% reported loss of employment during the first wave and 61% during the second wave. 72 and 83% of the respondents, respectively, reported that they did not receive any income during the first and second waves of the pandemic. Almost all respondents reported job losses among their family members. Of the

¹ Given that the COVID-19 pandemic has not fully ended, it is impossible to arrive at a complete assessment of its full impact on poverty in India and how it may evolve going forward (Dang et al., 2021). It is rightly stated that the economic consequences of the crisis are still working their way through the Indian economy, and policy measures aimed at addressing both the public health and economic fallout of the crisis continue to be formulated and rolled out. Empirical evidence on the actual impact of the crisis also remains highly fragmented and incomplete and micro studies, such as the one on which this paper is based, will definitely shed much-needed light on the ground situation.

Table 15.5 Challenges faced by domestic workers during the Lockdowns

<i>Type of impact</i>	<i>1st wave 2020 (%)</i>	<i>2nd wave 2021 (%)</i>
Did COVID-19 have any impact on you?		
Loss of employment	24 (43.64)	44 (61.11)
Not earned any income	52 (72.22)	60 (83.33)
Not received full salary	70 (97.22)	33 (45.83)
Loss of employment of family members	70 (97.22)	32 (44.44)
<i>Crisis due to loss of livelihood</i>		
Financial crisis	33 (45.83)	55 (76.39)
Stress/depression	42 (58.33)	62 (86.11)
Health problems	10 (13.89)	44 (61.11)
Anxiety	45 (62.50)	52 (72.22)
Sleeplessness	34 (47.22)	44 (61.11)

Source COVID-19 survey, 2020–2021. Multiple responses

respondents, 46 and 76% reported a financial crisis due to the lockdown during the first and second waves leading to anxiety (62.5 and 72%), mental stress (58.3 and 86%), sleeplessness (47.2 and 61%) and health problems (13.9 and 61%). The loss of employment due to the pandemic caused poverty and hunger, especially when the individual concerned was the sole breadwinner in the family.

The survey revealed that as the shutdown of social and economic activity during the lockdowns stretched on, mental stress increased exacerbated by a financial crisis. This is a less-covered aspect of the ongoing pandemic and needs to be addressed since it can typically influence a worker's productivity (Afridi et al., 2020). A large proportion (58.33%) of women domestic workers are in the age group of 30–59 years while 79.16% of the respondents are married which in many cases implied being burdened with household responsibilities in addition to their role as the main earners of their families. These women were particularly hard-hit during the lockdowns and in their aftermath. In some families there were other workhands; these households did not worry much as the family was able to raise sufficient income for their support. But there were families where employment was a necessity to meet basic expenses and for them the loss of work and income led to acute financial problems. A few fortunate ones had empathetic employers who continued to pay them during the lockdown period when they could not come to work.

There was a complex set of factors that contributed to the anxieties that these women faced in addition to the financial stress from the loss of income. Being at home, the women found themselves overburdened with household work and having to face increasing incidences of domestic violence. There were increased demands from children, who were at home due to the closure of schools. The children demanded not only something to eat but also different things to play with to keep them occupied. Often, these women faced problems of food shortages. The online studies of children required the use of smartphones with data connections, which these poverty-stricken workers could not afford. They also faced demands for money from their husbands for daily needs and for alcoholic drinks.

Most of these families lived in rented houses and found it difficult to pay their rent. With the loss of livelihoods and income, negotiating with landlords which often fell on the shoulders of these women, had also become difficult. As Sangeeta (name changed) a domestic help from the rural area of Basti put it,

Four of us stay in a room that costs ₹2,000. With no disposable income currently, we wonder how to sustain ourselves over here. The landlord brutally mentioned that we cannot keep the room if we do not pay. Hence, we feel it is better to return to our village at the moment.

Table 15.6 highlights the economic and social impact of the lockdown on these domestic workers.

Table 15.6 Economic and social impact of the pandemic

<i>Parameters</i>	<i>1st wave</i>	<i>%</i>	<i>2nd wave</i>	<i>%</i>
Financial distress	59	81.9	72	100.0
Dual burden of work at home and outside	14	19.4	5	6.95
Shortage of food/ration	33	45.8	18	25.0
Increased demand of children and husband at home	22	30.6	66	91.67
Domestic violence	16	22.2	46	63.89

Source COVID-19 survey, 2020–2021

THE NEED TO BOLSTER PUBLIC SUPPORT AND LIVELIHOOD SECURITY FOR THE VULNERABLE

Civil servants and human rights activists recommended that the government use surplus food stocks to provide free rations to marginalised sections of the society, including informal workers who have lost employment opportunities, until the pandemic and the related food and livelihood crises abates (Constitutional Conduct, 2021). It was also recommended that nutrition schemes for vulnerable children and mothers be provided and special measures be taken for mitigating the impact of the pandemic on vulnerable groups such as the elderly, single mothers, people with disabilities and children. Realising the need to be far more flexible during such emergencies in providing free rations to people without documents establishing their legal identity (especially migrants and informal workers), the Ministry of Consumer Affairs, Food and Public Distribution which controls the Public Distribution System (PDS) extended the provision of free food grains to them as well. Apart from this, efforts to support those employed in the informal economy came in the form of e-Shram cards issued by the Ministry of Labour and Employment to provide social protections to informal workers and cash transfers from the Ministry of Finance.

Improvements in universal social protection for the poor, marginalised and the vulnerable became the focus of the government's efforts to tackle the unprecedented toll of the pandemic. The Central Government also struggled to enable states to extend social protection measures (universal and portable) for the poor, migrants, and informal/domestic workers. There has been much demand for the emergency use and adaptation of welfare programmes and schemes such as the PDS, cash transfers, the National Social Assistance Programme (NSAP) and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in urban contexts during natural disasters such as the pandemic. Yet a meaningful policy response should begin with strengthening already existing programmes and schemes through, among other things, ensuring greater integration between them.

For domestic workers, their work in households puts them at enormous unaccounted risks especially during the pandemic. While they were being stigmatised and often denied work on grounds of being potential carriers of the virus, the reality is that they themselves were highly vulnerable to contracting the virus from their employers or being exposed

to it while travelling to the homes where they worked. Their very existence is imperilled with financial insecurity and limited social protection measures for many such as the lack of access to the PDS, exclusion from the public healthcare system, poor access to housing, water, sanitation and hygiene facilities (International Labour Organization, 2020). The migrant exodus during the nationwide lockdown exposed the weaknesses of social protection architectures based on fixed residence and non-portable entitlements which leaves out many domestic workers as well. Women domestic workers are highly vulnerable to violence and harassment.

Apart from reforms to the social protection architecture to ensure coverage of vulnerable groups such as domestic workers, policy proposals for addressing the precarity faced by these segments of the population have emphasised the urgent need for income support to help them tide over the current crisis such as access to free food rations through the PDS, amortisation on repayment of all loans and gender-sensitive policies to address specific challenges faced by women.

In response to the dire situation facing domestic workers during the lockdowns and in their aftermath, the government took various steps to ensure their well-being such as making it obligatory for employers to pay domestic workers even for the times when they were not called for work, and providing free rations. Over 90% of the respondents reported receiving food support during and after the lockdowns.

Table 15.7 shows the impact of public support measures on domestic workers (Table 15.8).

In addition to this, under the Pradhan Mantri Garib Kalyan Package (PMGKP), during the first lockdown most respondents got an ex-gratia payment of ₹500 three times in their account. However, those respondents who did not have bank accounts were unable to avail this benefit. Through the PDS, respondents received 5 kg of free food grains per person per month. During the second wave, the Central Government transferred another ex-gratia payment of ₹1000 to the bank accounts of informal sector workers. People, who got their e-Shram card in the month of December 2021, got their first payment of ₹1000 in their accounts. This benefit was only extended to those who had access to an e-Shram card. Not having an e-Shram card due to lack of information, official

Table 15.7 Responses on outreach of public support

<i>Variables</i>	<i>1st wave</i>	<i>%</i>	<i>2nd wave</i>	<i>%</i>
Those who believe the policy response through food and cash transfers for low-income households improved relative to the early phase of lockdown	53	73.6	72	100.0
Those who believe the health communication strategy of the government was effective in sustaining social distancing and hygiene practices	71	98.6	72	100.0
Those who believe the lockdown increased pre-existing social stigma	41	56.9	66	91.6
Received medical help from the government	5	6.9	45	62.5
Total	72	100.0	72	100.0

Source COVID-19 survey, 2020–2021

Table 15.8 Outreach of public rationing support

	<i>No. of responses</i>	<i>Frequency</i>
Those who received food rations during the lockdowns	66	91.67
How they got their rations		
Through ration card	59	89.39
Without ration card	2	3.03
From other sources	4	6.06
From social workers	5	7.58
Those who felt the rations they got were sufficient?	40	60.61

Source COVID-19 survey, 2020–2021

lethargy in promoting this scheme among its potential beneficiaries, and corruption, became a bottleneck to accessing these cash transfers.²

In the opinion of the respondents, the first lockdown was more challenging in terms of employment, access to food, money and health facilities because of the severity with which it was enforced and the ambiguity associated with its duration—stretching from 1 day (22 March

² While many of those who are eligible for cash transfers have remained deprived of them because of administrative bottlenecks, persistent corruption has resulted in those who are economically well-above the class for which this scheme is meant getting the benefits of the scheme.

2020) to 3 months. This left them with not enough time to make alternative arrangements or accumulate resources and provisions needed for their survival. According to the respondents, although the second lockdown was also not easy to sustain as they lost their employment, they somehow managed to accumulate some money and food offered by the government and their employers to sustain themselves.

For the respondents, one of their main concerns has been the education of their children. Many had to withdraw their children from school as they were unable to pay school fees and buy books for them. Even in cases where the parents could pay school fees for online classes, they mentioned that they lacked the requisite smartphones or tablets with internet access to give their children for such classes and the environment at home did not allow or encourage children to focus on their studies. Consequently, most respondents mentioned that their children have forgotten almost everything they were taught in school.

The challenge of taking care of children staying at home only added to the additional burden of unpaid care work that these female domestic workers were faced with during the pandemic. As mentioned earlier, one of the worst outcomes of the pandemic for these women has been the rise in gender inequality in the household setting in the form of increased unpaid care work and increased domestic violence.

After the lockdowns ended, domestic workers reported being slowly allowed to resume their earlier jobs with some restrictions. Over one-fifth of workers reported not being allowed to touch household items and having to change their clothes before starting their work.

Respondents were also asked about their source of help during the lockdowns. The responses are summarised in Table 15.9. 58.3% reported that family was the main source of support during the first wave but a reduction in family support was witnessed during the second wave. In 40.2% of the cases, the employer also provided help which increased during the second wave to 58.3%. 16.7% of respondents had to borrow money from moneylenders during the first wave. This figure rose to 91.6% in the second wave which indicates an overwhelming majority of them being further pushed into a debt trap. One-third of the respondents were living in rented accommodation and only a few of them reported that the house owner waived the rent.

The majority of the respondents agreed that while the government did offer help by providing free rations, medical help and cash transfers, the main problem was that in most of the areas where these domestic

Table 15.9 Sources of help during the two waves

<i>Source of help during lockdown</i>	<i>1st wave</i>	<i>%</i>	<i>2nd wave</i>	<i>%</i>
Friends	1	1.39	0	0.0
Family	42	58.33	22	30.5
Employer	29	40.28	42	58.3
Money lender	12	16.67	66	91.6
<i>Did landlords forgo rent?</i>				
Yes	4	5.56	0	0.0
No	20	27.78	24	33.3
Own house	48	66.67	48	61.1
Total	72	100.00	72	100.0

Source COVID-19 survey, 2020–2021

workers are employed, they are still stigmatised as potential spreaders of the COVID-19 virus and thus are deprived of their livelihoods. During the pandemic, they were treated like untouchables ignoring the fact that their job is to help clean the society. What their predicament revealed was the deep-seated and blatant class prejudices that continue to bedevil urban India where poverty is stigmatised and criminalised in middle-class consciousness and the dehumanisation of the urban poor is normalised. The intersectionality of class with other marginalised identities of caste, tribe and gender is also clearly at play in the case of these domestic workers and this would merit deeper analysis which was beyond the scope of this study.

