



Research report

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Impact of the COVID-19 Pandemic on Education, Livelihoods and Health

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Executive Summary

The strict and sudden lockdown imposed by the Government of India in the third week of March 2020 to control the spread of the COVID-19 virus, made visible the inadequacy and fragility of the Indian education system and urban social protection systems. Schools and higher education institutions across the country were closed and all economic activity in cities and towns came to a grinding halt. As a result, students across the span of education and millions of workers engaged in informal work in Indian cities were severely impacted.

This research set out to understand the impact of the COVID-19 pandemic and the lockdown on the education, livelihoods, and health of the most marginalized sections of Indian society. Three major sites were chosen for this investigation: In Delhi, we examined the impact of school closure; in Bengaluru, we assessed the impact of the closure of higher education institutions; and in Tiruchirappalli (Trichy) we examined how the loss of income impacted the lives of informal workers. This investigation also provided insight into the physical and mental health condition of the studied demographic and the various state and non-state relief measures that were offered in response to the health crisis. Individual interviews were conducted online and offline with different stakeholders; online panel discussions were held with various organisations providing relief; and secondary data was collated from various reports, case studies and government documents.

Poor learning levels in India have been a consequence of a multi-tiered education system that has emerged over the years with different grades of state and private schools, access based on financial capacity and low-fee private schools that deliver low-quality education. The objective was to capture the layered impact of the pandemic and digital learning on the teaching-learning process, existing educational arrangements and how these affected teachers, parents, and children from different types of schools and socio-economic contexts. The study found that the shift to online education resulted in a major drop in the number of marginalized children attending classes. It highlights the different challenges of digital learning in terms of access to resources and pedagogical approaches. It brought to light the unsustainability of an unregulated private schooling system. Findings reveal that while several children from marginalized communities fell out of the process of learning due to lack of digital access; several parents withdrew their children from private schools due to the loss of regular sources of income. In reflection, the pandemic was seen by the state as an opportunity to push the neoliberal agenda of digitalizing education and centralising all decision-making, leading to a complete erosion of the school teacher's agency in matters of curriculum and pedagogy. The study highlights how the ramifications of school closure impacted the mental health of students, teachers and parents, including specific gendered impacts on young girls and working women.

Over the past few decades in India, the higher education sector transitioned from a public dominated sector to a private mediated one. This has resulted in the commercialisation of higher education as the financial burden of education falls on the student rather than the state, thereby perpetuating inequalities in terms of access to higher education. This study aimed to understand the differentiated nature of experiences of students, researchers and faculty belonging to diverse socio-economic groups in some of the higher education institutions in the city of Bengaluru. The transition to online classes impacted the overall learning and pedagogical process for students and faculty, similar to experiences in the school education sector. In addition, this transition disrupted practice-based learning components such as field-based or lab work. Limited digital access due to inequitable digital infrastructure alongside class, caste, gender, and community-based asymmetries were amplified during the pandemic. Institutional response fell short of addressing the financial burden and shortage of devices in relation to digital education. The research exposed the social exclusion within and commodification of higher education, indicating the need to augment state investment in higher education to ensure equitable quality education for all.

Indian cities are agglomerates of urban inequality and poverty, largely experienced by informal workers – often migrants who live on the margins of our cities. These informal workers have no protection against job loss or sudden dismissal from work and no regulation of wages and working hours. They live in untenable situations and have no security in terms of housing, food, health, and education for their children. Given their precarious situation, we set out to understand the life experiences of different categories of informal workers (self-employed, daily, weekly, and monthly wage earners) in the city of Trichy, in relation to their livelihoods,

health, and the education of their children during the pandemic. Findings indicate that the different dimensions of vulnerabilities - *economic, physical, and social* - were exposed and exacerbated as these workers lost their jobs and income and struggled to meet regular expenses such as food and rent. While Tamil Nadu's state relief measures fell short because they were standardized and had structural issues, the non-state measures were community-driven and not large scale. The city and its existing social systems were found to be inadequate and therefore failed to protect the most vulnerable. The study highlights the need for instituting state-driven social protection measures by identifying and accounting for, not just the 'poor' but all vulnerable individuals and families.

The pandemic has brought to light the structural dynamics and inequities that reinforce each other during crises and differentially impact communities, regions, and institutions. It has made discernible blatant economic, health, caste-based, gender, and educational inequalities that face the poor, the homeless, socially disadvantaged, migrants, refugees, and those in informal settlements.

Evidence tells us that India's urban systems are not only weak in ensuring uniform access to basic services for those living on the margins but are also exclusionary in terms of limiting access to quality school and higher education. The education of disadvantaged children and youth is heavily impacted, pushing a generation of them out of learning opportunities thereby diminishing their life chances.

The findings of this study reinforce the need to pay close attention to intersections of caste, class, gender, and backward regions while addressing inter-related urban challenges, including those that have compounded educational inequality during the pandemic. Understanding and accounting for the dynamic interplay of urban inequality and vulnerabilities could assist in the reorientation of urban policy and urban practices, to be far more just, equitable and humane.

List of Abbreviations

AIADMK	All India Anna Dravida Munnetra Kazhagam
BJP	Bhartiya Janata Party
CBSE	Central Board for Secondary Education
CSF	Central Square Foundation
DMK	Dravida Munnetra Kazhagam
DRDO	Defence Research Development Organisation
DU	Delhi University
EWS	Economically Weaker Sections
FPS	Fair Price Shop
GNEM	Gurgaon Nagrik Ekta Manch
GOI	Government of India
HEFA	Higher Education Funding Agency
IHS	Indian Institute for Human Settlements
IIT	Indian Institute of Information Technology
IIM	Indian Institute of Management
IISc	Indian Institute of Science
ISEC	Institute of Social and Economic Change
ISRO	Indian Space Research Organisation
IT	Information Technology
JNCASR	Jawaharlal Nehru Institute for Advanced Scientific Research
JTS	Junior Technical School
LFP	Low Fee Paying
LMS	Learning Management Systems
MCD	Municipal Corporation of Delhi
MDM	Mid-Day Meal
MHRD	Ministry of Human Resource Development
NAL	National Aerospace Laboratories
NCT	National Capital Territory
NDMC	New Delhi Municipal Council
NEP	National Educational Policy
NGO	Non-Governmental Organisations
NIAS	National Institute of Advanced Studies
NREGA	National Rural Employment Guarantee Act
PDS	Public Distribution System
RWA	Residential Welfare Association
SDG	Sustainable Development Goal
SDM	Sub-Divisional Magistrate
SSA	Sarva Shiksha Abhiyan
SWAN	Stranded Workers' Action Network
TCC	Trichy City Corporation
TIFR	Tata Institute for Fundamental Research

Introduction

As the COVID-19 pandemic spread in the early months of 2020, a major health crisis took over the globe and India. To contain the spread of the virus, the Government of India announced a sudden and stringent lockdown in the third week of March 2020. This led to the shutdown of schools and higher education institutions across the country and brought to a complete halt, all economic activity in India's cities and towns. The pandemic had an immediate and major impact on two critical sections of India's population: millions of children and young people studying in schools and higher education institutions across the mega cities, urban areas and villages of rural India; and the millions of migrants engaged in informal work in India's cities.

This research aimed to investigate the impact of the first wave of the pandemic on the education, livelihoods, and health of the most marginalised sections of India's society. Three major sites were chosen for this investigation: (a) Tiruchirappalli (Trichy) with respect to the livelihoods of informal workers; (b) Delhi with respect to teachers, parents, and children in the city's schools; and (c) Bengaluru with respect to students and faculty of higher education institutions in the city. This investigation also provided insights into the physical and mental health conditions of the studied demographic¹.

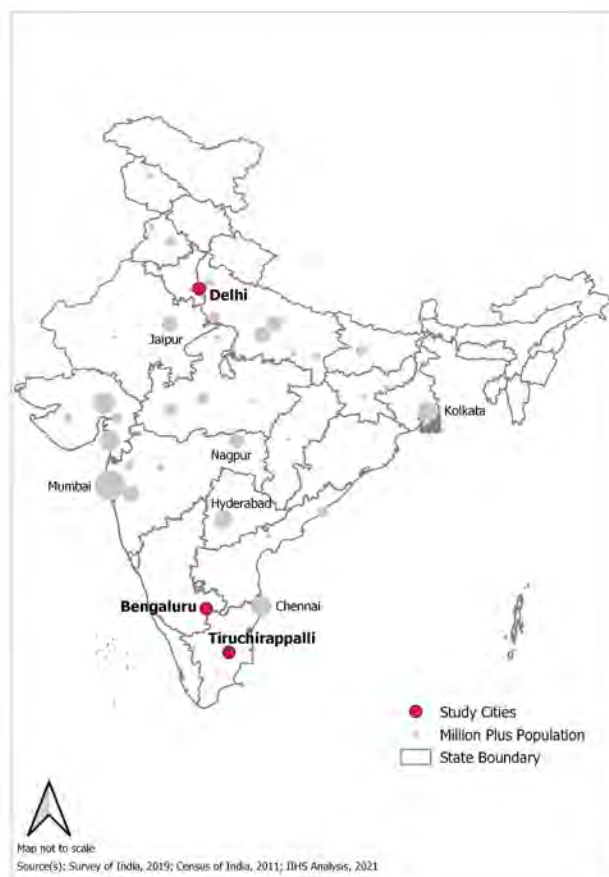


Image 1: Map of India exhibiting research sites for study

Cities serve as important sites for employment generation and opportunities for new entrants into the workforce due to urbanisation. Hence, migrants make up 43 percent of the country's urban population (Census, 2011 as cited in Bhagat et al. 2020). The sudden halt of all economic activity impacted almost half of India's urban population, who are migrants engaged in informal work.