THE WAY FORWARD

Given the vulnerability of paid domestic/informal workers, the government prioritised the provision of monetary and health support to them along with addressing their livelihood needs. While this urgent focus on health, financial support and livelihood protection is indispensable, the government also needs to be sensitive to gender-specific needs such as sanitation and healthcare. Social differences such as gender and attend to their special needs of sanitation and healthcare and evolve social protection schemes that are sensitive and responsive to such differences. Failure to account for such differences in the population of informal workers can only worsen their state of precarity.

The State has a pivotal role to play in instituting effective measures to help domestic workers deal with the catastrophic consequences of the pandemic. However, a combination of loopholes in existing schemes and programmes which make it possible for the employer or the State to abdicate their responsibility for the well-being of the domestic worker and the lack of political will to implement such schemes leave this population chronically underserved by the agencies of the State. A number of legislations exist that ostensibly address the needs of unorganised domestic workers such as the Unorganised Workers' Social Security Act (UWSSA) and the Domestic Workers Welfare Board Act. Yet they fail to provide the impetus for the upliftment of these workers as such legislation absolves employers of any responsibility over their domestic workers' social welfare and instead puts the onus for delivering social security on the State—whose record in this matter is patchy at best (Gothoskar, 2013). Often the State can even be complicit in their exploitation while seeming to serve their interests. For example, in her paper on domestic workers in Pune, Moghe (2013) discusses how the Domestic Workers Welfare Board Act serves as a neo-liberal strategy to create an illusion of serving the benefits of domestic workers without making any substantive improvements to their lives.

In 2010, the National Commission for Women drafted the Domestic Workers Welfare and Social Security Act to shield domestic workers from low wages, long work hours and sexual abuse to no avail. In 2011, the International Labour Organization (ILO) adopted the Domestic Workers Convention no. 189 to ensure dignity and legal protection for the workforce apart from health insurance, minimum wages and an umbrella organisation to protect their rights (Special Correspondent, 2011). Though India voted in favour of the convention, we are yet to endorse it. Subsequently, the government included domestic workers in the Rashtriya Swasthya Bima Yojana, a health insurance scheme providing a cover of ₹30,000, but availing it requires formal registration as a domestic worker. The cumbersome task of registration has discouraged most domestic workers from applying for this scheme. However, with the advent of the COVID-19 pandemic, the government has realised the overwhelming nature of the challenge facing this segment of the population requiring immediate attention. Accordingly, the Central Government started e-Shram cards for unorganised workers to get them registered.

Yet, when it comes to implementing the scheme, the Central Government has pushed the responsibility to the State Governments, and the

State Governments also are not seen to be serious in creating awareness about it among potential beneficiaries. What exacerbates the problem is the absence of data related to the informal sector and more particularly with relation to domestic workers. Unless they register for e-Shram cards, there is no official or legal recognition of them as domestic workers. In the absence of reliable data, this segment of the population becomes invisible to policy-makers and legislators. It is well-known that during the pandemic the threat of contracting the virus and the lockdowns stopped many domestic workers from coming to work. Yet, there is no data on how many employers continued to pay their wages during these idle months other than anecdotal evidence and scattered media coverage.

More than ever before, in the present context of the great suffering caused by the pandemic, it has become important to acknowledge the economic productivity of domestic workers and their rights to a safe and healthy work environment. It would not be wrong to say that domestic workers contribute significantly to the nation's economic development as many families in urban areas especially double-income families with working female members are excessively dependent on this workforce for cleaning, cooking and taking care of the elderly and children in their households (Kumar & Baliyan, 2021). However, it is not just their contribution to the economy but their existence as fellow human beings and as citizens of the nation that should prompt the society and the State to take the responsibility to ensure that domestic workers live dignified lives with social protections and opportunities for growth and development as full and equal citizens. This requires not just enlightened legislation and policies but also the political will backed by a passion for social justice to vigorously implement these provisions.

LIMITATIONS OF THE STUDY

One major limitation of the present study is the small sample size drawn from an urban location that covers a relatively small geographical area. In addition, we are at the limit of statistical significance for the calculation of livelihood struggles. Therefore, our results must be taken very cautiously. However, we believe that the results obtained are relevant since they might be representative of many similar workforces living in other urban areas, and only little information is available on this issue as yet.

CONCLUSION

The response to the first and second waves of the COVID-19 pandemic raises a few important considerations. The pandemic has brought to light the existence of grave social injustices in contemporary society and the consequent need for ambitious plans to reimagine and rebuild health, social and economic systems so that they leave no one behind (United Nations, 2020).

Such an ambitious undertaking urgently requires the designing and application of new legislation with a focus on the best strategies for ensuring safe workplaces and decent work. Affirmative and comprehensive policy measures are required by state governments in India to address the increasing marginalisation and vulnerabilities of these domestic workers.

This process of drafting policies and legislation to address developmental needs especially in times of a national crisis must rise above the self-centred considerations that drive partisan politics. The detrimental impact of such petty politics was evident in Uttar Pradesh just prior to the second wave of the pandemic when due to political considerations political rallies were allowed to be held despite the swelling tide of COVID-19 cases. One must weigh the cost of lives being lost during such exigencies against the cost of suspending State and local-body elections. Similarly, the criticism of India's initiative of providing vaccines to developing countries in need prior to the second wave also derives from a similar tendency to engage in petty politics of seeking advantage by embarrassing the government. It must be recognised that in times of natural calamity, no country or individual can afford to be self-centred and withhold support from the most deprived and marginalised.

India must not lose this opportunity to redesign national plans to prepare for future pandemics and also for further waves of this pandemic. For this, India requires data-driven, decentralised decision-making and a well-coordinated containment strategy (Reimagining India's Health System, 2021). It is the recommendation of this paper that all these aspects be incorporated in a long-term national plan in the form of a planning and guiding document for natural calamities, including in scenarios where multiple disasters occur concurrently such as, for example, pandemics arising alongside cyclones or floods.

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Impacts of COVID-19 on Public Health in Urban Slums in India and Lessons for the Future

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BACKGROUND

The COVID-19 pandemic-induced lockdowns in 2020 and 2021 severely impacted public health services and exposed the underlying weaknesses of India's public healthcare system. As India's not-so-robust healthcare system tried to deal with the challenge of containing the Novel Coronavirus (SARS-CoV-2), many essential services like maternal and child healthcare, immunization, tuberculosis case detection and treatment and family planning (FP) were neglected. In addition to this, those with chronic or acute ailments faced great difficulties in getting the medical attention they needed both due to the curbs on mobility during the lockdowns which limited access to doctors and hospitals and the

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massive diversion of the resources of hospitals and medical and healthcare personnel to dealing with COVID-related cases. During the peak of the second wave of the pandemic in India, the enormous number of COVID patients needing hospitalization so overwhelmed the healthcare system in the country that it made it impossible for those needing in-patient treatment in hospitals on account of other medical conditions from receiving the attention they needed.

The impact of this onslaught on the healthcare system for a period of months resulted in suffering for people across all classes with even the wealthy struggling to find access to medical facilities. However, there is no denying that the worst brunt of this crisis was borne by the urban poor living in slums or informal settlements who both due to poverty and their higher vulnerability to disease have a greater dependence on public health facilities provided by the State. The urban poor in India, as in other developing countries, are characterized by congested, unhygienic and potentially hazardous living conditions. They face financial insecurities due to unstable sources of livelihood. Children in such settings have limited access to educational opportunities. Health facilities are fewer than required and health outreach to slums is insufficient even in non-pandemic times. The incidence of malnutrition and food insecurity is typically high among such populations. Analysis of NFHS 4 data (2015–2016) by wealth quartiles showed that 43% children under 5 years of age in the poorest urban quartile were stunted (short for age) as against 21% in the richest urban quartile. Similarly, in the poorest urban quartile, 40% children under 5 years were underweight for age compared with 19% among the richest urban quartile (Agarwal and Kaushik, 2021). This data brings out the extent to which the urban poor bear the unequal burden of undernutrition.

Slum populations, which constitute about 40% of the population of most of India's cities, faced life-threatening disruptions to essential health services during the pandemic including maternal care, infant and child immunization and healthcare, family planning services, tuberculosis control efforts and the provision of supplementary nutrition through the Integrated Child Development Services (ICDS) and the Mid-day meal programme. Further, owing to their living conditions and lower levels of awareness of, and compliance with, public health protocols they are at greater risk of contracting COVID-19 (as well as other respiratory infections). In most such settlements the reach of healthcare services is insufficient relative to the population. Many slums or informal settlements

that are not recognized as settlements by the State do not receive even this basic level of public health services (Corburn et al., 2020).

The COVID-19 outbreak also had massive ramifications on progress towards the achievement of the Sustainable Development Goal (SDG) 3 which is to “Ensure healthy lives and promote well-being for all at all ages.” The pandemic pushed back decades of progress on global health. The year 2020 saw a global rise in tuberculosis deaths for the first time in a decade, caused by the COVID-19 pandemic, from 1.2 million in 2019 to 1.3 million in 2020. The year 2020 was also to be the envisaged milestone year for the End Tuberculosis Strategy. Yet tuberculosis treatment reached only half of the global target. With respect to neonatal health, 5 million children died before reaching their fifth birthday in 2020 alone, down from 5.9 million in 2015. Almost half of those deaths, 2.4 million, occurred in the first month of life. Globally, it is estimated that 22.7 million children missed vaccination owing to disruptions in immunization services (United Nations Economic and Social Council, 2022). These global statistics establish a further need to understand the impacts of COVID-19 in urban deprived neighbourhoods of India.

This paper discusses findings from a study carried out by the Urban Health Resource Centre (UHRC) in Indore and Agra seeking to understand the impacts of the lockdowns during the pandemic in India on the lives of the urban poor with respect to access to health services and other broader determinants of health and well-being including their livelihoods, food security, nutrition and the education of children. As part of this study, in-person qualitative interviews were conducted with 40 slumdweller and key informant interviews were held with 10 frontline health functionaries in these cities.¹ The paper also draws upon secondary literature and news reports to analyse the public health impacts of the COVID-19 pandemic.

In addition to describing the public health impacts of the lockdowns on slumdweller and enumerating their various coping strategies, this paper suggests certain policy interventions for a more prepared and resilient public health response to similar crises in the future, especially among the most vulnerable segments of the population.

¹ The data from the study was analysed thematically in Atlas TI. When an experience was reported by at least four respondents it was considered a finding.

IMPACT OF LOCKDOWNS ON NON-COVID HEALTHCARE

Among the second-order effects of the COVID-19 pandemic on the public health system in India was that routine healthcare services and the availability of medical care for non-COVID ailments were drastically disrupted. Our study captured the impact of the pandemic on essential processes such as immunization of infants and young children, antenatal care services, maternal care, family planning and the treatment protocols for patients of tuberculosis among slumdwellers.

Immunization of Infants and Young Children

Interviews with frontline health workers revealed supply-side challenges in extending routine immunization services to infants and young children such as administering the three doses of the DPT vaccine (diphtheria, tetanus and pertussis) and two doses of the measles vaccine which must be given in the first two years of life as a key preventive health measure. Failing this, the child runs a high risk of illness, nutritional depletion and death. During the most intense phases of the pandemic, these vaccinations were missed or delayed since most frontline health workers were on COVID-19 duty. The slumdwellers also feared taking their children for immunization owing to fear of them contracting COVID-19. As a result, infants and children missed essential immunization doses. The absence of vaccine protection for childhood infections such as measles, Diphtheria or Rubella depletes the child's nutritional reserves. It leads to the degradation of health and impairs the child's overall development.

Many young children are likely to have contracted measles, and some must have died unaccounted as a measles-related death during the pandemic. In India, among infants (children below 12 months of age), more than 2 children of 100 suspected to have measles die indicating a case fatality rate of > 2 .

The six-monthly vitamin A prophylactic dose was also affected during the pandemic along with infant and child immunization. The country-wide high dose (200,000 IU) six-monthly Vitamin A Supplementation (VAS) programme is operational in India as well as in more than 70 countries around the world and is recognized to be one of the most effective public health interventions ever undertaken (Fawzi, 2006; Wallace, 2012). Owing to the need for improving the coverage of six-monthly administration of VAS In India, a biannual VAS strategy was piloted and

scaled up in India (Vir & Pandey, 2011). Vitamin A deficiency is a known risk factor for measles mortality (Sommer & West, 1996). Routine six-monthly vitamin A supplementation is also thought to decrease measles case fatality; however, the data suggests supplementation may not be as effective in preventing measles mortality as vitamin A administration at the onset of measles (The Vitamin A and Pneumonia Working Group, 1995).

Among the infections covered under India's Universal vaccination programme, measles infection has a high case fatality rate among infants and young children. Measles infections affect a larger proportion of younger children in slums owing to prolonged exposure to infected siblings and small living spaces in slums. Consequently, measles-related mortality is higher among infants and children living in slums. Lack of age-appropriate measles immunization and poor nutritional intake contributing to low immunity worsens the risk of illness and death. Congested living spaces also result in a higher probability of secondary infections among siblings to measles which are usually more severe (Agarwal et al., 2005).

Maternal and Childcare

One of the gravest consequences of the pandemic on public health was in the form of the omission of vital, time-sensitive steps in the processes of maternal and child care. The adverse impact could be seen right from the stage of antenatal care. From late March 2020 till September 2020, most pregnant women in slums missed their regular antenatal checkups and the administration of Iron Folic Acid tablets, calcium supplements and Tetanus Toxoid vaccinations by Auxiliary Nurse Midwives (ANMs) at Anganwadi centres or during outreach sessions elsewhere in the slums. Most ASHA (Accredited Social Health Activist) workers were busy with COVID duties or were inaccessible to the slum dwellers since they themselves feared getting infected. The unavailability of doctors and paramedic personnel at State-run urban health centres also contributed to pregnant women not receiving necessary antenatal checkups. Disruption in optimal functioning of Anganwadi Centres led to pregnant, lactating mother and children under the age of 3 not receiving nutritional supplements.

Owing to the lockdown, Jaya, a 22-year-old expectant mother was not able to receive the second shot of the tetanus toxoid vaccine and her

take-home rations which was a crucial source of supplementary nutrition for her. Her baby did not survive more than a minute after delivery. In another case, 23-year-old Suman who was about to deliver her baby was turned away from two government hospitals. She was in an advanced stage of labour and had to urgently undergo delivery with the help of a local *dai* (mid-wife) since she was bleeding profusely and she had suffered a placental abruption. Her baby had already died in her womb. Suman complained of lower abdominal pain and bleeding after delivery. Her blood test report suggested jaundice (or perhaps some other infection which was not properly diagnosed). She was again denied medical treatment in various hospitals that she approached over the next few days. Eventually the medical staff of a government hospital agreed to admit her and gave her blood transfusion since she had lost a lot of blood. However, Suman passed away as the infection had by then taken its toll.

Most pregnant mothers were not able to register for the Janani Suraksha Yojana (JSY), a Maternity Benefit Scheme of the government from March 2020 till September 2020 which led to them being deprived of the one-time JSY cash benefit to new mothers of Rs. 1000. This financial assistance is intended to enable mothers to consume nutritious food and pay for expenses related to childbirth.

After September 2020 when there was a greater relaxation in COVID restrictions, those serving as ANMs (Auxiliary Nurse Midwives) and ASHA workers started visiting settlements to motivate slum dwellers to ensure that pregnant women received adequate antenatal care. These efforts helped many women and their families overcome their fears and visit hospitals for necessary medical attention. In general, it was observed that during this period families living in slums could not prioritize antenatal care owing to the movement restrictions during the lockdowns and their fears of contracting COVID-19. They focussed instead on the delivery of the child.

In slums, most mothers lack family support in sharp contrast to the presence of the extended family in villages. Many were reduced to a state of powerlessness and hopelessness since they lacked necessary government-issued documents that would establish their identities and domicile (which are necessary to access welfare schemes provided by the State) and they had lost their livelihoods due to COVID-19.

Family planning efforts among the slum dwellers were also disrupted during this period. A technical note prepared by the United Nations Population Fund (UNFPA) estimated that owing to the diversion of

resources and manpower towards measures taken for COVID-19 containment, about 47 million women in 114 low- and middle-income countries, including India, would not have been able to use contraception and this would have resulted in an estimated 7 million unintended pregnancies (UNFPA, 2020). Poor urban women in India have generally been deprived in terms of access to family planning methods and associated health services (Calhoun et al., 2013; Rimal et al., 2015; Speizer et al., 2012). Apart from poverty, regressive gender norms had a role to play in maintaining this deprivation. The COVID-19 lockdowns only exacerbated their plight by placing constraints on their mobility (Krubiner et al., 2021).

In the areas where interviews were carried out, most ASHA workers who were engaged on COVID-19 duty were unavailable to provide oral contraceptive pills and condoms to families. A few ASHA workers interviewed mentioned that they relied on their pre-COVID-19 stock of oral pills during this period and distributed them among some families. Women in the household were unable to leave their homes to purchase oral pills nor could they convey this need to their husbands as they often consumed these pills in secrecy.

Finally, with the disruption of the services of ICDS and Anganwadis during the lockdowns, the take-home rations and cooked meals offered under the supplementary nutrition programmes did not reach their intended beneficiaries including young children, severely malnourished children and pregnant and lactating mothers.

Disruptions in the Treatment Regimen of Tuberculosis (TB)

There has been a major disruption in the treatment regimens for chronic diseases requiring prolonged treatment and close follow-up. One such disease is Tuberculosis (TB). There has been a marked increase in deaths due to TB following the two-year COVID-19 pandemic. India accounted for nearly a third of the 1.48 million people who died of TB worldwide. It is estimated that the number of cases in India rose by 13% compared to the previous year (Nihalani, 2021). According to the World Health Organisation (WHO), TB deaths have increased because of reduced access to care (World Health Organization, 2021). Factors

that contributed to this included late detection owing to delayed testing,² delay in initiating medical treatment and interruptions in the treatment of patients who were already on medication when the pandemic struck.

Loss of Livelihoods

Most informal workers who are inhabitants of slums lost their regular work during the COVID-19 lockdown of 2020. These included factory workers who could not continue their work due to the shutting down of their factories during the lockdowns and domestic workers who were not able to get to work in private residences or were asked not to come by employers who feared contracting the virus from them. In such circumstances, many of the residents in these settlements migrated to their native villages. As Jeevan, a casual worker in Indore put it, “We had no choice but to migrate to our native villages. At least we would not go hungry. In the village, we can work on the farm and earn some money. Here (In Indore), we have to pay rent and with no money or work, it was difficult to survive. We returned to Indore after restrictions were lifted and work was available, albeit sporadically.”

The livelihood of street vendors selling vegetables were slightly less impacted than factory workers. The second national lockdown that was imposed in 2021 following the second wave of the pandemic in India was less rigid and allowed for vegetables (that were categorized as essential items) to be sold. On the other hand, street vendors selling other items such as clothes were adversely affected. Home-based workers could not get work owing to restrictions and substantially reduced demand for products like clothes, pottery items and food items. A few home-based workers engaged in stitching items of clothing could get orders from contractors, stitch from their homes and have the order delivered to the contractor or intermediary from their homes. Other casual workers were mostly out of work during the months of the lockdowns.

Given the uncertainty around their livelihoods and the lack of social protections, slum dwellers who were mostly informal workers found themselves in a highly vulnerable predicament. They either postponed medical care or were forced to borrow money to pay for their medical treatment at private hospitals.

² This is partially owing to the fear of contracting COVID-19.

Food and Nutrition Security

During the COVID-19 lockdowns many informal workers faced food and nutrition insecurity and hunger. Uncertain livelihoods and meagre savings made it difficult for them to purchase even staple food items such as pulses, wheat flour and cooking oil. Many families who were contacted in Indore could not get access to free rations being provided by the government due to not having a food subsidy card (a card which gave them access to highly subsidized or free rations from the Public Distribution System). In the words of Suraj, a casual worker, “We do not have a food subsidy card in Indore. During the lockdown, all my work stopped. I could not even get subsidized grains. My employer helped me by giving me some money and food during the lockdown.”

The Education of Children

The COVID-19 pandemic resulted in the closure of schools for a period of nearly two years. Many children from these settlements subsequently dropped out of school. The incidence of dropping out was most observed among those in grade VIII and above as most young adolescents in the families of informal sector workers had to start contributing to their family income in order to cope with the financial crisis caused by the pandemic. Many parents were open to the idea of re-enrolling their children in schools as and when the pandemic subsided. For those who did not drop out of school, classes were conducted in the online mode. The families of many children faced challenges in this respect since they did not own nor could they afford to buy the needed electronic devices (smartphones, laptops or computers) or internet connections to access online learning. In this regard, Deepa, a street vendor, observed sadly, “My daughter could not pursue her online classes as we did not have a smartphone. I am hoping that the schools start soon so that she does not miss out on her education further.”

From a public health perspective, the interruption of formal in-person education for children for close to two years, has had a profound impact on the physical, mental, social and psychological well-being of the child. In urban deprived slums, children who drop out from school have very little chance of resuming formal education. These children upon reaching adolescence have no choice but to work in the informal sector to contribute to family income, thereby continuing the vicious cycle of

intergenerational poverty. Children excluded from the formal education system largely grow up to be uninformed of important topics concerning health and nutrition. Many children developed psychological problems due to the lack of opportunities to socialize and play with other children and to develop self-confidence.

COPING STRATEGIES

Given the formidable odds that were against them, slumdwellers found various ways of dealing with their health-related challenges.

Maternal, Infant and Child Healthcare

Many women used the services of traditional birth attendants or took the help of their neighbours for delivering their babies at home owing to inaccessible government health facilities. Private nurses who were experienced, although not properly qualified, provided home birth services to a few women in Agra.

Some families opted to get the mother admitted to a private hospital for delivery. For this, they had to borrow money from relatives and neighbours to pay for the high expenses involved. In Indore, for example, Rajni of Ganesh Basti borrowed money from a slum-based women's group mentored by an NGO (Mahila Arogya Samiti as mandated by the National Urban Health Mission) as well as her relatives when she was turned away from a large government hospital. She hurriedly delivered her child in a private hospital. The baby was fortunately healthy. It was observed that families that were aware of the importance of the immunization for children and antenatal care for pregnant mothers took them to private facilities.

Demonstrating a potentially positive facet of urban–rural linkages, families in peri-urban slums of Agra preferred to access geographically proximal rural Block Community Health Centres for antenatal checkups, tetanus toxoid vaccinations and childbirth. During the pandemic, rural health facilities were far more easily accessible and safer owing to the lesser COVID caseload in rural areas.

Livelihoods

Many slumdweller returned to their native villages during the lockdowns as they were uncertain of their future in the city where they faced the high risk of infection and a heavy cost of living. By moving to the village, they were able to eliminate the cost of rent in the city and minimize the cost of the family's food needs. These workers were willing to earn small wages in the villages for whatever daily-wage work they could find.

Those working on jobs such as factory workers and street vendors selling clothes, plastic items and toys shifted to selling food items and vegetables as selling these essential items provided a smaller, yet reasonably certain income during the lockdowns. They used their savings or borrowed money from relatives, neighbours or from community self-help groups to purchase carts to sell these items.

Many of those who worked in factories or as domestic workers engaged in casual labour as soon as restrictions were lifted. Some workers who were completely out of work utilized their meagre savings to survive during the lockdowns.