¹ We are extremely grateful to our respondents for taking time out to be part of this study during such difficult times and for their willingness to share deeply personal details of their lives. We acknowledge and recognise their contribution to this research and to the generation of new insights.

India's towns and cities are also epicentres of urban inequality and poverty, characterised by social stratification in terms of gender, religion, caste, and ethnicity (Bazaz et al., 2016). Those living on the city's margins face severe everyday challenges of inadequate housing, low wages, insecure and hazardous work; discrimination based on ethnicity, caste, religion, class, and gender and are persistently excluded from the economic, cultural, social, and political life of the city they inhabit and nurture (Batra et al., 2021). The urban poor are exposed to *physical vulnerabilities* as they live in untenable situations and struggle to secure housing (Anand et al., 2014); *economic vulnerabilities* characterised by informal employment with no social protection; *environmental vulnerabilities* due to water and air pollution (Jain et al., 2015); and *social vulnerabilities* due to deep inequalities along dimensions of religion, caste, gender, and community (Batra et al., 2021).

Adding to this precarity, the lockdown posed an imminent threat to the survival of the bulk of informal workers, compelling many to start long walks back to their villages² in April and May 2020. Those who remained in the cities faced sudden loss of work and income, forcing them to spend their limited savings to meet basic needs of food, shelter, and medicines. The pandemic not only brought to light their economic and physical vulnerabilities but amplified them manifold. This research presents the experiences and struggles of the city's most marginalised during the pandemic.

As the country faced a complete lockdown, schools, and higher education institutions across the country shut down indefinitely. Estimates suggest that more than 320 million school, college, and university students have been impacted by the pandemic-induced lockdown (UNESCO 2020). Even before the pandemic, the world and India were facing a "learning crisis...258 million children and youth of primary- and secondary-school age were out of school and low schooling quality meant many who were in school learned too little" (World Bank, 2020a, p.5).

Poor learning levels in India have been a consequence of a multi-tiered education system that has emerged over the years with different grades of state schools, accessed based on ability, low-fee private schools that deliver low quality education, and an increasingly internationalised system of private schools for the elite. Multiple attempts at systemic reform of school education to address interlinked challenges have failed to institutionalise universal quality education and address the growing learning crisis. More recently, a large number of state schools were merged and closed down with the aim to rationalise schools that are economically unviable and sub-optimal (Batra, 2020a).

The pandemic brought to light the unsustainability of unregulated private schooling, a large share of which were closed during the pandemic, as parents withdrew their children due to loss of regular sources of income. The shift to online education during this time led several children of the marginalised to fall out of processes of learning due to lack of digital access. This research presents the experiences of students, teachers, and parents as they struggled to keep pace with new and sudden demands of this major shift.

Over the past six decades India has moved from a public sector dominated higher education system to a private sector mediated one. Unlike in developed countries where the massification of higher education was facilitated through public institutions, in India it was largely mediated by the private sector (Sarkar, 2020). The unchecked growth of private higher education institutions has led to rampant commercialisation, resulting in the shift of the financial burden of education from the state to the individual, thereby perpetuating inequality in accessing higher education.

The challenges of exclusion in higher education institutions are not only those of access; students encounter various forms of exclusion once they enter these spaces (Deshpande & Zacharias, 2013). The existing structure of higher education tends to privilege the already privileged, typically urban elites from upper caste and class backgrounds, thereby reproducing these hierarchies. As higher education institutes shifted to online modes of education, several faculty members and students experienced extreme forms of inequality of access. This research examines their experiences in the larger context of systemic asymmetries.

² Many migrant workers covered hundreds kilometres by foot (Jan Sahas, 2020b)

Nowhere is the gap between the current structure and state of school and higher education, and the Indian Constitution's aims of equity and social justice, more apparent than in the state response to the COVID-19 pandemic. Despite widespread economic and social differentiation and unequal access to technology and online resources, the state has been making all its efforts to privilege online teaching. The pandemic and the subsequent transition from physical to online classes has created new forms of exclusion and deepened social inequity in the school and higher education sector.

The findings of this research are presented in three sections in this report, each focused on a specific site of research:

(a) The first section, examines how school closure impacted the diverse schooling systems of Delhi. Narratives of teachers, children and parents highlight how stakeholders from different socio-economic contexts across government and private schools have been affected - the multiple challenges they experience as teaching-learning is disrupted by the closure of schools, and the nature and extent of state and non-state response to the educational crisis.

(b) The second section, examines how technologically mediated learning platforms, brought into effect due to the pandemic, continue to impact teaching, and the learning of students from different groups in higher education institutions in Bengaluru. It emphasizes pedagogic constraints faced by students from different socio-economic backgrounds, and the institutional and extra-institutional responses to these issues.

(c) The third section, examines how the livelihoods of informal workers in the city of Trichy were affected and how they managed to cope during this period, including access (or lack of access) to assistance from state and non-state actors. It explores how the city's most marginalised and vulnerable are impacted by the crisis in the face of acute urban inequality that remains a critical challenge to developing sustainable cities.

Delhi: School Education

Delhi's school system is diverse and perhaps one of the most iniquitous. While some of the country's best educational institutes are in Delhi, it is ironic that school provisioning for the most vulnerable in the capital city is abysmally inadequate (Bissoyi, 2018).

Primary education in Delhi is largely the responsibility of local authorities – Municipal Corporation of Delhi (MCD), and New Delhi Municipal Council (NDMC)³. Upper Primary, Secondary and Senior Secondary education largely falls under the Directorate of Education of the Government of the National Capital Territory (NCT) of Delhi that run a variety of composite schools including the *Sarvodaya Vidyalayas*. Delhi has several schools run by the Central government such as the *Kendriya Vidyalayas*, *Navodaya Vidyalayas* and schools under the Delhi Cantonment Board and the Ministry of Defence.

Schools managed by the private sector can be categorised as recognised schools (aided and unaided) and unrecognised schools. The private unaided schools receive no financial support from the government but are mandated to be certified by the state. While many private schools are recognised, several others remain unrecognised and remain unaccounted for in government statistics. Recognised schools⁴ are monitored while unrecognised schools are largely unregulated and therefore not monitored. Even though unrecognised, some of these private schools flourish because the quality of government schools is seen to be even lower. The costs of these private schools, nevertheless, preclude the participation by the poorest (Juneja, 2010).

³ It is important to note that the municipal corporation schools come under independently elected bodies that do not form a part of the Government of Delhi.

⁴ Recognised schools are periodically required to report their activities to the officials of the Education Department and follow prescribed procedures for the appointment of teachers and the provision of infrastructure. Recognition of these schools is subject to continued compliance with these regulations. The department also inspects and supervises recognised schools and recognition can be withdrawn if they are found to be violating or not abiding to the procedures (Juneja, 2010, p. 7–8).

Objectives of the study and research process

The physical closure of schools led to a series of challenges for teachers, children, and their parents, especially as educational activity shifted to online modes of learning. The objective of this research was to capture the differentiated experiences of children, their parents and of school teachers during the pandemic. We were particularly interested in capturing the layered impact of the pandemic and digital learning on the teaching-learning process, existing educational arrangements and how these affected people from different sections of society. We also attempted to examine the nature of state response and the role non-state actors in responding to the crisis.

The research was conducted with select teachers, parents, and students, across a range of schools in Delhi. The schools selected for the study include those run by the central government, state, and local governments as well as quasi-government⁵ schools. Given the wide range of private schools, those selected include well-endowed elite private schools⁶, other private schools⁷, low fee private schools, and private aided schools. Students for the study were selected from different levels of schooling – primary (grades 1-5), middle (grades 6-9), and senior secondary (grades 10-12). In total, 78 respondents were interviewed out of which 35 are teachers, 23 are parents and 20 are students across different grades in government and private schools. Table 1 highlights the category-wise distribution of the respondents selected for the study.

Respondents				Type of School					
	Total	Gender		Government			Private		
		Men/ Boys	Women/ Girls	Total	Gender		Total	Gender	
					Men/ Boys	Women/ Girls		Men/ Boys	Women/ Girls
Teachers	35	5	30	21	4	17	14	1	13
Parents	23	3	20	7 + 3*	2	8	12+1*	1	12
Students	20	6	14	9	2	7	11	4	7
Total	78	14	64	40	8	32	38	6	32

Table 1. Category-wise Distribution of Sample

Note: * 4 parents had children studying in both government and private schools

Narratives were collated via extensive, in-depth conversations based on semi-structured interview schedules. In the initial stages of the research and given movement restrictions due to the lockdown, participants were approached using personal networks. Later, the snowballing method of data collection was used where participants were asked to provide contacts of their acquaintances. This was done to widen the reach of the research and to reduce the element of skewness in sample selection.

Considering the lockdown and restricted mobility during the pandemic, all interviews were conducted through video conferencing tools and phone calls. The interviews were conducted in English, Hindi, or a combination of the two languages as per participant preference. Each conversation lasted about 45 minutes, with some extending up

⁵ These schools are neither exclusively private, nor are they government established/overtly aided. They appear to enjoy the independence from government regulations that characterise private schools. But, at the same time, they are also alleged to be recipients of public funds and privileges, transferred, not through the departments of education, but through other indirect or direct means, owing to their association with prestigious government services (Juneja, 2010, p. 8).

⁶ Elite private schools are unaided schools with students largely from high socio-economic backgrounds. The fees is high with minimal provisioning of free ships.

⁷ These private schools are those unaided schools, funded wholly or partly by students' fees and administered by a private body. Students in these schools are usually from diverse socio-economic classes.

to 1.5 hours. Interviews were conducted over a span of 5 months between July and November 2020. The semi-structured interviews comprised of themes that required exploration, keeping in view the objectives of the research. Research ethics were followed and the anonymity and confidentiality of all respondents was maintained. Most participants gave their consent for the conversations to be recorded. Where consent was not given, the researchers used field diaries to document the conversations.