Food Security

The families that had stored food grains in advance (such as those brought from villages at relatively low cost), were able to rely on this food stock during the period of the lockdowns. In many areas, the elected ward representatives distributed free rations during the lockdowns though not all families of informal workers were their beneficiaries. Some families in dire circumstances had to borrow money from relatives and neighbours to procure grains. Many vulnerable families had to cut down on food intake or eat less nutritious food such as *chapatis* (flat bread) with chutney, peppers and pickle. Families that were able to receive take-home rations from Anganwadi centres or through the mid-day meal scheme found this measure a reprieve during this unprecedented time of crisis. Some families in the slums had started small kitchen gardens where they grew vegetables such as bottle gourd, bitter gourd, sponge gourd, brinjals, tomatoes and pumpkins. They were able to do this with the help of the Urban Health Resource Centre. Not only did their produce from these gardens help them in this time of crisis but they were also able to share some of their vegetables with a few neighbouring families (Agarwal et al., 2021).

Education of Children

Some parents who prioritized education of their children started sending their children to “coaching” institutions in slums as soon as restrictions were lifted to ensure continuity in their education. This became essential given that the long disruption in regular schooling had caused a loss of learning and of essential capabilities such as reading, writing and arithmetic among children. A few families took loans from community savings groups or microfinance institutions to purchase android phones for their children to enable “online” education.

LESSONS FOR THE FUTURE

The COVID-19 pandemic has exposed many of the underlying weaknesses of our existing public health system and it has made us conscious of those segments of the population that are most vulnerable to such a crisis. Learning from the lessons of the pandemic would require a clear-eyed and dispassionate analysis of the loopholes and deficiencies of our public health system.

The pandemic stretched the healthcare system’s capacity to its limits and exposed critical shortages of essential medical equipment and facilities such as hospital beds, oxygen concentrators and life-saving drugs. This crisis and the anticipation of other such pandemics, or other forms of disasters that could almost certainly occur in the future must spur the State and policy implementers on to expeditiously augment the country’s existing healthcare system and make it incrementally more robust. There is a need to set up more Urban Primary Health Centres, maternity care hospitals and second-tier and tertiary-care hospitals in India’s rapidly growing cities. India has only 0.9 hospital beds for every 1000 people and 2–4 doctors for every 1000 people (Housing Research, 2021). In a written response to the Upper House of Parliament (Rajya Sabha), India’s Health Minister Mansukh Mandaviya reported that India has 1.96 nurses per 1000 population (Press Trust of India, 2022). Given these acute shortages of health human resources and hospital beds, there is an urgent need to increase medical facilities and human resources providing medical, nursing and other para-medical and social-work-related services as part of the public healthcare system. Further, there is a need for more regular training and skill upgradation for public healthcare personnel. The government health system should set up emergency (e.g., mobile clinics)

MCH services for future epidemic, disaster and should partner with private doctors/nurses near slums for better outreach of healthcare. (Agarwal et al., 2021) Our findings indicateing reliance of slum dweller's residing in peri-urban slums reliance on Rural healthcare centres. In peri-urban slums These results also point at the need to strengthen rural health infrastructure serving nearby peri-urban slums formally recognized by Govt. despite separate jurisdictions is an approach adaptable in LMIC cities. (Agarwal et al., 2021).

What the findings from our study made clear is that the urban poor in India have unique vulnerabilities and the policies that are drafted for better preparedness for future public health crisis of this kind must account for addressing the interrelated determinants of health and well-being including more and better health facilities, food security, livelihood opportunities and good education for this population. The COVID-19 pandemic has shown the precarious conditions in which the urban poor live, and their great dependence on the services offered by the State and its agencies. Owing to this, and to the fact that the urban poor contributes at low-wages to India's rapidly urbanizing economy, the policies of the State agencies in-charge of health and urban development should prioritize the well-being of this section of the population. The well-being of the urban poor must be a fixed lens through which every public policy and programme implementation prescription in the area of urban public health is viewed.

At a more practical level, this would mean that a substantial proportion of the staff in government hospitals and clinics should be available for routine health services during crises such as the COVID-19 pandemic. Given that the continuation of essential health services is non-negotiable, in times of crisis when there is a shortfall of health personnel, private nurses can be recruited and recent graduates of nursing colleges can be deployed on short-term contracts to maintain the continuity of these services, especially among the vulnerable and the economically deprived.

In terms of implementing the vision of a large-scale expansion of public-health infrastructure in India and ensuring the continuous enhancement in the quality of services with an eye on reaching the most vulnerable segments of the population, the following are a few strategic recommendations.

*Focus on Enhancing Health Infrastructure in Small Cities
with a Population Size of 500,000 to 3 Million*

Small to medium-sized cities in India with a population size of 500,000 to 1 million and 1 million to 3 million are fast-growing hubs of commercial activities, witnessing fast-paced infrastructure development.³ These cities witness rapid in-migration from neighbouring rural areas and smaller cities and towns. These categories of cities/urban agglomerations require greater focus in building public healthcare systems as compared to megacities, which have traditionally been the focus of research and investment. Further, emphasis needs to be placed on newly developing settlements on the peripheries of cities where most recent migrants choose to dwell (Agarwal, 2016).

Expeditious implementation of the National Urban Health Mission (NUHM) is needed, alongside strengthening of the urban component of the Integrated Child Development Services (ICDS) programme. Particularly necessary are: outreach health services in informal settlements; more Accredited Social Health Activists in informal settlements (to reach one per 200 to 500 households); and an overall increase in primary, secondary and tertiary healthcare in cities. Setting up additional Anganwadi centres or miniAnganwadi centres (a mini-AWC serves 150 to 400 people) in informal settlements would greatly improve health, nutrition and well-being outreach services for informal settlements dwellers and informal workers. For newer settlers and less-experienced families, knowledge of outreach services and cost-effective government and charitable medical facilities can help improve healthcare access.

To reverse the loss in Tuberculosis (TB) care, aggressive efforts towards improving case detection are required urgently (Ruhwald et al., 2021). Equally crucial is the need to get those detected TB patients to start on their treatments and to support those whose treatment was interrupted to get back to their regular treatment regimen.

ensure that essential healthcare services in cities reach the most vulnerable and marginalized, spatial mapping tools (hand-drawn, computer-aided or geo-referenced GIS maps) can be used to better locate and reach

³ Among the fastest growing urban agglomerations in Africa and Asia are small and intermediate cities of between 500,000 and 1 million inhabitants (Population Division, 2018).

out to those who are often excluded from access to such services such as inhabitants of slums, informal settlements and migrant populations (located at brick-kilns and construction sites) (Vlahov et al., 2011).

Address the Social Determinants of Health Through Coordinated Interventions

There are a number of different sectors and avenues through which strategic interventions can be made to positively influence the health of disadvantaged urban populations. Insufficient coordination among departments of health/public health, municipal bodies, and other departments/agencies responsible for the provision of physical, environmental and infrastructure services; for enhancing nutrition and food security; poverty alleviation and livelihood improvement programmes hinders the reach of services to the urban poor. Weak coordination among different units and offices of the health department such as the units responsible for maternal and child healthcare, nutrition promotion and undernutrition treatment, adolescent health, reproductive health and family planning, vector-borne diseases, tuberculosis identification and treatment, also contributes to poor access of health services (Agarwal et al., 2016). There is also a clear need to address gender inequality and social ills such as alcoholism and domestic violence; through fostering the human dignity and the social status of the marginalized, and building social capital among slum communities along with associated efforts to improve mechanisms of governance in such neighbourhoods. While these interventions are initiated from distinct sectors and agencies, they must be implemented in a coordinated manner to result in meaningful change.

Greater clarity of roles, and active coordination among the department of health/public health, municipal bodies, the department of women and child development and departments/agencies responsible for nutrition, food subsidy and environment improvement services in a city have the potential to improve the reach of such essential services to urban slums and to other vulnerable populations (Agarwal et al., 2016).

In terms of addressing the immediate socio-economic crisis faced by these groups, some possible interventions can include the creation of an employment guarantee programme for the urban poor to address the potential loss of livelihoods and income. In the area of education, onsite, decentralized classes in settlements where there are open spaces is one way to consider extending education to deprived children during future

shocks of this kind. Community-level structures such as self-help groups or microfinancing groups can be encouraged to expand their mandate to oversee provision of such decentralized forms of education to children in the community when schools need to be shut down. Indeed, the strengthening of community-level structures will be a key element in a strategy to unlock the people's sense of agency in such slum areas to take charge of their own development and learn to collaborate to overcome the collective challenges that they face.

Enhancing the Capacities of Communities

Strengthening community capability among the urban poor has immense potential to further their health and well-being. The UHRC has focussed much of its efforts on strengthening confidence and self-reliance of slum communities through enhancing knowledge and negotiation skills among women's groups in these slums (described as Mahila Arogya Samitis or "women's health groups" in National Urban Health Mission) and building incrementally strong linkages and partnerships between these women's groups and government bodies/departments (Agarwal et al., 2022) particularly in its flagship programmes in Indore and Agra. These partnerships are being taken forward encouraging perseverance among these grassroots civil society groups in slums to engage with government officials, municipal corporations, elected ward representatives, private, charitable health care providers, individual doctors and other NGO representatives. The capability enhancement and social cohesion fostered in the community through the slum-level women's groups helps the community to gradually overcome its lack of hope, sense of exclusion and voicelessness.

Empowered slum communities can assist providers ensure better access and improved supply of services. Slum women can be trained to support others in ante-natal care, assist in providing neonatal care and create a demand for services through individual and group counselling. Trained and empowered women can also facilitate the holding of immunization and antenatal care camps and motivate the community to attend these camps thereby enhancing utilization of the available services (Agarwal, 2007).

Health education and outreach programmes are crucial in slum communities because they help raise consciousness within the population about their need for healthcare services. The more communities

know about which health services are available and are relevant to their needs, the more they will seek out these services. Non-governmental organizations such as UHRC (in Indore and Agra), Society for Nutrition Education and Health Action (SNEHA) (in Mumbai) and Suraksha (in Bangalore) have been doing much work in this regard by mobilizing slum communities to provide a link between the community and service providers and to generate awareness and demand for health services in underserved communities.

Finally, partnership of the communities with grassroot-level NGOs and government departments will be vital in ensuring access to services linked to health, nutrition, income insecurity and education of children. Eventually, the success of all development programmes meant for these populations will depend on the extent to which they have built their own capacities to resolve their challenges. Experience has shown that the most conducive condition for such empowerment of the urban poor to happen is a collaborative and mutually supportive relationship between the community, NGOs or civil society organizations and the State and its agencies.

CONCLUSION

The Informal sector in India contributes 70–75% of the country's GDP (Capital Market, 2014). Although India's cities collectively account for less than one-third of the total population, their share in the country's GDP is more than three-fourths (Shaban et al., 2020). A better-nourished and healthier workforce is in the interest of India's economic growth. With increasing levels of urbanization and the growth of cities, the contribution of urban workers to the informal economy is crucial and is likely to increase.

As a part of the modernization push, there is less tolerance than before for informal settlements and livelihoods in urban areas. Today, with the move towards broad boulevards, mass transport systems and modern shopping malls, informal settlements are getting compressed into congested living with far fewer services than the rest of the city. Informal livelihoods are becoming more uncertain and less equal leading to increased vulnerability among those employed in this sector. The COVID-19 pandemic further accentuated these vulnerabilities.

It is crucial to recognize the multiple gendered burdens of urban poor women. Urban poor women confront multiple burdens arising out of

uncertain livelihoods, minimal family support, childcare and domestic chores. Their challenges need to be recognized and should be prioritized in extending health and nutrition services.

There are positive examples of a few Indian States that have introduced reforms in the Public Distribution System (PDS), such as expanding coverage, increasing the number of Fair Price Shops, reducing prices, having uniform or slightly variable prices for different categories of households or cardholders, using real-time monitoring, offering toll-free complaint numbers and enhancing transparency of the supply chain. Several studies suggest these reforms have led to better implementation of the PDS (Himanshu & Sen, 2011, Joshi et al., 2016; Khera, 2011). Several states in India, including Tamil Nadu, Telangana, Himachal Pradesh and Odisha, have universalized informal workers' access to grains through the PDS. Under Tamil Nadu's universal PDS system, for instance, each family below the poverty line is entitled to 20 kg of rice at a highly subsidized price—and families decide for themselves whether they qualify. The State Government decided on this universal coverage, acknowledging that effective targeting of poor families was administratively complex, and there was a real risk of the people most in need of food security being left out (Vydhanathan & Radhakrishnan, 2016). Similarly, there is evidence from the famine-prone Koraput-Bolangir-Kalahandi region of Odisha that the caloric intake and diet-quality improved after PDS was universalized (Rahman, 2016).