Besides the individual narratives gathered via in-depth conversations, a series of panel discussions⁸ were held with non-state organisations to examine their assessment of the situation, grassroots level experiences, and interventions in reaching out to schools and the community. These organisations include digital support platforms and civil society organisations engaged in education and who had made systematic educational interventions during the time of school closure. Besides this, an extensive literature review was undertaken of the different assessment and intervention reports that emerged from the field about the reach of digital learning and ground realities. Primary as well as secondary data gathered from diverse sources helped capture a variety of dimensions and address the research objectives in a robust manner.

Identifying participants to collate individual narratives was a challenge. This required multiple communications and follow-up phone calls with the participants. Weekly schedules were made for the interviews based on the availability of each participant. Since the interviews were conducted over a period of five months, new developments such as changes in the guidelines for online teaching, teachers' roles as part of COVID-19 task force, issues of compensation cuts and teacher layoffs kept emerging. Such developments were included as they were significant to the study.

Findings

During the early stages of the pandemic, schools in Delhi were in the process of closing the academic session and were preparing for the new session which usually begins in the month of April every year. The sudden announcement of a country-wide lockdown led to the suspension of physical classes, taking schools by surprise. All schools were shut down indefinitely to contain the spread of the virus. Neither teachers nor parents received any clear communication about the period of school closure or of any alternative educational arrangements. In a delayed response, initial instructions from school principals to teachers were to create class-wise WhatsApp groups for posting information and sending learning materials. Soon after, schools were directed to construct online learning platforms, positioning them as the future of education (NCERT, 2020; MHRD, 2020).

Findings are discussed under three major heads: immediate impact of the lockdown on educational provisioning and process; challenges of digital learning; and systemic impact of school closure⁹.

Immediate impact of the lockdown on educational provisioning and process

The lockdown impacted all stakeholders in the system of education, including teachers, children, and their parents. Teachers in government schools received no communication from state authorities about any alternative arrangements for teaching, between March when the schools were indefinitely closed, until May 2020. After a considerable state of confusion faced by school authorities and teachers, the Government of India issued official instructions to shift the site of education to online platforms. This was being done with little acknowledgement of the fact that a large proportion of young people and children across India do not have internet access. The sudden transition from physical to online classes posed several new challenges while exacerbating existing economic and social disadvantage.

Children from the most vulnerable sections of society were completely unprepared and ill equipped to access digital platforms or resources. Unable to join WhatsApp groups, they were out of the system for 4-5 months in the initial period of school closure. Once schooling moved to online platforms, there was a massive dip in the numbers

⁸ Panel discussions served as Focus Group Discussions conducted online. Panellists were asked to make short presentations of their work. This was followed by discussions around specific questions posed by the moderator. The TESF-India research team used this as an innovative research tool to gather data from non-state actors. Each panel discussion was of over two-hour duration. Refer to the Appendix for details of the participants.

⁹ Please note that all in-text quotes of participants are placed within double quotation marks throughout the document.

of children who could attend classes. In a study conducted in the states of Odisha, Bihar, Jharkhand, Chhattisgarh, and Uttar Pradesh, during May and June 2020, over 80 per cent parents reported that education was not being delivered during the lockdown. In Bihar, this figure was 100 per cent. The major reason cited was lack of digital devices and internet access (Oxfam, 2020).

Post-summer vacations, during the third week of June 2020, there was total panic in government-run schools. Instructions from the Principals directed teachers to report back to their physical school locations, even if they were away in their hometowns outside Delhi. Hence, teachers were expected to travel to their workplaces from their hometowns in the middle of the pandemic when COVID-19 positivity rates were high.

"A friend of mine who was six months pregnant, was called from her hometown by the school authorities. Another friend of mine residing in the containment zone of Agra was unable to travel as it is an armed forces area with high restrictions. He was stuck in his hometown as he did not get a travel permit. Now the Principal is troubling him. He is not being given his salary. Initially he was taking classes but from 1st July 2020 he was asked not to take any classes. The principal is also threatening him saying that he will lose his job," stated a teacher at a government school.

"An order was issued from the Sub-Divisional Magistrate (SDM) and within no time in the month of June 2020 teachers were asked to fill in a Google form that their presence was required, and they were asked to join back duties immediately. Those who express their unwillingness might either be suspended or lose their jobs if they do not comply with the instructions", informed a teacher from a state-run school.

The financial condition of the families of children determined the extent of their resource availability and accessibility to online classes. Children enrolled in government schools faced severe problems of accessing devices and internet facilities. Those in private schools were comparatively in a better position to access online classes. Children from economically weaker sections (EWS) in private schools and those enrolled in low fee paying (LFP) private schools were also largely left out of the online learning process (Indian Express, 2021). As schools shifted to the online mode, most children from socially and economically marginalised sections of society were pushed out of formal learning.

"Forty per cent of all students in schools run by the Delhi government could not be reached by the teachers, initially. Of course, the number has improved over the past 7 months of taking online classes. But even if they are traceable many of them are still in the villages and are unable to access online classes. However, their attendance is not counted by the teachers even if they are reachable now because it is mandatory to be part of WhatsApp groups," informed a teacher from a state-run school.

"Dropouts are high in the 5th grade I teach. Many parents who are migrants have gone back to their villages stating that nothing is left for them in the city as there is no work. So, they are not coming back," stated a primary class teacher at a state-run school.

A study conducted in the government schools of Mumbai, found that about 28 percent children from migrant families, enrolled in grades 1 to 8, had left for their villages with their parents. 'Over 3 million 9th and 10th grade students had left. The estimate is that about 30 percent students were not going to come back (PUCL, 2020).

Amidst rampant loss of livelihood and financial setback, child labour seems to have been aggravated among those coming from economically poorer backgrounds.

"I get calls from my high school students. One of them has started working in a factory. Another child informed that he had joined a place where LED lights are manufactured. There is yet another who started working in a grocery shop as a delivery boy. Another is working in a roadside food joint. All such children are unable to attend classes and will eventually drop out of the school system. Since the COVID crisis has forced children to shift to daily wage work to support their families, only 15 to 20 per cent of students are found attending virtual classes," a teacher from a government school conveyed.

Language also emerged as a major barrier for children during online classes. According to the NCERT Learning Enhancement Guidelines (2020), the major online platforms used in schools are: WhatsApp, Google Classroom, Google Meet, and G Suite. None of these have easy provisions for the use of regional languages. Children from marginalised sections of society are most affected also because of the limitation of diverse language use in online classes. For example, in Odisha, tribal children are taught in tribal languages such as Santali, Ho, Kui, and Kolha. It has become very challenging to conduct online classes using these languages, pushing several children to drop out (Ghosh, 2020). This raises critical questions about the relationship between language and power, as well as epistemic concerns that seem to leave the bulk of communities and their knowledges outside mainstream education.

Teachers across private schools revealed that even though authorities do not reprimand EWS children given their socio-economic backgrounds and the challenges they face, the school makes no effort to find ways of reaching out to them when they are not able to attend classes. A survey revealed that of the 250 million students affected by the lockdown, 80 per cent fall in the EWS category and were struggling to attend classes due to lack of resources (Indian Express, 2021).

Some private schools however, ensured that EWS children are not left out of the learning process during school closure. Whether they were in the city or went back to their native places during the lockdown, they tried to ensure that learning continuity was maintained.

"Initially we were on Zoom, but we shifted to Google classroom for EWS students as that required lesser bandwidth. The school also ensured that the EWS children have at least one gadget at their place to access classes. Other than that, not all were in Delhi. One child was in Rajasthan, another in Mumbai, and yet another in Kerala. Whoever was unable to access online classes, there was a clear instruction from the school that they should be reached out to, on a priority basis. As a class teacher, it was my responsibility to follow up with parents. If children are completely unable to attend classes due to connectivity issues, it is my responsibility to send them all the work done in class," a private school teacher mentioned.

As schooling moved to online platforms, there was a massive dip in the numbers of children who could attend classes.

Challenges of digital education

There have been huge variations in the accessibility to online educational platforms and resources, internet services, and the availability of time and space for attending online classes. The paraphernalia required to attend online classes that includes devices such as laptops and phones, internet connectivity and data packages was not available to the bulk of children. A stark contrast was noticed between elite private school children who could afford personal phones and laptops for attending online classes and those whose families faced loss of income and livelihood during the lockdown.

Barriers to accessing virtual classrooms

Image 2: Challenges to online accessibility in rural areas

Due to the precarious condition of several vulnerable families, children could not access even the worksheets sent on WhatsApp groups, simply because they did not have smart phones. The competence, familiarity, and ease with which elite private school children could access resources helped them to sustain their learning. The bulk of government school students on the other hand, lagged in every way, unable to join online classes and unable to access resources that were circulated to those who could not attend online classes.

Teachers too faced immense challenges, trying to access devices as schools made demands on them to be technologically equipped. Teachers experienced a sense of frustration and helplessness as they struggled to sustain virtual modes of learning.

"Teachers are pressurised to buy gadgets. I have a laptop to take my classes. It's comparatively easier but 90 per cent of our teachers use their phones and it's hard to take live classes through phones. It so happens that whenever a screen is shared during live classes, it either gets lapsed or the class gets disconnected. The teacher needs to log in multiple times which completely breaks the momentum of the class. The principal in one of our staff meetings has made it mandatory for teachers to either buy laptops or tablets to sustain uninterrupted classes, with no consideration on whether teachers will be able to afford them or not", informed a government school teacher.

With financial crunch and livelihood distress in families, the education of children has been heavily impacted. Parents shared several stories of distress as they were unable to provide digital access to their children.