There is an urgent need to prioritize the urban poor in all forms of policy implementation and practice. India is fortunate to have many well-written policies catering to urban health and well-being such as the National Urban Health Mission (NUHM), Integrated Child Development Services (ICDS) and National Food Security Act (NFSA), 2013. Lessons learnt from the COVID-19 pandemic are vital in providing impetus to translate these policies into action and work towards the well-being of this economically underprivileged segment of the population.

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Whose Knowledge Makes a City Smart? Exploring Conceptions of the Role of Knowledge in Urban Policy in Indore, India

Caroline E. Fazli

INTRODUCTION

The nationwide lockdown in India that began in March 2020, in response to the Covid-19 pandemic, led to the return of millions of migrants from cities to their home villages. The hardships encountered by these reverse migrants on the road home opened the eyes of many to the challenges faced by urban informal sector workers, who play such a key role in making Indian cities run. The issue was not simply a short-term one of migrants needing resources to be able to travel, but was an indication of a more systemic need to consider questions around the agency of migrants and informal settlement dwellers in urban development and policy.

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At the same time, the Smart Cities Mission (SCM) introduced by the Government of India in 2015 has marked a significant change in thought and discourse on urban development in India and in Indore, one of the first cities selected under the Mission.

A great deal of public discussion has been taking place regarding what it means to be a Smart City. Efforts have been made to incorporate citizen participation and inclusivity explicitly into the SCM's conception of smart urbanism. This presents an opportunity to examine more closely how this concern for participation and inclusion is being conceptualized and implemented. What are the inherited premises about desirable urban development and smart urbanism that might be implicitly influencing conceptions of the Smart City? What role do these assume for dwellers in informal settlements? What further insights into possible urban futures can be gained by taking into account the perspectives, culture and values of people living in informal settlements?

As a way of providing context, this paper will trace the history of urban development policies and plans in India, with a focus on those policies that had greater influence on Indore, culminating with the recent introduction of the SCM. Theory on the role of ideas, along with institutions, in shaping policy, will be drawn on to highlight ideas around knowledge that have informed the SCM in India since its inception in 2015. In light of theory on alternative smart urbanism and the findings of a study carried out in these same two informal settlements by the Bahá'í Chair for Studies in Development (BCSD), the paper will then explore some of the potential contributions to visions of urban wellbeing that residents have to offer, based on their knowledge systems.

THEORETICAL FRAMEWORK

The trajectory of urban development in India, as traced in the following paper, has been shaped significantly by the macro political-economic processes predominating in India at different moments in history. First, the political economy of colonialism, then post-independence Nehruvian socialism, then more recently, liberalization. Each of these periods entailed changes to social, economic and political life that were driven by certain core ideas, assumptions and values, and embodied in urban policy and ultimately, in the form of the city itself. During each of these periods, India's cities have swelled even larger, with an urban population in 2019

of over 460 million residents—more than 33% of the total population of the country—of whom one quarter live in slums (Bholey, 2019, p. 119).

Historical institutionalism is a theoretical perspective that looks at the way institutions create constraints and opportunities for policy change over time (Béland, 2005; Immergut, 1998; Skocpol, 1992; Sorensen, 2015; Steinmo et al., 2002). A strand of thinking has emerged within historical institutionalism that examines how ideas, along with institutions, have shaped policy (Béland et al., 2016; Campbell, 2004; Holler, 2017). The role of ideas can take different forms, including policy paradigms, policy frames and agenda setting. Béland (2005) describes how policy alternatives “seeking the attention of policy-makers” are “rooted in policy paradigms (i.e. coherent sets of principles and causal beliefs) that constitute ‘road maps’”, which are drawn upon in “constructing frames aimed at convincing the population to support the policy alternatives they put forward” (pp. 2–3). Ideological frames are, in this typology, “the discourse surrounding debated alternatives” (Béland, 2005, p. 3). Policy paradigms are a “set of structured assumptions about existing policy problems and the instruments capable of solving them” (Béland, 2016, p. 4). Hall (1993) describes how the paradigm specifies the ideas and standards used, and the very problem that is supposed to be addressed by the policy. The framework of ideas and standards of the paradigm “is embedded in the very terminology through which policymakers communicate about their work, and it is influential precisely because so much of it is taken for granted and unamenable to scrutiny” (Hall, 1993, p. 297). A growing literature exists on the role of paradigms in social policy (Béland, 2005; Daigneault, 2014; Ferge, 1997; Hogan & Howlett, 2015; Holler, 2017).

With this background, the following analysis will seek to set out the context for the emergence of the SCM by very broadly tracing changes in urban development policies in India over time, with reference to the way they appear to reflect a larger paradigm of beliefs and assumptions. The paradigms drawn upon could include concepts, beliefs and values concerning essential relationships that make up society, and those concerning what constitutes progress and the good life—which have a bearing on how the problems of urban development are framed. Clearly, a noticeable change can be discerned in the way the individual is thought to relate to the community, to institutions, and to nature from the Nehruvian socialist period to the post-liberalization period, for example. A change in paradigm occurred more broadly in the socio-economic

system. Notions about human nature are embedded in the paradigm—for instance, the notion of the individual as a rational self-interested actor. The paradigm includes, among other things, assumptions about who the poor are and how the state should relate to them, about the role of cooperation and competition in society, about how social change happens and about what development means.

Examining paradigm change so broadly across such a large time period (from the early twentieth century to the present) is clearly too vast for a short paper. Hence, I will focus more on one city—Indore, India—and on one element of the changing paradigm, which is the notions surrounding knowledge in urban development. In this paper, I will touch on notions about knowledge that appear to be assumed in the paradigm, which is part of a larger constellation of concepts and values in each historical period. These notions are closely related to questions around participation which are bound up with the question of who generates knowledge and whose knowledge counts. The main focus of analysis of these conceptions of knowledge will be the period of the emergence of the SCM in Indore. As the word ‘smart’ itself references ideas about intelligence, it points to the significance of analysing what assumptions and beliefs around knowledge are bound up with the paradigm in which it operates. Recent scholarship on alternative smart urbanism has started to question some of assumptions about knowledge that appear to be embedded in the prevalent global paradigm of smart urbanism (Amin, 2016; Ghosh & Arora, 2019; McFarlane & Söderström, 2017; Nam & Pardo, 2011; Saunders & Baeck, 2015). This opens up space to consider what a people-centred smart urbanism should entail. In this light, the paper will address the question of what role the knowledge possessed by communities in urban informal settlements can play in contributing to the vision for the development of the city. The paper will include findings from a BCSD study in two informal settlements in Indore that contain examples of the wisdom and knowledge possessed by such communities that can potentially contribute to greater urban wellbeing.

Changes in Urban Development Paradigms in India: From the Early Twentieth Century to the Inception of the Smart Cities Mission

In order to provide context for the interpretive analysis of the SCM in Indore, the following sections provide a brief chronology of how ideas and paradigms of urban development changed in each era of India’s

history, alongside India's successive plans and larger macro-level changes in political economy. Highlights of how these changes affected urban development in Indore in each period are also noted, as well as what changes have been experienced in the two informal settlements in which BCSD carried out research in 2018.

The City of Indore Under the Holkar Princely State (Early Twentieth Century–1947)

In twentieth-century colonial India, Indore was a British protectorate and the capital of the princely state ruled by the Holkar dynasty. The city had a population of less than 100,000 people living across 5 square miles, centring around the Holkars' residences (Meller, 1990, p. 177). In the present day, these 5 square miles have largely come to be part of the 'old city' of Indore, which contains many of the original structures from the Holkar era, woven in a maze of narrow lanes along the Khan and Saraswati rivers. In the early 1900s, Indore was developing as a centre for the cotton industry, attracting migrant mill workers, and it was also one of the largest trading centres of central India for opium and grain. As a consequence of the large grain bazaars, the city struggled with rat infestation and became one of the worst affected cities in India during the plague. Despite being located at the confluence of two rivers, the city faced dire water shortage, even after large amounts were spent constructing poorly located reservoirs planned by western engineers (Meller, 1990, p. 177).

Urban Planning in Early Twentieth Century Indore: Notions of Knowledge and Power Shaping Policy and Urban Space

Under British colonial rule, cities in India were growing, albeit under an overarching logic that gave priority to generating revenue for—and consolidating the power of—the British Raj. British city planning in India tended to focus on creating wide roads, slum clearance, expensive sewage systems and centralized planning by professional engineers. Major cities like Bombay and Calcutta were developed as railheads and sites for the export of raw materials and import of British finished goods. White British people took up residence in separate 'cantonment' areas in the major cities where they could live apart from the native population but soon they realized to ensure their own health they would also need to look into public health of the growing urban masses. Thus measures were taken for provision of piped water, underground sewerage and drainage systems (Spodek, 2013).

Recovering the Holkar-Geddesian Legacy in Indore

In Indore, what occurred was somewhat different, as the Holkar rulers recruited the heterodox-thinking planner, Patrick Geddes. Geddes was a Scottish, anti-colonial zoologist-turned-city planner who prepared the first master plan for Indore. The plan took a more holistic approach, focusing on the culture and participation of the people rather than top-down zoning. Geddes' work began when the city was suffering from one of the worst outbreaks of the plague, so his first objective was to address the question of public health. Rather than advocating slum clearance, he proposed a number of approaches to involving the population in improving their localities. Aside from planning for consolidation of the grain markets and the introduction of cats to catch rats, his proposals involved very little demolition. As part of this plan, residents of the old quarters were inspired to clean, pave and repair their streets in preparation for the Diwali festival and to create gardens and open spaces at every corner. Geddes strove to maintain the connection between workers and the countryside from which they had migrated through low-density housing with ample gardens. The gardens were to be laid out in such a way in relation to the drainage that they would serve as means of biological sewage disposal, using carefully chosen combinations of local plants that would be appropriate for this purpose and for maintaining soil health. This would also help change the role of sweepers—considered the lowest on the caste hierarchy—into those respected as gardeners. City-wide efforts to clean the slums were initiated in 1917, with the promise that a fantastic Diwali procession would travel through the best-cleaned areas. That year, thousands of cartloads of refuse were removed by residents as part of their cleaning efforts. At Diwali, a colourful procession headed by a white elephant wended its way through the cleaned streets of the city, culminating in the burning of a 'plague rat' effigy in a huge bonfire and a fireworks display. The excitement generated by these efforts, using the local cultural idiom, mobilized the entire population in improving their settlements. This practice continued well into the 1920s (Meller, 1990, p. 181).

Geddes advocated for the creation of low-cost housing in existing informal settlements using reinforced traditional and recycled materials rather than relying on expensive concrete as had been done in the construction of the unsightly 'chawls' (tenements) for Mumbai mill workers, still standing today. To Geddes, it was a mistake to undertake sweeping slum clearances in the name of sanitation and order defined

in terms of fitting a regular grid of straight roads. He felt that the gridiron-planned city forced slum clearance and relocation of working-class populations to the periphery, creating standardized semi-slums which had more social problems stemming from the destruction of a sense of community and increase in isolationism and individualism. He created a scenic road following the course of the river rather than relying solely on straight, grid-like roads. Seeing urban development as an evolutionary process that must take into account the interrelatedness of life in the city, Geddes was cautious about sudden, sweeping changes. He saw all life forms as part of a web of life which are organically linked in relationships of mutual influence; rather than being mechanical parts that can be planned for in a pre-determined way, the city needed to be seen as and planned for like an organism which has emergent properties. The planner was like a gardener, who would try to understand the existing order and logic of the city and might prune certain sections of it in order to encourage life processes, and that too through cooperation and persuasion, not by force (Visvanathan, 2001).

Although many of Geddes' plans for Indore were never translated into reality, some of his ideas are being revisited now by scholars seeking inspiration for a future vision for Indian cities (Echanove, 2013; Young & Clavel, 2017). His integration of place, work and folk, integration of disciplines across the natural and social sciences, bringing together of the material and spiritual dimensions of the life of populations, valuing local knowledge and harmonizing it with science—these are all ways of envisioning urban development that empowers ordinary people and their knowledge.

The Post-Independence Period Until Liberalization (1947–1991)

After India gained independence in 1947, it pursued a path of development heavily influenced by Nehruvian socialism. The principles of national unity, parliamentary democracy, industrialization, socialism, development of a scientific temper and non-alignment were pursued under the strong central planning apparatus of the national government (Parekh, 1991). Following Partition, an influx of Hindu and Sikh refugees from the newly created Pakistan into India—including Indore—led to urban growth and even the creation of new towns in India (Shaw, 2009). The focus on industrialization also created population growth in areas in and around cities with concentrations of industry. Town planning in India immediately after independence was characterized by modernism in the early

decades, as modernism in architecture as well as planning was seen as a revolutionary break from the colonial past. Although a number of new institutions and agencies for urban development were created during the first few Five-Year Plans (economic plans created at the national level under the Planning Commission), an aspiration towards the Gandhian ideal of village development and self-sufficiency resulted in some reluctance to focus on urban needs in policy and a tendency to lack vision and simply respond to the needs of cities as they emerged (Bholey, 2019, p. 124).

The 3rd Five-Year Plan (1961–1966) is regarded as a turning point in urban planning in India, as it more specifically addressed the importance of cities in balanced regional development and mandated the preparation of master plans for cities (Bhagat, 2014, p. 5). The majority of states in India introduced legislation modelled on British town planning practices during this plan. By the 7th Plan (1985–1990), due to slow economic growth and host of other factors, initial efforts to liberalize India's economy began. With crisis precipitated by lack of foreign exchange reserves, major steps were taken from 1991 onwards to introduce a whole host of policies aimed at liberalisation, privatization and globalization. With the Soviet Union collapsing, China introducing market-friendly reforms, and the Western world in the afterglow of the Reagan-Thatcher era, liberalisation was the predominant idea of the age.

Urban Development in Indore Between Independence and Liberalization (1947–1991), with Reference to Kabutar Khana and North Toda Settlements

Indore was not a metro city or a capital city, so it was comparatively more neglected in planning during this era and did not receive funds under plans that targeted metro cities. The population of the city doubled between 1971 and 1991, while the slum population quadrupled during the same period (Bhat et al., 2012, p. 19).

Elderly residents of Kabutar Khana and North Toda—two informal settlements in the old city of Indore—described how the land by the Saraswati and Khan Rivers started being occupied by increasing numbers of migrants from the late 1970s onwards (Institute for Studies in Global Prosperity [ISGP] & Bahá'í Chair for Studies in Development [BCSD], 2021). The proximity of this location to the centre of the city and its markets made it near to work opportunities. The reason this land was available was because it was partly serving as the floodplain of the Khan

and Saraswati Rivers, which would flood in the monsoon season and recede other times of the year, so this section of land had not been developed and was, of course, flood prone. But for desperate migrants seeking to eke out a livelihood in the city, the threat of seasonal flooding was less a problem than the advantage of living near a source of water that could be used for washing and bathing needs free of charge (ISGP & BCSD, 2021, p. 10). In 1984, squatters in these areas were given tenure rights (or *patta*) under the Madhya Pradesh Act No. 15, which was to protect them from eviction (Ansari, 2000). The population of these informal settlements continued to grow in the 1980s alongside increase in river pollution, such that the water, which in the 1970s residents remember as having been drinkable, gradually became filled with sewage and industrial effluents, creating health hazards for those living along its banks (ISGP & BCSD, 2021, p. 11).

Post-Liberalization to Smart Cities Mission (1991–2014)

After 1991, India's economic policy became more market-oriented. Policy changes were initially made as part of the structural adjustment conditions laid out by the World Bank and the International Monetary Fund in order for India to qualify for a bailout (Upadhyay, 2000, p. 106). Recommendations for India included “a reduction in public investment and expenditure,” a “massive privatization of major national industries” and a “decline in the economic role of the public sector” (Upadhyay, 2000, p. 106).

In the early 1990s, in terms of urban policy, space was created for the private sector entry into housing and real estate in urban areas (Bholey, 2019, p. 124). A constitutional amendment was adopted during the 8th Five-Year Plan (1992–1997) that allowed for the election of Urban Local Bodies, decentralizing decisions about urbanization and urban finance. In the 9th Five-Year Plan (1997–2002), focus was on “growth with social justice and equity” (Bholey, 2019, p. 124). Efforts were made to find ways for Urban Local Bodies to gain greater fiscal autonomy and supplement the funds available to them by accessing the capital market. Priority was given to creating employment, making affordable housing available, and developing urban infrastructure such as roads and mass transit, in which 100% foreign direct investment was allowed for the first time (Bholey, 2019).

During the 10th Five-Year Plan (2002–2007), the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched. This

included a Basic Services for Urban Poor (BSUP) program and an Integrated Housing and Slum Development Program (IHSDP), which continued the national focus on “growth with social justice and equity” (Bholey, 2019, p. 125). IHSDP focussed on promoting integrated development of slums through provision of basic services, shelter and civic amenities. These schemes continued into the 11th Five-Year Plan (2007–2012) and the Rajiv Awas Yojana (RAY) was added in 2011. RAY aimed to make cities slum-free by improving conditions in existing informal settlements and preventing the creation of new slums. This was mainly achieved through providing home ownership, along with land title and access to basic amenities, to slum dwellers at a low cost (Kundu, 2013, p. 15).

In terms of what actually happened in practice, JNNURM and RAY were not implemented as planned. Haphazard growth in peri-urban areas continued and many challenges were faced in the provision of services to the urban poor (Bholey, 2019, p. 125). According to Kundu (2013), the design of RAY betrayed a “big-city bias to attract global capital” (p. 15). As municipalities were required to contribute a share of resources to access central government funds under RAY, they favoured a public–private partnership model of fundraising. Municipalities tried to shift slum dwellers off of high-value land in the city centre to peripheries where land is cheaper, in order to convert central land to a source of revenue by creating space for apartments and commercial complexes to serve the upper and middle classes (Kundu, 2013, p. 17). The idea of in-situ slum redevelopment seemed promising in comparison to previous approaches that hinged on displacement and demolition of slums. The actual implementation of RAY, however, ended up being more of a continuation of displacement of the poor, this time following the dictates of the market (Roy, 2014).

Liberalization has had an array of effects on urban development over time, which are still being understood. For one, Doshi (2019) points out that liberalization primarily aided growth in the service economy while undercutting the informal employment, domestic work, small-scale agriculture and cottage industries in which the majority of urban poor are engaged (p. 692). This pattern of development he explains has spurred Gross Domestic Product (GDP) growth without creating much increase in employment. Liberalization has actuated growing struggles over urban space, as demand for spaces to be used by the increasingly upper and

middle classes for offices, residences and leisure that appeal to ‘world-class’ urban aesthetics and consumption desires comes up against the needs of the growing number of working-class people who dwell in urban informal settlements (Doshi, 2019, p. 692). Roy (2009) describes the urban crisis as “marked by the lack of adequate infrastructure and growth management as well as by sharp social divisions that are starkly etched in a landscape of bourgeois enclaves and slums” (p. 76).

The massive changes underway in India’s political and economic life also led to a rise in communal politics as different groups struggled for power and sought to redefine national identity in the changing landscape. Communal riots occurred in cities across India in 1992–1993 (Doshi, 2019; Puniyani, 2005). Groups residing in informal settlements became increasingly marginalized in the face of what has been called the ‘bourgeois environmentalism’ of the growing middle classes: in the name of having a ‘clean, green’ city, the working class became increasingly shut out from the urban spaces where they work over concerns about aesthetics, leisure, safety and health (Baviskar, 2018, p. 200). Dhananka (2016) recounts how even the formal spaces for citizen participation created under JNNURM could only be meaningfully accessed by those with technical expertise and English-language fluency, and thus the ‘participation’ was often carried out on behalf of slum residents by elite Non-Governmental Organisations (p. 61). Thus, the urbanization process post-liberalization sometimes deepened inequalities in the city, prioritizing global knowledge over the knowledge of the masses of urban poor.

Post-Liberalization Urban Development in Indore (1991–2015)

The period leading up to and after liberalization saw the increasing involvement of international, civil society and private sector actors, along with the urban local bodies in developing and implementing plans for urban development in Indore. One major example of such involvement was the Indore Habitat Improvement Project (IHIP) carried out from 1990 to 1997. IHIP involved \$15 million in support from the U.K. Overseas Development Administration (ODA) for infrastructural improvements in slums (Chu, 2018, p. 1770; Verma, 2000). On the face of it, IHIP was very innovative in its approach. It employed a new approach called ‘slum networking’ that took a holistic approach to community-based sanitation and environmental improvement alongside

infrastructure provision, viewing slums as integral parts of the city rather than a problem (Verma, 2000). Harkening back to Geddes' plan of the early twentieth century, it sought to create a relationship between the slums and the natural drainage channels of the city in order to cut costs and maintenance and enable community control (Verma, 2000).

IHIP covered 183 slums in Indore with a population of some 400,000 people (Verma, 2000, p. 92). It involved construction of individual toilets in the slums connected to underground sewers, individual piped water supply, and the use of roads as storm water drains along with soft landscaping. The underground sewage lines were designed to maximize gravity flow to avoid the cost of pumping. Households were supposed to make their own connections to discharge sewage and sullage from toilets, kitchens and bathrooms into the drainage underground. The surface drainage, then, which was only supposed to be for stormwater, was to flow along the roads in the slums, which were linked together for this purpose and were expected to also reduce traffic on the main roads of the city. River cleaning efforts were undertaken together with landscaping along the riverbanks near the slums including restoration of the temples and steps along the riverbanks. Bund walls were installed in the riverbed to create a lake during summers, and fountains and lights installed to create an attractive area that was supposed to attract recreational facilities and commercial investment (Verma, 2000, p. 92).

Although IHIP won many awards (Verma, 2000, p. 91), the improvements it brought about could not be sustained. An impact assessment study carried out under ODA found that limited coverage of households was achieved in water and toilet connections (Verma, 2000). Those toilets that did get constructed were connected to sewage lines without having water supply for flushing. The underground sewage lines became choked in many places, deterring residents from making further connections to them. Streets were not serving as effective storm water drains, but were instead becoming waterlogged with mix of drainage overflow and storm water. Numerous problems were faced with water supply to homes and water contamination. As a result, local actors stepped in to provide an above-ground network of water supply pipes which then ran in parallel to the below-ground network. This ended up increasing depletion of groundwater reserves and the overall cost of water supply. The limited landscaping that had taken place under IHIP had not survived for long and designated garden areas were paved over. Since the river did not stay clean, the lake had been created in the river, surrounded by fountains

and lights, had an overpowering stench that kept recreation as well as commerce far from its banks and in fact became a source of vector-borne diseases for surrounding slums (Verma, 2000). It appears that even the IHIP, despite aspiring to broad participation, ended up being a top-down intervention that did not take local knowledge adequately into account.

Indore, the largest city in Madhya Pradesh and its commercial capital, saw its population grow by 59% between 1991 and 2001—the decade following India’s liberalization (Sridharan, 2011, p. 199)—and another 30% between 2001 and 2011, bringing the total population to nearly 2 million people in which an estimated 30–50% of the population lived in slums (Agarwal, 2016, p. 7). Post-liberalization, special economic zones were created in the vicinity of Indore, attracting multinational companies manufacturing such goods as cars and pharmaceuticals. Major real estate developers moved in and acquired land around the periphery of the city for residential townships catering to middle and high-income groups (Sridharan, 2011). Demand for water strained the city’s supplies, and the city became increasingly dependent on water piped in from the Narmada river located 70 km away, which supplied 80% of the city’s water in 2006 (UN-Habitat, 2006, p. 20). Urban growth also led to accelerated loss of green cover and high levels of pollution and waste generation (Gupta et al., 2006).