"It was very difficult. My husband is without a job since the lockdown. I am a housewife. In fear of COVID-19 we didn't travel back to our village, which is in the interiors of Gorakhpur. Survival is not easy in the city. We didn't even get any ration. We have the ration card made but lot of paperwork was sought to get ration. Where do we run around for paperwork in the pandemic? A nearby government school was serving cooked meals for those who either do not have ration cards or have not received any ration. For a few days I went there to get food to feed my children. Such is the situation; how will I continue schooling of my children in online mode? It is impossible till my husband is able to earn again," mentioned a parent of a child from a government school.

Several parents found 'regular schooling' much more cost-effective than online learning as the latter compelled them to spend outside their budgets to sustain their children's education. Expenses like regular internet recharge have also become difficult for many. Even if mobile phones are recharged, their internet connectivity often gets disrupted, leading the child to eventually leave classes, frustrated and unmotivated. Even parents who could afford

internet with broader bandwidth struggled to connect, alternating between Wi-Fi and mobile internet data, due to frequent power cuts and the lack of backup devices required for uninterrupted online activity.

The continued pressure on parents to pay the school fees in private schools for the period of school shutdown added to the woes of parents; specifically, for those who had lost livelihoods and were struggling to meet basic needs of food and shelter. Several parents of relatively better financed schools found no rationale to pay fees in entirety for the period of school shutdown. Apart from the tuition fee which went towards paying teachers' salaries, schools continued to charge for facilities such as the library, science laboratories, computer laboratories and electricity when none of these resources were being utilised by the students. The matter was brought to the courts, with little respite, even as of today, for the parent community.

Low fee-paying private schools that are largely dependent on school fees for survival, have been harassing parents by making continuous phone calls, and sending messages on WhatsApp. Children, whose parents have delayed paying the fees or were unable to pay it altogether due to loss of livelihoods, have been openly rebuked during online classes in front of their classmates.

Despite loss of jobs, some parents are struggling to meet additional costs incurred on supplementary means of learning such as private tuitions and resources supplied by Ed-Tech companies, to support their children's learning. This is leading to increased dissatisfaction among parents who are being pressured to purchase all sorts of Ed-Tech resources that schools are indirectly pushing parents to buy for their children. Surveys reveal that a large number of children have moved out of private schools (Jain et al., 2020; CSF, 2020b), as the parents have had no other option. This is discussed in detail in the next section of this report.

**Children from marginalized sections of society are affected
the most and are left out of the learning process.**

Pressure on schools to increase online access

There is immense pressure on teachers by state authorities via the school administration to ensure the efficacy of online classes. Teachers in turn pressure parents to get devices for children to attend online classes. Teachers pointed out how state officials were only concerned about the number of students present in online classes to claim the success of digital learning. Neither state authorities nor school heads were concerned about the curriculum and knowledge that was being imparted through digital learning platforms, and how far students were able to comprehend. Instead, the focus seemed to be solely on access and participation numbers.

A government school teacher shared, "we are forced to call up the parents every day to put pressure on them to buy phones. We are asked to tell parents that the school cannot do anything if you have lost your job, or you do not have money. Do whatever is possible but make arrangements to buy a phone for your child to access classes."

The following excerpt is from a government schoolteacher's account of the immense pressure she faced to increase student attendance during online classes.

In July 2020, I was teaching a class of almost 62 students, but I was sending online attendance for only 27 students. My principal asked me why the attendance was so low. I told her that I have spoken to each student and realised that not everyone has a smartphone. The ones who have it are attending classes. Others either don't have a smartphone or are not able to recharge their phones. In some cases, the phone was with their brother or they didn't have internet connectivity. Some had Jio phones, some had gone to their village or are too stressed to attend online classes.

The principal told me that this number was too low as we must show records to the state authorities regarding the number of students who are available on WhatsApp, those who are not, and the ones who are attending online classes. So, there was pressure to show maximum participation of students. We cannot assume that the students who shared their WhatsApp numbers with us are also attending the online classes. But we are so much under pressure that some

teachers had started threatening the students of 10th and 12th grades that if they do not attend classes, they will not be registered to appear for their Board examinations. Even teachers of younger children, like grade 2 were pressured to submit their work on time, else they would be marked absent and would not be promoted to the next grade. The entire education machinery is working just to project the success of online education via high participation. The only thing that we are asking our students is whether they have attended the class or watched the video. It doesn't matter if the child had watched it just for a minute or the entire video. The child needs to just tell us that yes, we have watched it. The entire focus is on attendance and an acknowledgement of learning resources that were sent, and not on learning and comprehension.

Teachers are succumbing to the pressures put on them, in the fear of losing their jobs or being issued disciplinary memos. They seem to have internalised and accepted the burden imposed on them to prove that online teaching was effective via the projection of large numbers attending online classes and responding to communication via WhatsApp messages. Teachers' docility, numbness, and acquiescence to authority reinforces the culture of false state projections about the success of digital learning.

"There is immense pressure from the principal to increase the attendance graph and show success of the online mode. Teachers, to prove their efficiency in increasing the graph, have started using various techniques to put pressure on parents and the children. There is a teacher who tells the Principal in one of our staff meetings that if a child is absent in her class for ten days, she informs the parents that she will remove the child from the WhatsApp group and stop sending any lessons. Another teacher said she puts pressure on parents saying that if their children do not attend classes, they will be removed from the school. The agenda of staff meetings is to find ways to keep adding pressure on parents so that their children attend online classes," shared a teacher at a state-run school.

This appears to have exacerbated the woes of students and parents specifically those who come from the most vulnerable sections of society. Several parents are cutting down on eating wholesome meals to save money to buy smart phones, or even take loans, pushing themselves into a debt cycle. Children too sense the pressures put on them in blatant ways.

"Ma'am says those who will not send their work will not be given their attendance and no attendance means no promotion to the next class," mentioned a 4th grade student from a government school.

Children studying in private schools and those who were able to access online classes were warned by their teachers that if they did not attend classes regularly, their *"assessment will be impacted; their parents will be informed; or rules such as keeping cameras always on during classes will be enforced"*. A child's autonomy is usually limited to an in-person classroom. The gaps between the schoolteacher as an authoritarian figure and the children is seen to be further accentuated during the online mode of learning. Under immense pressure themselves, teachers are asserting their authority even more and creating new disciplinary rules that are bound to distance children from their teachers and the processes of learning.

Teachers are under constant pressure to ensure the efficacy of online classes with a focus only on access and participation numbers rather than imparting meaningful knowledge.

Centralisation and homogenisation of digital resources

The central and state governments are making all efforts to privilege online learning despite widespread economic and social asymmetry and unequal access to technology. Centralised digital resources and E-Vidya apps are being pushed by the Government of India via web-based platforms such as DIKSHA and Swayam Prabha. The Directorate of Education of the Government of Delhi uses YouTube links and digital teaching-learning materials developed by and outsourced to various corporate and civil society organisations. Centralised ways of ensuring online learning have homogenised curricular content and pedagogic approaches. As a result, teachers are unable to address the diversity and different developmental levels of children in their classes. Teachers are being coerced into playing a techno-managerial role involving the dissemination of outsourced, teaching-learning materials. The central role of the teacher has become one of keeping records of students who can or cannot access the videos and the worksheets.

"A teacher knows what her/his students will understand, what is the nature of knowledge that children will respond to. But when the schoolwork is mass produced it does not take into consideration diverse learning levels of children. It also breaks the teacher-student relationship," conveyed a teacher at a government school.

"Teachers are only sending video links and the worksheets sent by the DoE. They are not even allowed to rework on the worksheets as per the level of the students. Teachers have become completely insignificant in the system. We are only made to do COVID-19 duties. We miss teaching, but we do not have the voice for even asking what we are appointed for," said another teacher at a state-run school.

Several teachers shared that the content of the materials they are supposed to disseminate to students fails to match the cognitive abilities of children. Most of these materials are a diluted reproduction of school textbook content and are largely incomprehensible to several students. Teachers felt that it would be much easier for students to read and understand the textbook than the slides which were uploaded.

Students belonging to the most vulnerable communities, those residing in remote rural areas with no phone or internet connectivity or the means to acquire these, are unable to access any of the e-learning resources. Coercing schools to organise online classes has led to deep learning loss as millions remain outside mainstream digital access. This has reinforced and deepened existing educational inequality, bringing back questions of iniquitous access and the opportunity to learn for the most marginalised.

This is not the situation in the elite private schools and other better resourced private schools. With technological systems in place, several private schools have set up processes and practices to ensure quality e-content based on the guidelines issued by the Central Board for Secondary Education (CBSE). However, low fee-paying private schools do not have any such mechanisms in place, and therefore, either do not encourage their students to use digital materials or have simply closed. Private school teachers are reasonably happy with the content developed. However, teachers are concerned that if children are left on their own to learn via the apps and video channels provided, it will lead to a decline in their learning abilities.

The pandemic has coerced teachers into playing techno-managerial roles involving the dissemination of outsourced, teaching-learning materials.

Arbitrary curriculum change

The central government took advantage of the long period of school closure to not only centralise the content and process of learning, but to make widespread changes in school curriculum and textbooks¹⁰.

A senior secondary school student at a state-run school informed *"now this year they changed the textbook. This is also an issue, from where to buy the new books? No books are available in the market due to lockdown. The teacher said, your books have changed, paragraphs from within the chapters have changed. Portions are deleted and added. What do we do now?"*

In the garb of reducing curriculum load on students during the period of stress and anxiety, the CBSE deleted critical content from the social science textbooks. The chapters deleted from the syllabi include critical constructs such as, secularism, citizenship, gender and caste, federalism, democracy and diversity, nationalism, India's relations with its neighbours, and the growth of local governments in India (Deccan Chronicle, 2020). The Maharashtra government took similar measures noting that *"farmer suicides is not compulsory to be taught"* (PUCL, 2020).

Later, the CBSE issued a clarification stating that the reduction of syllabus means 'no questions will come from those chapters in the examinations, and that teachers will be encouraged to teach them' (Mohanty, 2020). Some

¹⁰ Curricular revision exercise is a national level exercise. However, curricular changes are not undertaken in the middle of school sessions.

teachers mentioned that with the several challenges of online learning, it is most unlikely that teachers and students will spend any time on chapters and concepts that have been removed from the list of syllabi for the purpose of the Board examinations (Mohanty, 2020). Several school teachers and Principals largely welcomed the move to reduce syllabi.

Central and state governments are making all efforts to privilege online learning and to institute centralised curricular and pedagogical approaches.
Widespread arbitrary changes are made in school curriculum and textbooks.

Pedagogical challenges of online classes

Teachers shared some of the specific difficulties they faced while teaching certain subjects online. Those teaching middle and higher secondary classes shared that they found the teaching of mathematics through the online mode particularly difficult. Science was another subject they found challenging to teach as it was largely dependent on practical experiments that could be done only in a laboratory.

“Teaching has become very difficult for me as I take mathematics. In mathematical operations step by step concept building is crucial, which is a challenge in the online mode. Problem-solving questions require writing, which has almost ended in online classes. Children’s doubts remain unaddressed sometimes due to technological glitches and sometimes due to limited screen time and the pressure on us to complete the syllabus. Children are not able to grasp the subject in this mode,” conveyed a higher secondary school teacher of a low-fee private school.

“We are not able to do any of our science practical. We are just submitting practical files based on videos that are sent to us. We aren’t getting hands-on experience,” communicated a senior secondary student at a private school.

Teachers’ lack of knowledge about how to use devices and unfamiliarity with online teaching methodologies, posed a major hindrance to children’s learning. Teachers from local government schools found the sharing and use of curriculum content through mobile phones particularly challenging.

Children with various forms of disability faced tremendous problems in maintaining continuity in their learning. Since several of these children have different pace of learning, memory, and retention in comparison to able-bodied children, they were affected deeply. The sudden switch to alternative pedagogical approach via digital platforms increased the burden on teachers manifold as they struggled to ensure that children with disabilities cope with the ‘new normal’ in education.

Emphasising the pedagogical concerns for differently-abled children, a government schoolteacher shared, *“The online mode is the most difficult for disabled children. I have two students in my class who are mute and deaf. Over online I am unable to do anything for them. They have completely fallen out of learning for the past four to five months. Even if I send them videos with actions, they can only see, they cannot hear. I want to talk to them over the phone, but they are unable to share their doubts. There has been hardly any follow-up with these children. We do not get much support from their parents either as they go out to work.”*

Children with various forms of disability face tremendous problems in maintaining continuity in their learning.

Children across government and private schools felt that the content taught during online classes has been considerably diluted. Due to time constraints and the limitation posed by online modes of interaction, curriculum content has been transmuted into small capsules of information copied from the internet or reproduced from the school textbook.

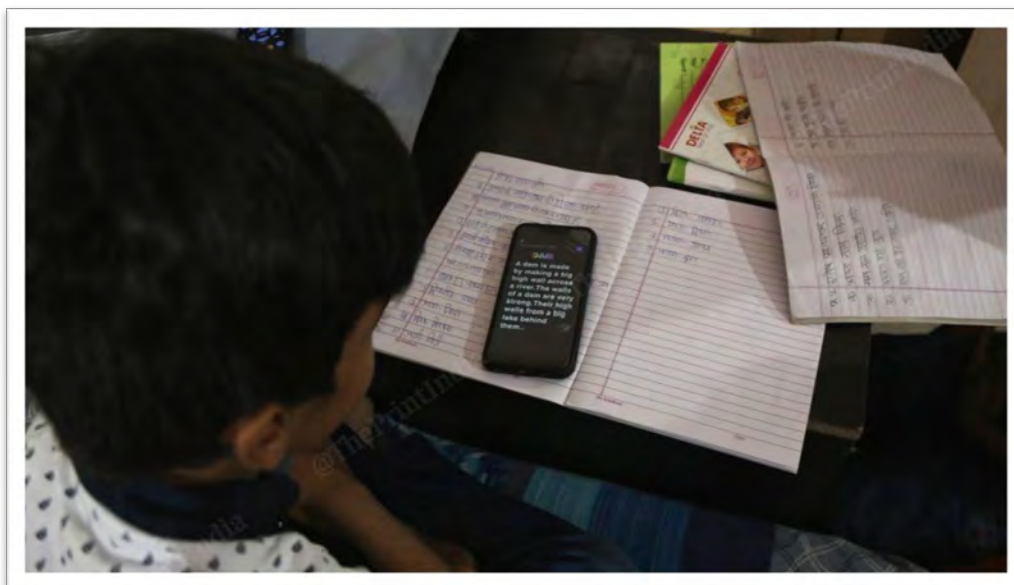


Image 3. A school child in Delhi studies online via WhatsApp

"The teacher goes for shortcuts; she knows not everything can be explained online. So, she just explains briefly and then sends links of videos or notes and leaves it to us. Notes that teachers send us are readymade. They have many guides; they click photos from there and send them on our WhatsApp group", communicated a senior secondary school student at a government school.

"We log in and send our roll numbers to the teachers for attendance. We are then into other activities. While classes are on, students are either on WhatsApp chatting with friends or on Instagram. In physical classes we had so many difficulties in understanding and comprehending, you think online will help? It has rather worsened", stated a senior secondary school student from a government school.

However, in well-endowed private schools, attempts are made to involve children using multiple apps such as, Quizzes, Quizlet, Kahoot, Answer Garden, and Padlet. These were initially found to be very engaging for students. The repeated use of these apps however, created a sense of monotony among children who gradually became disinterested during online classes. Several students faced significant challenges during online classes struggling to understand, comprehend, and retain the concepts that were being taught.

"We do play online games. Kahoot is the most popular quiz game during our classes. Every time we complete a concept, the teacher creates a Kahoot. It is just an informal way of keeping us engaged and it's fun too. But now over a period we are losing interest playing the same online games. It is not breaking the monotony of classes anymore," said a senior secondary school student at an elite private school.

A culture of teacher-student engagement, peer interaction and dialogue, which are integral to learning has been completely disrupted. Students are unable to seek clarity of the concepts and issues taught to them. Classrooms would often be spaces to engage with students' personal knowledge, their interests, experiences at home and in their social milieu. All of this has come to a complete halt. The teaching-learning process has become impersonal and dry, demotivating both the student and the teacher.

"Students from different sections of a grade are merged into one large group. In my child's class the number exceeded 100, with just one teacher to teach. In such a situation, and with multiple logistics to take care of during the online mode, the teacher is unable to give individual attention to students. Schools are not transparent about the merging of sections, but it seems a major reason is the laying-off of teachers for cost-cutting", conveyed a parent of a private school.

Merging of sections is common in many private schools in the online mode. This impacts children's learning development as gaps remain which the children try to fill, either through self-learning, parental support or through private tuitions.

Systemic impact of school closure

The pandemic and school closure led to a series of systemic impacts that are likely to create major structural gaps and challenges in school provisioning. These gaps are likely to take a long time to reverse even after schools reopen and some normalcy is brought back in the school system. First, several low fee-paying schools closed as they proved to be economically unviable. This led to a high increase in enrolments in state schools, presenting an opportunity to revive the state school system. Second, a large number of teachers working on contract were laid off during the pandemic, further augmenting the problem of teacher shortage. Third, the bulk of primary school teachers were roped in for COVID-19 related duties, leading to health risks and fatalities. Each of these are discussed in this section.

Closing of low fee-paying schools

Several parents withdrew their children from low fee-paying (LFP) private schools and sought admission in state schools. This happened because several people lost their livelihoods during the pandemic. Unable to even pay the meagre fee that LFPs charge, many parents had no choice but to withdraw their children from these schools. These were children of migrant families and informal labour, many of whom were also forced to leave the city as they lost livelihoods and ran out of basic amenities like food and shelter.

"Till now, out of 37 students who have taken admission in classes 4 and 5, at least 30 have come from private low fee-paying schools. This happens every year, but the pandemic has further augmented this phenomenon," informed a teacher in a government school.

A middle school parent who lost his job during the lockdown shared, *"I don't have work. I was laid off with the shutdown of schools. It's been eight months now. I was a safai karamchari in an International School. Now the situation is such that I am borrowing money to feed my family. The debts are increasing, and I have no clue how to pay back the money. Hence, I shifted my daughter from a private school to the nearby government school as I was unable to pay fees."*

Another parent whose child is in the 1st standard of a low fee private school narrated about the harassment she experienced as she was unable to pay the school fees due to the financial setback in the family. **Video 1** captures her experience.

As a consequence of several people unable to afford even the LFP private school, many of these schools faced bankruptcy and closed shop. A representative from the Central Square Foundation (CSF) in a panel discussion with the TESF team shared this concern, *"One of the big sectors affected by the pandemic is the 'affordable private school sector'. Almost one in two children go to these budget private schools, and many are impacted. The schools themselves are impacted because parents are unable to pay the fees, and the schools are not going to be sustainable. So not only are these schools closed, but now, many will close in the near future, which is a very sad situation."*

Due to the massive exodus and economic hardships, enrolment in private schools may decrease and parents might not re-enrol their children in the same schools. If the economic crisis worsens, parents are likely to choose government schools over private schools. With this shift, private schools with little liquidity such as LFP schools may be forced to shut down in large numbers (CSF, 2020b). In Gurugram, the economic blow inflicted by the pandemic and lockdown led many private schools to refuse to forgo school fees. This has led about 43,000 students to switch from private schools to government schools in Haryana (Yadav, 2020).