Kabutar Khana and North Toda 1991–2015

The population of Kabutar Khana and North Toda swelled during this period and a number of new huts of families, particularly manual scavengers, were constructed during this period on the land adjacent to the river (ISGP & BCSD, 2021, p. 10). The river, which in previous decades had potable water for at least part of the year, became increasingly polluted as urban population and industrial activity burgeoned in Indore, far outstripping municipal capacity for sewage treatment (Banerjee, 2019; Tahir & Visaria, 2017). Kabutar Khana and North Toda were both affected by the IHIP project. The changes were especially noticeable in North Toda, which faces the waterfront area where the heritage stone steps (*ghats*) along the riverside were restored (ISGP & BCSD, 2021, p. 15).

Toilets were constructed in most of the homes of North Toda and Kabutar Khana residents under the government’s Swachh Bharat Mission from 2014 onwards, eventually leading to the city being declared ‘open-defecation free’ (Nidugala & Pant, 2017, p. 5). The introduction of

integrated solid waste management in the city from 2015 onwards, leading also to a later series of awards for being India's cleanest city, was cited by residents as having made a noticeable difference in the cleanliness of the slums, leading to a decline in mosquito- and water-borne diseases (ISGP & BCSD, 2021; Komaraiah & Dube, 2018, p. 186; Nidugala & Pant, 2017). Although sources of river pollution from riverside households were reduced during this period, sewage from different parts of the city, including chemical as well as biological agents from industries, continued to flow untreated into the rivers, leading to health risks, especially when the river floods its banks during the monsoon season (Tahir & Visaria, 2017).

The Smart Cities Mission (2015–Present)

In the context described above, the SCM was introduced by the central government in 2015. According to the *Smart Cities Mission Statement and Guidelines*, the aim of the Mission is to:

promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities. (Ministry of Urban Development [MoUD], 2015, p. 5)

Individual cities were invited to develop their own proposals, with the help of corporate consultants, for funding under the Mission which addressed 10 areas of core smart infrastructure development: water supply, electricity supply, sanitation and solid waste management, urban mobility and public transport, affordable housing (especially for the poor), IT connectivity and digitization, good governance (including e-governance and citizen participation), sustainable environment, safety and security of citizens (especially women, children and the elderly), and health and education (MoUD, 2015, pp. 5–6). The guidelines also required the inclusion of at least one pan-city element in the proposal.

A competition was held, in which Indore won a spot in the group of the first 20 of 100 cities to be covered under the Mission and submitted one of the largest budgets of all the cities (Anand et al., 2018, p. 7).

Indore's proposal focussed on a small section of the oldest and most historical parts of the city, along the river, for its area-based development (ABD) plan (Dwivedi et al., 2020, p. 4). The areas of riverfront development chosen overlapped significantly with the ones covered under the IHIP in the 1990s. The plan for the 742 acres in the ABD plan involved projects for transport (including road construction) and walkability, water and sanitation, power supply, laying of power lines and other utilities underground, heritage conservation, IT connectivity and IT-enabled government services (Dwivedi et al., p. 13). The pan-city component of the proposal focusses on integrating traffic metering, intelligent transportation systems and solid waste management (Dwivedi et al., p. 12). Redevelopment work in the ABD area was proposed to affect over 28,000 dwellers in 27 slums, including Kabutar Khana (Dwivedi et al., p. 13).

The SCM also advocates increased citizen participation and inclusion in sustainable development. According to the Centre for Policy Research, however, citizen participation recorded across cities was more easily achieved with groups that were literate and had internet access (Taraporevala, 2018, p. 2). Indore “conducted one of the widest citizens consultation in the country” in the preparation of its Smart City proposal, involving nearly 600,000 people (Indore Smart City Development Limited, 2017, p. 3). Some 87,000 of these people were involved in face-to-face meetings, whereas the bulk of the 600,000 participants (out of a city population of over 2 million) engaged through websites, apps, social media and online polls—modalities that require a computer or a smart phone (Indore Smart City Development Limited, 2017, p. 3).

Scholars examining the formulation of smart city policies worldwide have reflected on some of the common threads across the vision for the future of the city. Amin (2016) describes the smart city imaginary as envisioning:

[a] closely monitored wired city [with] software-governed infrastructures and habitats sending large real-time data to computational systems and models able to map the complex city and generate intelligence for city leaders, systems providers, and research laboratories working with each other to continuously adjust urban governance in fitting ways. (p. 778)

Reflecting on the consequences of this imaginary, McFarlane and Söderström (2017) write:

There is a tendency to present the ‘urban’ in ‘smart urban’ as a blank canvas upon which powerful sophisticated technology can simply be overlain and made to work in straightforwardly useful, new ways. There is little genuine commitment to social and ecological justice here, and little critical thinking around how digital technologies might practically become embedded in the already existing worlds of urban life. (p. 313)

McFarlane and Söderström (2017) posit that the glamorous image of the smart city being promoted across the world purposefully incorporates a “very thin conception of the urban” because “it is useful for corporations selling [smart urbanism] packages to depict the city as a flat arena awaiting their latest technological expertise, rather than as a complex multiform of different ... agendas and radically distinct needs” (p. 326).

To look to these already existing worlds of urban life, in the informal settlements being reshaped under the Smart Cities Mission in Indore, is to gain insights into the knowledge and perspectives that have the potential to add depth and vitality to the vision for the city’s future. In order to translate smart urbanism into practice in an equitable way, McFarlane and Söderström (2017) propose moving from a ‘technology-intensive’ to a ‘knowledge-intensive’ approach: “a redefined SU [smart urbanism] should be grounded in places—actually existing cities—with their specific populations, resources and problems, rather than start[ing] with technology” (p. 313). Thus, rather than letting projects be defined by the supply-side—which technologies, packages and applications IT companies are selling—plans for smart urban development can start with the demand side: ordinary people living in the urban neighbourhoods in question and with their reading of their particular challenges. Then, based on the knowledge and resources they bring to the table, the technological tools actually needed and most relevant to enhance their initiatives could be identified.

Rather than forsaking technology and smart urbanism altogether, a number of articles have called for ‘people-centred smart cities’ in which the ‘collective intelligence’ of ordinary citizens is allowed to exercise agency (Ghosh & Arora, 2019; Nam & Pardo, 2011; Saunders & Baeck, 2015; Vanolo, 2014). In this conception, an ‘alternative smart citizen’ engages in processes of learning rooted in already existing kinds of learning that the residents—especially of poor neighbourhoods—use to better their lives. Identifying the knowledges “of those conventionally on the margins of the techno-fetishism” (McFarlane & Söderström, 2017,

p. 317) of smart urbanist discourse is vital to initiatives that work for urban justice, in which, “technology follows that identification, rather than being dropped into the urban environment” (McFarlane & Söderström, 2017, p. 317). If an effective process for the empowering of ‘smart citizens’ were to be created, appropriate technology could then be identified, learned and wielded by ordinary citizens. In this, a role for experts exists, as well, but not as bringers of a template or package, but as learners alongside ordinary residents.

McFarlane and Söderström (2017) observe that, while, “an implicit assumption of corporate-led [smart urbanism] regarding knowledge is that there is available data on what we need to know” (p. 317) and that solutions to urban problems can be found through data-mining, we should keep in mind that the data which is chosen to be gathered in the first place is “the product of a highly selective and power-laden exercise” (p. 317) usually focussed around what the state wants to know. What is required then, is less emphasis on data and more emphasis on knowledge and its interpretation, by people, in collaboration with the State. The role of the smart citizen or collectives of smart citizens, here, in generating, interpreting and applying knowledge, is key.

Findings from the BCSD Study in Relation to the Knowledge Resources of Urban Informal Settlement Dwellers

As an example of this, residents of North Toda and Kabutar Khana could point to a number of elements of their knowledge system that could be considered resources for urban development. One of those elements had to do with their knowledge of how to conserve and manage sharing of common resources, like water. Another interrelated aspect concerns knowledge of how to work together in solidarity with neighbours in order to promote collective well-being.

Regarding the knowledge of conservation and collective management of common resources such as water—residents espoused perspectives that contrast with conceptions common in the neoliberal paradigm of water as a commodity consumed by the individual. Residents spoke passionately about the moral duty to use the earth’s resources strictly according to one’s need, not one’s greed (ISGP & BCSD, 2021). Places of worship such as shrines, mosques, temples and *dargahs*,¹ provided water to the

¹ Sufi mausoleums.

inhabitants of both localities from their wells during times of water shortage, as did businesses and households that had wells on their properties (ISGP & BCSD, 2021, p. 42). Two residents underscored the perspective towards water as follows:

Water [like the rest of nature] does not consider differences. It does not ask - whose water am I? or who is drinking me or using me? Neither water, nor the air, nor the sky or the rain or the earth gives any regard to differences between people. It doesn't differentiate—it flows for all. (ISGP & BCSD, 2021, p. 65)

Water like air and fire cannot be made into parts or divided. Water that flows...doesn't know whether it is now in Pakistan or in Hindustan. Nobody can divide it. It is a bestowal of God. (ISGP & BCSD, 2021, p. 65)

Elaborating on this point, a resident artisan commented:

This water—is it ours or is it God's? It is God's. Water is God's. Everything belongs to God. Nothing is owned by us. Every drop of water belongs to God and if we waste water, we will be answerable to Him for it. (ISGP & BCSD, 2021, pp. 66–67)

The Mullah of Kabutar Khana expanded on this idea, “the *Quran* says that everything is made for our benefit. Trees, animals, water—all of creation is there for our use and to fulfil our needs” (ISGP & BCSD, 2021, p. 66). He qualified this, however, by underscoring how the *Quran* also warns about the dangers of wastefulness and profligacy: “Extravagance is a sin. It is forbidden. It makes us heedless of the impact we are having on the world and on others” (ISGP & BCSD, 2021, p. 66).

A Hindu priest (*pandit*) in North Toda cited examples of how nature is equated with divinity in the Hindu scriptures, and is associated with the goddess Parvati, the wife of Shiva. He emphasized, consequently, that “To keep nature clean and pure is our responsibility” (ISGP & BCSD, 2021, p. 67). Another resident, similarly, explained: “The tree, the plant, the mountain... each little bit, each piece, each leaf of the tree, ... it exists by God's will and it is by God's command that they bless us. Harming them is then a grave offense, that's why we should protect the environment” (ISGP & BCSD, 2021, p. 67). All around the neighbourhoods, examples could be found of how community members economize on their use of

resources, recycle and reuse almost everything, and go to great lengths to avoid waste.

This perspective begs the question—how would urban development policy be different if it considered water and other urban commons in the light that these residents do? The challenge associated with a common resource, of course, is how to manage it and resolve potential conflicts that could arise. Residents’ perspectives towards this tended away from a legalistic and individualistic approach and towards emphasis on interconnectedness with one’s fellow human beings. One resident said:

[If] you bow down for your neighbour... your neighbour will bow down for you. If you do something good to them and show love, you can be sure it will be reciprocated. This is the only way to live. (ISGP & BCSD, 2021, p. 28)

Another resident recalled an Islamic Hadith to the effect that, “until you know that your neighbour has food to eat and is not going hungry, you should not eat,” and a Hindu resident said it is the *dharma* (moral duty) of neighbours to support one another during difficulties and share in one another’s joys and sorrows, regardless of the other’s caste or creed (ISGP & BCSD, 2021, p. 33). Another said, “India is a very religious country. Development should take the people’s beliefs into account. The common person finally has to carry out development work ... Finally the responsibility for change is with the people. It’s their lives” (ISGP & BCSD, 2021, p. 43). Residents cherished the culture of religious harmony between Hindu-Muslims that had developed over the years in their neighbourhoods through living together side by side and facing shared challenges together (ISGP & BCSD, 2021). Residents’ comments on how they earn a living, conduct trade, access healthcare and credit all revolved around their reliance on a complex network of relationships in their neighbourhoods built on non-monetized resources such as trust, friendship and reciprocity (ISGP & BCSD, 2021, p. 35).