With the mass closure of low fee-paying private schools due to loss of livelihoods, several people have shifted their children to government schools.

In response to LFPs shutting down in large numbers, the Central Square Foundation (CSF), a leading advocate of privatising the school sector, recommends that these schools be regulated and registered under the Companies Act; and be brought under a “corporate governance structure”. Advocating state support for LFPs, CSF strongly recommends that they be classified as micro, small, or medium enterprises” to become eligible for credit availability” by the government (2020b). Advocacy for private schools finds institutional support in the National Education Policy (NEP), 2020 (Gol, 2020b).

Teacher layoffs and compensation cuts

One of the major fallouts of the pandemic has been the state’s swiftness in laying off a large number of school teachers employed in contractual positions. Contractual teachers were arbitrarily laid off from their jobs with the announcement of school closure during the lockdown of March 2020.

“It so happened, I get up in the morning and around 8 am a message comes from the school that I am relieved from my duty. It was that instant. In any job, it is desirable that at least a 10-day advance notice is given before laying off a person and here I get up from my sleep and come to know from the principal that I am no longer part of the school system and that I should come to the school at the earliest to collect my relieving,” shared a guest teacher from state run government school.

Shoeb Rana, president of the All-India Guest Teachers’ Association, shared that many guest teachers used to get work during the summer break at summer camps for the *Mission Buniyaad* and other remedial classes. Since all schools have had to remain closed, these teachers have not been called for work (Iftikhar, 2020).

However, some guest teachers at state-run schools and those under the *Sarva Shiksha Abhiyan* (SSA) were reabsorbed into the system after a few months. Contractual teachers at the local government schools are, however, still out of jobs. Immense hopelessness has seeped in. Most of the teachers conveyed that they have tried all possible ways through their contractual teachers’ welfare association to get back their jobs, but nothing has worked.

“We are constantly writing on various social media platforms. We have been regularly using the MHRD Twitter platform as well, but with no luck so far,” a contractual teacher anxiously remarked.

“There are 4000 contractual teachers across the various local government schools of Delhi, but their names are never in the record of the teachers’ list. Their positions have always been declared vacant. Hence, when their contract ends, they are conveniently disowned. This is precisely the reason why when the pandemic hit the city, contractual teachers were completely abandoned by the system in no time,” informed another contractual teacher of a local government-run school.

**Large numbers of teachers working on contract
were laid off during the pandemic.**

Those contractual teachers who have a native home and agricultural lands in their village have gone back and have started farming to earn a living. However, there are still many who do not have any such arrangements. They are trying to survive in the city but with the sure possibility of accumulating heavy debts. They have, nevertheless, not given up hope.

One teacher shared that, *“without contractual teachers, the education system cannot run. In most of the schools in terms of strength, it is the contractual teachers who are the majority. Hence, we will get back our contracts that is for sure, but it might take a long time.”* Estimates reveal that the contractual teacher work force in Delhi government schools alone is about 34 per cent.

Permanent teachers at government schools are fighting their own battles. Teachers shared that their salaries are being disbursed after deductions. Schools run by the municipal corporation, particularly of the north zone, started

facing a financial crunch even before the pandemic, due to poor revenue collection. The situation worsened during the lockdown as economic activity came to a standstill. Both teaching and non-teaching staff in schools under the north zone did not receive their salaries from when the lockdown was announced. Salaries were delayed up to two months even before the pandemic. The problem has aggravated since the pandemic, extending non-payment of salaries into several months. The crisis has deepened for the teachers who are the sole earning members of their families. This is even though teachers are expected to report in school at least four days a week for attending to administrative work, school admissions, distribution of books and worksheets, in addition to COVID-19 related duties such as ration distribution and attending medical camps, dispensaries, and vaccination drives.

One of the teachers from the north zone mentioned that *“the teachers’ association has filed a court case against the government for not disbursing our salaries. Just before every court hearing, one month’s salary is released by the MCD to appease the teachers and delay the decision of the court.”*

Teachers are helpless trying to fight for their rights, as governmental authorities respond by giving false assurances to them. From arbitrary job losses to compensation cuts, teachers have been at the receiving end of state apathy, indifference, and injustice. The unfettered fight of school teachers continues even as several of them succumbed to the virus while doing state election (The Logical Indian, 2021) and COVID-19 related duties in different parts of the country (Tomar, 2021). The suffering school teachers have endured and continue to endure as the pandemic still rages, is a manifestation of deep systemic failure and state apathy.

Teachers as COVID-19 taskforce

Official notifications have been issued from time-to-time to deploy teachers on COVID-19 related duties. Termed ‘Covid Senani’ (warriors), teachers have been drawn into conducting house-to-house surveys to collect COVID-19 related information; check body temperature, pulse rate, and oxygen levels of people in public spaces like airports; and collect fine (*challan*) for not wearing masks in public. About 50 to 100 data points were required to be submitted daily by the teachers to the medical authorities of a chosen area. This was a huge challenge as many people did not permit teachers to check the required parameters and were unwilling to provide the required details.



Image 4. A teacher in Delhi assigned the task of checking body temperature and oxygen levels

Teachers were given duties at airports to confiscate passenger passports if they tried to enter the city without the required test. The *challan* collection duties required fulfilling targets of about 15 to 20 *challans* per day for not wearing masks. Targets were randomly set for various duties, geographical areas were divided, and teachers were expected to comply. Teachers were given food distribution duties as well, in schools that were turned into quarantine centres.

The following excerpt reveals the systemic violence teachers faced as ‘COVID warriors’.

I have been going for COVID-19 duties for the past 6 months even on weekends. I have prepared containment zones and de-contained them. I have also been part of the lab testing work. I have taken up the responsibility of a nodal officer. I have also undertaken fulfilling the formalities of home isolation, even though it is the work of the ANM (Auxiliary Nurse Midwives) and not of the teachers. If teachers are not coming or not doing work or not meeting targets, then there is a threat of show cause. It's been six months now doing all kinds of COVID-19 duties. It seems I am more a medical staff and less of a teacher, given the amount of knowledge I have gained about COVID-19. I am not against COVID-19 duties as it is a great learning experience for me. There is an immense amount of public dealing which as teachers, we were never exposed to.

But I have felt extremely disturbed and exhausted with the kind of disrespect and insensitivity shown towards teachers. Our safety concerns are not taken care of as dispensaries lack resources. No medical insurance is provided to us. Teachers are completely left at the mercy of the medical officer in charge and the state authorities. My teaching has completely taken a backseat. During COVID-19 duties, unit tests have happened, and mid-term is to happen soon, but I am unable to teach my students. All I am doing is preparing questions, checking the papers, and preparing results. Children message and I reply, but that's about it. Initially, I used to feel guilty but sadly I have become emotionally blunt now. I just cannot do both. I have made my peace with it.

Since the commencement of the vaccination program in January 2021, teachers have been allocated duties to various vaccination and health centres. Recently, in the middle of the second wave, an order was issued by the Sub-Divisional Magistrate (SDM) of Northeast Delhi to deploy teachers for monitoring dead bodies of people who died of the Coronavirus.

The bulk of primary school teachers were roped in for COVID-19 related duties, leading to health risks and fatalities.

Teachers are left to negotiate with the governing authorities, including directly with medical officers, in case they are unable to perform an expected task. They are not entitled to any leave against COVID-19 related duties assigned to them. In fact, medical officers insist that teachers will be able to take leave only when they get a certificate that they have tested positive for COVID-19.

It is not clear how state schools have sustained teaching and learning, given that a large number of contractual teachers have been out of the system since March 2020, and an equally large number of teachers have been deployed for COVID-19- and election-related duties.

Inferences and Key Learning

Research findings suggest that the impact of the pandemic and school closure is differentiated along private and public schools, as well as along the rich and the poor. The worst impact has been on the education of the children of the most marginalised who have been pushed out of the system of learning. The pandemic was seen by the state as an opportunity to take forward the neoliberal agenda of digitalising education¹¹, despite huge asymmetries in terms of technological access. The push to institutionalise and legitimise digital learning was achieved through its inclusion in the National Education Policy, 2020, brought in during the pandemic with limited opportunity for discussions in the Indian Parliament. Processes of digitalising education has led to a complete erosion of the school teacher's agency in matters of curriculum and pedagogy. Concerns of mental health of students and teachers have emerged as a critical area of engagement that the state neglected all through the pandemic leading to considerable emotional distress among the young. Each of these are discussed in this section.

¹¹ Digitalising education has been on the agenda for some time, now legitimised through the National Education Policy, 2020

Eroding Teacher Autonomy

Over the last several years, neoliberal reforms had eroded school teachers' autonomy even in matters of curricular and pedagogical choices. Teachers' professional capacities and judgement, sensibilities, training, and education have been undervalued. The system considers teachers as incapable of doing their jobs, and there exists no feedback mechanism through which teachers can be heard on matters of professional practice and concerns. The pandemic has further exacerbated this problem. Increasing surveillance over online platforms from diverse authorities – parents, school administration and state officials – have destroyed whatever little freedom teachers enjoyed with their children in the corporeal classes.

“Classes are recorded and sent to children. More than children it's the parents who watch it over and over again to find fault. And then, they complain to the school authorities. Instead of focusing on the content, I am more worried about background noise when I am recording. If I fumble, I will be asked to re-record the class. It's not an easy thing from home with no technical support from school. Parents are scrutinising everything because they are paying fees. Parents have forgotten that teachers are not programmed robots. Teaching seems all about appearance and performance. Knowledge seems to have been disregarded in the process,” said a private school teacher.

Teachers at private schools are being continuously judged while taking online classes. Parents often pass remarks about teachers' ability to teach, comment on the background of their house that is visible on screen, pass judgements about their English pronunciation, and even pass remarks about what they wear. Teachers shared with distress how the physical appearance of a teacher is so critical for parents. The entire focus of the parents is on teachers' attire, their communication and articulation skills, including their accent. They don't seem to worry about the meaningfulness of the knowledge teachers engage students with.

As a result, teachers are not able to teach with the same spontaneity that they had in the physical school. They are extremely conscious of the constant gaze of the parents. Teachers feel that parents who send their children to elite private schools come from affluent, influential backgrounds, and feel a sense of entitlement which prompts them to manipulate the school administration against individual teachers.

Teachers in government schools seem to have internalised their roles as techno managers of digital schooling. With stringent bureaucratic orders, teachers no longer feel secure in ideating and thinking as professionals. They are coerced into following official orders even in matters of pedagogic approaches. Resisting any of this could mean getting a show cause or losing their jobs.

“Rules have become very arbitrary. Every school administration is interpreting the online teaching-learning guidelines in their own ways without taking cognizance of the concerns of the teachers who are meant to blindly put the rules into practice,” communicated a private school teacher.

The culture of online teaching has created the conditions for school administration across government and private schools to have complete control over teachers. Class links are made available not only to the school Principal and administration but also to the state officials for them to access and monitor teachers during online classes. Teachers felt that there was some space for autonomy at least in developing teacher-student relationships in physical classrooms that went beyond formal classroom interactions. The online culture of learning and other authoritarian measures adopted by the state and schools has destroyed any semblance of classroom spontaneity and agency of both teachers and students.

Constant surveillance by school and state authorities has impacted the psychological well-being of teachers.

Gender Concerns

In a survey conducted among adolescents in Delhi-NCR, it was found that only 22 per cent of girls had access to mobile phones compared to 44 per cent of boys for online classes (Child Rights and You, 2020). Teachers too confirmed that the gender gap was evident in terms of access to gadgets. The preference was always given to boys over girls. Girls also struggled to attend classes as they were constantly kept busy with household work. They could only access gadgets in homes where the boys were not interested in attending online classes. School teachers were getting calls from girl children, conveying their anxiety in waiting for schools to reopen as they wanted to escape from household chores and the burden of taking care of their younger siblings. 71 per cent of girls were found to be engaging in chores and care work as against 38 per cent of boys. The same report stated that 56 per cent of boys were able to spend time on their studies, as against 46 per cent of girls (Ghatak et al., 2020).

During the pandemic several young girls who were not even of legal age were coerced into getting married (PUCL, 2020). Coming from vulnerable sections of society where parents had lost their livelihoods, several girls attending government schools were pushed into early marriage. Families saw the pandemic as an opportunity to organise marriages because large gatherings were not allowed, and parents could save themselves from having to take loans. Given the prescribed social distancing norms, parents felt they could organise low-cost marriages allowing for fewer guests, and because girls are seen as liabilities, marrying them off would mean lesser mouths to feed (Bose, 2021). It would also address another threat – one of their girls running away with young boys.

The research titled “Covid in Her Voice” by EMpower (2021) found that nearly 40 per cent of girls from marginalised communities were in financial distress due to the pandemic-induced economic downturn and were therefore under immense pressure to get married.

Conversations with teachers revealed that, as women, they were torn between domestic responsibilities and school responsibilities. Adding to this was their continuous struggle to access and learn how to use digital mediums as and when demanded by the school. Young teachers had the added responsibility of taking care of their children and their education as well.

An elite private school teacher shared with considerable distress and anxiety: *“I wake up at 4 am to prepare for my class, whether it is preparing notes, videos, PPTs or question papers. Many of my classes begin early at 6:00 am. I have no house help for the past seven months. I take care of the entire household chores. My child has her online classes too which is again my responsibility as she is in her primary grades and needs constant support. Post-classes it is again my responsibility to make sure that she completes her classwork as well as homework. The school administration is completely insensitive to the multiple struggles this pandemic and school closure has thrown up for women teachers. We have no support from the family either. As a teacher coordinator, I have seen teachers crying and breaking down while sharing their struggles with me. I am as helpless too.”*

Teacher narratives recount how domestic violence on women teachers has accelerated during the pandemic. The following excerpt was shared by a resource person from Nirantar in a panel discussion with the TESF team.

It is important to understand that the teachers I am talking about come from a social milieu where mobile phones are given for surveillance and control. In pre-pandemic times, teachers used to come to the Centre¹² for 4-5 hours and phone calls used to constantly come from their homes. Now the centre is closed. But constant calls started coming when relief work began. The families were suspicious. When centres are closed why are calls coming and why are they on the phone, is the question teachers are continuously confronted with from their husbands. It is very difficult to convince the family and particularly the husbands that these were work calls. One teacher sent an audio message to us that her husband has taken the phone and she can see it only when he permits her to. Another teacher got a work call at night. Her husband switched off the phone and told her only the next morning. There was yet another who wrote a letter and sent a photo of it on WhatsApp to us. She then deleted the photo because her husband checks her phone. There was another teacher who recorded an audio message from the bathroom. With time, teachers started coming to the centres, only to get out of the toxic home atmosphere. At least for 4-5 hours a day, they found a space of their own at the centre, where they could do what they wanted to.

¹² The panellist from Nirantar is referring to the Learning Resource Centre (LRC) at the organisation. The Nirantar LRC constructs knowledge around various aspects of gender and sexuality, engaging with multiple stakeholders through training and capacity building.

The burden of online learning is mainly carried by the mothers, especially those whose children are in elementary grades. Mothers are expected to shoulder the sole responsibility of supporting children during online classes, helping them comprehend the lessons being taught and attending to constant technological glitches.

"A minimum amount is taught in the class. The major part of the lessons is left to the mothers. I am working in a multinational company and now I have taken up the role of a teacher for my child because it's either me or nobody. I am burdened with figuring out time for my work, daughter's studies, and domestic chores. Professionally I am impacted as my office will not understand the havoc in my life.", stated a parent of a private school child.

Girl students, women teachers, and mothers – all seem to have been impacted by the closure of schools. Several working women are coping with the added responsibility of their children's education, especially as the onus of children's learning has shifted from the school to the home. They struggle to fulfil their professional duties, domestic responsibilities, including looking after their children's education. *This has taken a toll on the mothers, manifested at times in the form of violence against children*¹³.

Several girls were pushed into early marriage. Teachers and working mothers struggle to fulfil their professional and domestic responsibilities.

Degenerating mental health

School closures, the fear of being infected, and online classes brought a host of psychological challenges for the young and old. Challenges for school teachers became manifold as they struggled with the demands of new technology, alongside COVID-19 related duties. The fear of being under constant surveillance while teaching through unfamiliar modes added to their already stressful condition. The constant hounding by school and state authorities in multiple ways immensely impacted the psychological well-being of teachers.

With the transition to the online mode, most systemic processes and practices have slipped into a kind of adhocism, as a teacher at an elite private school shared.

There are days when I sit in front of the laptop at 7:30 am and get up at 5:30 pm... even now I got a message from the school that there is a meeting at 5:30 pm. Arbitrarily and randomly organised meetings are communicated at very short notice. Often meetings go on for hours together with the presumption that everybody will be available whenever asked for, because meetings are online, and travel is not required. Teachers do not even get a Sunday for themselves in this online mayhem.

Teachers have also been shaken up and shattered by the emotional violence and indignity experienced during cyber-attacks. A government schoolteacher narrated one such incident experienced by her friend.

My roommate was taking class with 4th standard children. Suddenly the chat box flashed with some sexually abusive words. 4th class children cannot write the way it was written. This meant that the link was with somebody else too. When parents are asked, they insist that their children were attending class and they were beside them. We sent screenshots to the principal too. All he said was to talk to parents. That's all. The matter was not investigated at all. Nothing is done even as teachers continue to experience such disturbing situations during online classes repeatedly. It's like so what if such messages have been written. Why make so much of a hue and cry?

Teachers across government and private schools spoke about cyberbullying and the trolling that happens on online platforms during classes. This usually happened in senior classes where students took screenshots of teachers and then developed them into memes for social media channels such as Instagram News Feeds, Stories, and WhatsApp groups. This is a serious issue that can cause humiliation and impact the mental health of teachers.

¹³ As mentioned by a resource person from Aga Khan Foundation in a panel discussion with the TESF team.

A disordered life, toxic home environment, unwillingness to attend online classes, inability to meet friends, and having to be confined within the closed walls of home are factors that have impacted the mental health of children during the pandemic.

“Sometimes when home is suffocating for a child, school becomes a secure place among teachers and friends. Now school is taken away from us, and we are forced to sit at home which is probably not the best environment for us. Close conversation with teachers was catharsis for us. All that has completely ended” conveyed a student in a private school.

There has been an alarming repercussion of the pandemic-induced lockdown with Maharashtra witnessing a spike in the number of child suicides during the period, raising concerns about children's mental and emotional wellbeing (PUCL, 2020). The uncertainty around Board exams in the case of classes 10 and 12 was also one of the major causes for child distress and suicidal tendencies (PUCL, 2020). For these reasons, teachers were assigned the additional duty of organising counselling for students. Several teachers were themselves stressed and therefore unable to do justice to the students. The excerpt below captures the view of a government schoolteacher on the mental wellbeing of school children.