Residents of the neighbourhoods had a strong sense of purpose in life connected to contributing to the betterment of their neighbourhoods. A North Toda woman commented, “If a person cannot be of service to another, then of what use is that person?” (ISGP and BCSD, 2021, p. 31). A man from North Toda commented:

The purpose of life is to do some good to those who are less fortunate than us, to be of some use to them, to be a source of happiness to them... Living for ourselves—this is something anyone can do, even animals do it. But to live for others—that is the key to life. (ISGP & BCSD, 2021, p. 32)

A North Toda resident who now earns well as a building contractor, but who continued living in the settlement and is known for frequently undertaking initiatives to better the neighbourhood, said of his motivation for doing so:

This body that God has given us, is not only for ourselves. It should be useful to others as well. A true human being should be of help to others. I see the neighbourhood as my life-long companion. I will never leave it and go anywhere else... I have money. I could live elsewhere [more affluent parts of the city]. But because of my struggle to improve this neighbourhood, I will never leave and go. If we leave, who will look after the neighbourhood? We all live here like a family. Whenever there is a function in someone's house—a birth somewhere or a death—people invite me. They share their sorrows with me, and I share mine with them. This is how we live. (ISGP & BCSD, 2021, p. 32)

Time and again, residents mentioned the importance of their relationships with their neighbours when asked about their views on interconnectedness with other beings. Aside from the family, and sometimes more so than the family, this neighbour-to-neighbour relationship seemed to be the most obvious social context in which residents expressed and understood spiritual principles and values. It was most often a neighbour to whom one would turn for help in times of crisis, as well as with whom one would celebrate or simply carry out the routines of daily life. Thus the neighbourly relationship was given great importance. One resident stated, “Our moral duty is to be a true and constant companion to our neighbour. They naturally depend on us. We share in their sad and happy moments and participate in their weddings and festivals” (ISGP & BCSD, 2021, p. 32). Another explained that the *dharm* (moral duty) of a neighbour, from a Hindu perspective is to be a “source of strength and support during difficulties and a joyful companion during all the happy occasions of life” (ISGP & BCSD, 2021, p. 33). A shopkeeper in Kabutar Khana discussed the implications of this idea as follows:

Even if my neighbour wakes me up in the middle of the night, I will get up and go to help him. Whatever his difficulty may be—whether he has got into trouble with the police or has to be taken to the hospital—it is my duty to support him and help him. (ISGP & BCSD, 2021, p. 33)

Muslim participants shared an Islamic Hadith that enjoins, “until you know that your neighbour has had food to eat and is not going hungry, you should not eat” (ISGP & BCSD, 2021, p. 33). A resident of Kabutar Khana added:

The fundamental principle of Islam is brotherhood ... with people of any religion. The meaning of brotherhood is if someone has a physical handicap, we help him or her. If they have any difficulty, their difficulty is my difficulty, whoever they are. (ISGP & BCSD, 2021, p. 34)

Another example of solidarity and reciprocity among neighbours came from North Toda, where residents pooled money to help those with inadequate resources at the time of crisis. Citing an instance of a friend whose mother had passed away and who lacked funds to pay for her cremation, she recounted:

We, her neighbours, decided to pool together ₹15 or ₹20 from each of us and to somehow give her mother a decent cremation. We took care of the expenses although we ourselves are poor. But we cannot bear to see others in pain! I think of how we would want to be treated if we were in that situation. What if my body was lying there and nobody were there to attend to it? (ISGP & BCSD, 2021, p. 34)

The resident also shared that whenever a person of limited financial means in her lane takes ill, the neighbours organise a fund to raise money for the treatment. Participants did not represent their sense of duty towards others as something actuated by guilt or by fear, nor as being burdensome. They described bonds of friendship and solidarity with neighbours as a source of joy as well as collective security in an increasingly fragmented world. A yogi (Hindu ascetic) residing in the area opined:

I have never thought of anyone as just a neighbour. I have made them a *bumdard* [sympathiser], someone who shares the same pain. ... I take the pain of others and give them back happiness. ... [W]e have the capacity...to share the sorrows of others and receive happiness from it. (ISGP & BCSD, 2021, p. 35)

A worldview that views the community as a natural extension of the family lent emotional resonance to relationships in the neighbourhood. Residents see individuals as belonging to the community and therefore the community—beyond only the family—as being responsible for individual members (ISGP & BCSD, 2021, p. 35).

Neighbourhood residents' spiritual and social bonds were further reinforced in many cases by economic interdependence and reciprocity. For instance, female domestic workers from North Toda described how they are not granted sick leave or holidays because their employers' homes need to be cleaned and dishes washed on a daily basis. Therefore, they rely on other women from the neighbourhood to fill in for them when they are sick, need to care for a family member or need to travel. They also rely on an informal network of support to watch their children, who often play in the neighbourhood lanes while some of their mothers are at work. A mother from North Toda said she knew when she went to work, "There will be many eyes watching over our children" (ISGP & BCSD, 2021, p. 47). This showed how much neighbourhood residents' livelihoods depend on the relationships of trust and reciprocity they have built in their settlements. This reciprocity was expressed in economic relationships within the neighbourhoods, too, in the form of informal credit. A woman who ran a small grocery shop in North Toda explained that most of her customers buy on credit, and that she trusted them to pay back as they all lived in the same area and knew everyone's wellbeing depended on maintaining good relationships. Similarly, a man running a medical shop in Kabutar Khana commented:

We have relationships with everyone here, so it's natural to trust others. We know people's circumstances. We aren't afraid that they won't pay back. Even if they don't, we're happy we helped someone who is in need, and we know who really is in need. ... When you know the family and you know the story of their lives and there is a relationship, you cannot be indifferent to them. We care about them and trust that we will get the money back. (ISGP & BCSD, 2021, p. 48)

Due to the strength of these relationships, residents of the settlements were reluctant to move elsewhere, such as one woman who wondered, “How will I survive elsewhere, where they charge you money for everything and no one will care to listen to your difficulty and pain?” (ISGP & BCSD, 2021, p. 48). Residents found it extremely difficult to qualify for formal loans and said, “It is easier for us to just borrow from our friends and relatives. We can at least talk to them and explain our situation to them if something happens and our repayment gets delayed” (ISGP & BCSD, 2021, pp. 48–49).

These bonds of reciprocity and interconnectedness among residents, interestingly, were not limited to a circle of friends of the same caste and religious background. The study describes how time and again, residents’ comments and actions bore witness to the close and cordial relationships between Hindus and Muslims in the neighbourhood, in particular, but also between these groups and the Sikh, dalits and tribal populations. One resident emphasized, when asked how people in the neighbourhood of different religious backgrounds see one another, that “Islam teaches us to work for the betterment of all. So, we all try to help each other. We have a sense of brotherhood” (ISGP & BCSD, 2021, p. 34). A Sikh resident, similarly, shared that,

Guru Nanak, our divine teacher, tells us that all humanity is one. There are no real differences between human beings. We have to learn to ignore the worldly differences between people based on caste or creed and serve all human beings. (ISGP & BCSD, 2021, p. 37)

A temple custodian and grocery shop owner in North Toda commented:

The unity between us is a result of us growing up together, side by side. We have become used to one another. We love each other. If we don’t get along with each other, where else are we going to go? If something happens to me at night, I am not going to go looking for a person of my religion to help me. I turn to my neighbour for help—whatever his religion may be. (ISGP & BCSD, 2021, pp. 39–40)

A well-loved story shared by several Kabutar Khana residents on separate occasions recounted how the Mahadev Temple in the neighbourhood was once in a state of collapse, leading the Hindu community in the area to seek permission from the police for its reconstruction. Permission was denied on the grounds that building such a temple in a majority Muslim

area might ignite religious tensions. When this response was shared with other members of the neighbourhood, a group of Muslim residents got together and accompanied the Hindu neighbours to the police station to reassure the police that they had no objection to the construction of the temple and would be happy to see it rebuilt. This led to building permission being granted, and reportedly Muslim residents also contributed funds to its construction (ISGP & BCSD, 2021, pp. 40–41).

The cooperation between Muslims and Hindus in the two settlements extended from common celebration of cultural events to helping one another address water shortage and flooding. Residents living uphill from the river would offer shelter to those whose homes were inundated during floods. Neighbours would assist flood victims to carry their belongings to safety and to access drinking water and food. Water from the mosque and temple water supplies in the neighbourhoods were offered to neighbours of all religious and caste backgrounds, and local dharamshalas and madrassas were used as temporary shelters, as well. These are among many examples shared by residents of how living side by side and sharing common challenges cemented relationships of friendship and reciprocity among neighbours (ISGP & BCSD, 2021, pp. 37–42).

Critical Reflections on the Findings of the Study in Light of the Theoretical Framework

This paper started out by considering what historical institutionalism has to say about the role of ideas in policy, particularly assumptions embedded in larger paradigms that govern what is and is not thinkable. The paper then traced changing paradigms of urban development in India during the colonial era, the Nehruvian socialist decades and then the post-liberalization period, showing how urbanization was influenced by the larger ideas about political economy. Ideas from recent scholarship on people-centred alternative smart urbanism were brought in to shed light on another possible paradigm, one which seeks to put the knowledge of residents of urban neighbourhoods at the centre of urban development. The findings from the BCSD research helped to provide insights into the kind of knowledge that urban informal settlements possess. Settlement residents' ideas and experience in relation to water commons and relationships of interconnectedness and reciprocity seem to hold a lot of potential for application to urban challenges. This potential, however, will remain just that unless it is channelled into organizational structures and more systematic learning processes that would enable collectives of residents to

work together and draw on technology in order to apply their knowledge and moral convictions to specific urban development issues on an ongoing basis. Furthermore, residents would need a process for reflecting on and refining their existing knowledge, as well. Beliefs about interconnectedness with nature and with one's neighbours are very powerful, especially when rooted in underlying metaphysical worldviews, and this constitutes an important, overlooked dimension of urban development. It also has to be acknowledged, however, that these beliefs can also be mixed in with disempowering forms of gender, caste- or ethnic-based prejudice, superstition, or a lack of openness to change. A careful process of reflection would be needed within the community to identify and carry forward the traditions and knowledge that are conducive to collective wellbeing, while also being willing to let go of some conceptions that are no longer conducive.

Even once convictions are identified that are deemed beneficial for the community's wellbeing, understanding what these mean in practice is another dimension of learning that would need to be worked on through praxis. Many statements residents may have made during the BCSD study appear to be rhetorical or aspirational in nature; residents themselves do not necessarily have a lot of experience applying these convictions on a neighbourhood-wide or city-wide scale, and this would be an object of learning. Further, development does not occur magically when people's knowledge is heard; a process would need to be set in motion that facilitates ongoing involvement of informal settlement (and other neighbourhoods') residents in learning, building further on existing capacity and knowledge, and continually advancing thought and practice for people-centred urban development. In this way, the collective intelligence of urban residents could exercise agency, and based on residents' rich understanding of their own contexts and challenges, the knowledge they have and the knowledge they need, residents could be empowered to make decisions about appropriate technologies.

CONCLUSION

At a moment in the world's history in which models of development often augment divisions between people, the knowledge of populations that are able to actually perceive connection and relatedness—interdependence among people, the environment and the city—is a valuable contribution to knowledge of how to build a better city.

The evolution of urban policy in India over the decades since liberalization has led to greater emphasis being placed on citizen participation and inclusion. Having a people-centred smart city necessitates greater attention to the knowledge and reality of all people, including migrants and informal settlement dwellers. Although not often considered to be a source of knowledge, these residents possess cultural and religious knowledge systems and practices that can offer valuable insights to build on. Through experience with applying spiritual principles from their religious belief systems to the practical challenges of community life, the residents of these settlements have valuable insights to offer to the wider population of the city on collaborative approaches to achieving collective goals and conflict resolution, insights which would need to be further built upon and incorporated appropriately into institutional structures that facilitate learning. Harkening back to Geddes' vision of interconnectedness among the entire web of life, the rural and urban, the spiritual and material, how could city planning in this era become more like gardening? Are there ways in which the capacity and knowledge of all segments of the population can be better cultivated and harmonized in pursuit of a people-centred smart urbanism? These are some of the questions that future research could find fruitful to explore.

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