It's like I am making sure to do all possible things that make children suffocate and then I institutionalise a system to heal them from that suffocation and in no time aim to make them happy. This is precisely what the Department of Education (DoE) is claiming it is doing. The Department is engaging counsellors for children, organising webinars, sending videos on activities that are supposedly mentally healing. All this is a sham. This is just to please the higher authorities and for media publicity. We, as a system, are constantly after the lives of children to ensure the success of the virtual mode of schooling. We are insensitive to the existential crisis they and their families are going through. Children giving board exams are under severe mental stress. They have no money to pay their examination fees and when they voice their concerns to us, we say if fees are not submitted on time within the given date, you're losing out a year and that is not our responsibility. The junior classes are given the threat of not being promoted if they do not attend online classes. Most children we cater to are from vulnerable sections of society. When in dire need of money, they enquire about their scholarships, but teachers often rebuke them. It is clear that we do not care about the mental agony our children are going through. Lessening their stress is out of question.

Genuinely concerned teachers thus feel helpless as they are unable to find a way out of the pathological conditions their children are experiencing.

Accelerating the Neoliberal Agenda

The pandemic and school closures have created conditions that appear to foster the use of authoritarian neoliberal measures. A significant and prompt response to school closure came from non-state actors who viewed it as an opportunity to launch e-learning and remote learning programmes to sustain education. Agencies like McKinsey¹⁴ are providing scripted lessons to teachers in government schools. The American India Foundation initiated ideas of peer-to-peer learning using WhatsApp groups of teachers and students. They plan schedules and lesson plans with teachers and train them to use remote learning methods. The Ahvaan Trust has been designing and implementing an online forum called 'Lockdown ki Pathshala' on Facebook. Ahvaan has been working with the Government of Delhi, designing, and disseminating weekly activities for parents to engage their children at home, and providing modified syllabi for kindergarten and nursery classes (Ahvaan Trust, 2020). Organisations like, Pratham, Peepul and Aga Khan Foundation are working in partnership with state governments for the production and dissemination of e-content for digital education.

Several non-state actors have had an agenda-setting influence in the education space, especially as they work closely with the central and state governments.

¹⁴ This is part of the larger influence of an international and corporate community on national education policy and provisioning.

This study reveals that non-state intervention and activity has accelerated for government schools by organisations such as Career Launcher, SAD, and Tech Mahindra. Several of these organisations are producing school curricular content and pedagogic approaches. The schoolteacher has been marginalised and alienated from their own work as educators. Their role is at best limited to clearing doubts raised by students, much of which is not possible given the limitation of online platforms and inequality of access for the bulk of students. It seems that decisions of what to teach and how to teach are now in the hands of non-state organisations, with whom even tech companies and the state are actively partnering, leaving the teachers out of core decisions and processes of educational practice. Teachers have been transformed into techno managers and as mere conduits of learning materials outsourced and centralised by state authorities. The undermining of teachers' epistemic identity and their potential role in ensuring quality education, that characterised neoliberal reforms, has pushed teachers further to the periphery of the education system.

In conclusion, the pandemic has revealed a deeply fractured school education system – one that has reopened questions of access as the state pushes for digital learning platforms. While the first decade of reforms witnessed near universal school enrolment, the pandemic has demonstrated that large numbers of children have been left out of learning due to inequality of digital access and learning. The most significant challenge will be to bring the large numbers of children back to school and to ensure acceptable levels of learning.

The pandemic has revealed a deeply fractured school education system. It has reopened questions of access as digital learning platforms are available to only a few.

The study highlights that the learning crisis being witnessed during the pandemic is a consequence of the intersection of inequalities across class, caste, ethnicity, gender, and educational provisioning. Education policy needs to problematise the concept of learning crisis rather than view it simplistically as 'loss of learning' due to non-attendance of school.

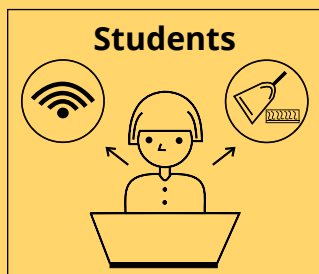
With the mass closure of low fee-paying private schools due to loss of livelihoods, several people are shifting their children to government schools. This needs to be seen as an opportunity to revive the state school system; to build adequate infrastructure and provide professionally qualified teachers.

This needs to be seen as an opportunity to revive the state school system, build adequate infrastructure and provide professionally qualified teachers.

The policy recommendation of state school mergers should be halted immediately; and states should invest in schools rather than support budget schools as is being advocated by various non-state actors with interests in the private sector.

School Education

This research aimed to capture the impact of the pandemic and digital learning on students, teachers, and parents from different sections of society in the city of Delhi.



With the sudden shift towards online classes, children from vulnerable sections of society were left out of the learning process due to lack of access to digital devices and internet facilities.

Time constraints, dilution of curriculum and limitations posed by online modes of interaction impacted children's learning through online classes.

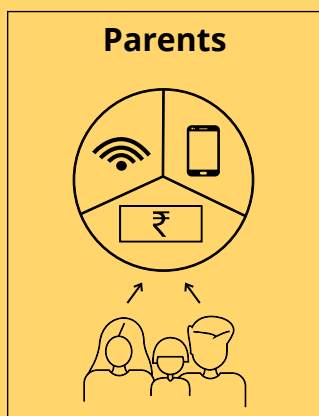
Girl children struggled to attend online classes as they were constantly kept busy with household work. Due to financial distress caused by the pandemic-induced economic downturn, families pressurized girls to get married.

Teachers were under constant pressure to ensure the efficacy of online classes with a focus only on access and participation numbers rather than ensuring meaningful learning.

The pandemic exacerbated the problem of undermining teachers' epistemic identities and professional judgement. Teachers were coerced into disseminating teaching-learning materials that were outsourced.

The bulk of government primary school teachers were assigned Covid-19 related duties, leading to health risks and fatalities. Many teachers working on contracts were laid off during the pandemic.

Women teachers struggled to fulfil their professional duties and domestic responsibilities, including meeting the demands of online education for their children.



Due to loss of livelihood, parents struggled to provide resources such as smart mobile phones and internet facilities required for online education.

The continued pressure on parents to pay fees in private schools even when schools were shut down added to their financial and mental stress.

Systemic Impact



Several low fee-paying schools closed as they proved to be economically unviable, leading to a significant increase in enrolment in state schools. Non-state actors, especially in the IT sector viewed the pandemic as a profit-making opportunity to introduce e-learning products at scale for the underserved.

Strengthening the public school education system

The pandemic has revealed a deeply fractured school education system – one that reopened questions of access as the state pushes for digital learning platforms, creating new forms of exclusion.

The 'learning crisis' must not be seen as mere 'learning loss'. It needs to be problematized as the push for digital learning has revealed deep intersections of inequality across class, caste, gender, language and region.

The mass closure of low fee-paying private schools and increased enrolment in state schools need to be seen as an opportunity to revive the state school system.

Bengaluru¹⁵: Higher Education

Bengaluru has garnered attention as the 'knowledge capital' of the country, with a bustling ecosystem of educational institutions. Its Public Sector Units (PSUs), most of which were established in the 1950s and 1960s, contribute to the economy and have helped establish the infrastructure required for higher educational institutions as well as to create employment. Along with advanced educational and research institutes such as the Indian Institute of Science (IISc), National Institute of Advanced Studies (NIAS), Institute of Social and Economic Change (ISEC), Indian Institute of Management (IIM), Indian Institute of Information Technology (IIIT), Indian Space Research Organisation (ISRO), Jawaharlal Nehru Institute for Advanced Scientific Research (JNCASR), National Aerospace Laboratories (NAL), Tata Institute for Fundamental Research (TIFR), Defence Research Development Organisation (DRDO), over the years, many engineering and medical colleges have also come up in the city (Sudhira et al., 2007), making it an important site for research in higher education. Some of Bengaluru's public higher education institutions have gained international repute for exemplary research, and these institutions are characterised by ranking and being conducive environments for research, and boast of student and faculty migration from different countries and institutions. Higher education institutions also contribute to the production of Bengaluru's image as a 'city of science, innovation, and entrepreneurialism' (Tukdeo & Mali, 2021).

As of February 2021, there were 54 universities, 256 engineering colleges, 325 polytechnic colleges, and 12 junior technical schools (JTS), listed under the Department of Higher Education, Government of Karnataka. Of this, public institutions constitute a small proportion – 23 universities¹⁶, 17 engineering colleges, 85 polytechnic colleges¹⁷. The rest are either public aided or private institutions. It is important to note that these figures are for the state of Karnataka. Bengaluru being the capital city, is better serviced, has a significant proportion of these institutions, and attracts a considerable student population, both from the state as well as other states and countries.

English education was introduced to the Mysore presidency as early as the 1830s through Christian missionaries whose labours were captured in the form of photographs, which Nair notes, 'invite the viewer to participate in its narrative of improvement' (Nair, 2019: p. 1). Higher education for women was a parallel effort of the English feminist project; the first higher education institution for women in Mysore was spearheaded by Ms. Muller, whose institution drew about seventy day-scholars by 1912 (Nair, 2019). In his exposition of higher education in 1970s Bengaluru, Jayaram notes that higher education has acted as a 'status stabiliser' by perpetuating 'status retention' in urban areas. Despite increased opportunities for education after independence, the privileges held by the upper stratum and the impediments to higher status occupations remained and further intensified (Jayaram, 1977).

Given the differential access to higher education in cities, in our research, we focussed on teasing out how a technologically mediated learning platform, brought into effect due to the pandemic – a rare public health crisis – has impacted the learning of students from different groups in higher education institutions in Bengaluru. In a study of the city's higher education (graduate level and above) and the social profile of students, it was found, as is intuitive, that the number of male students was higher than female students. This was also the case for other urban and rural areas in the state (See Figure 1).

¹⁵ Also called Bangalore.

¹⁶ <https://hed.karnataka.gov.in/page/Departments/Universities/Public+Universities+Under+Department+of+Higher+Education/en>

¹⁷ <https://dtek.karnataka.gov.in/page/Institutions/Engineering+Colleges/en>

KARNATAKA

BANGALORE

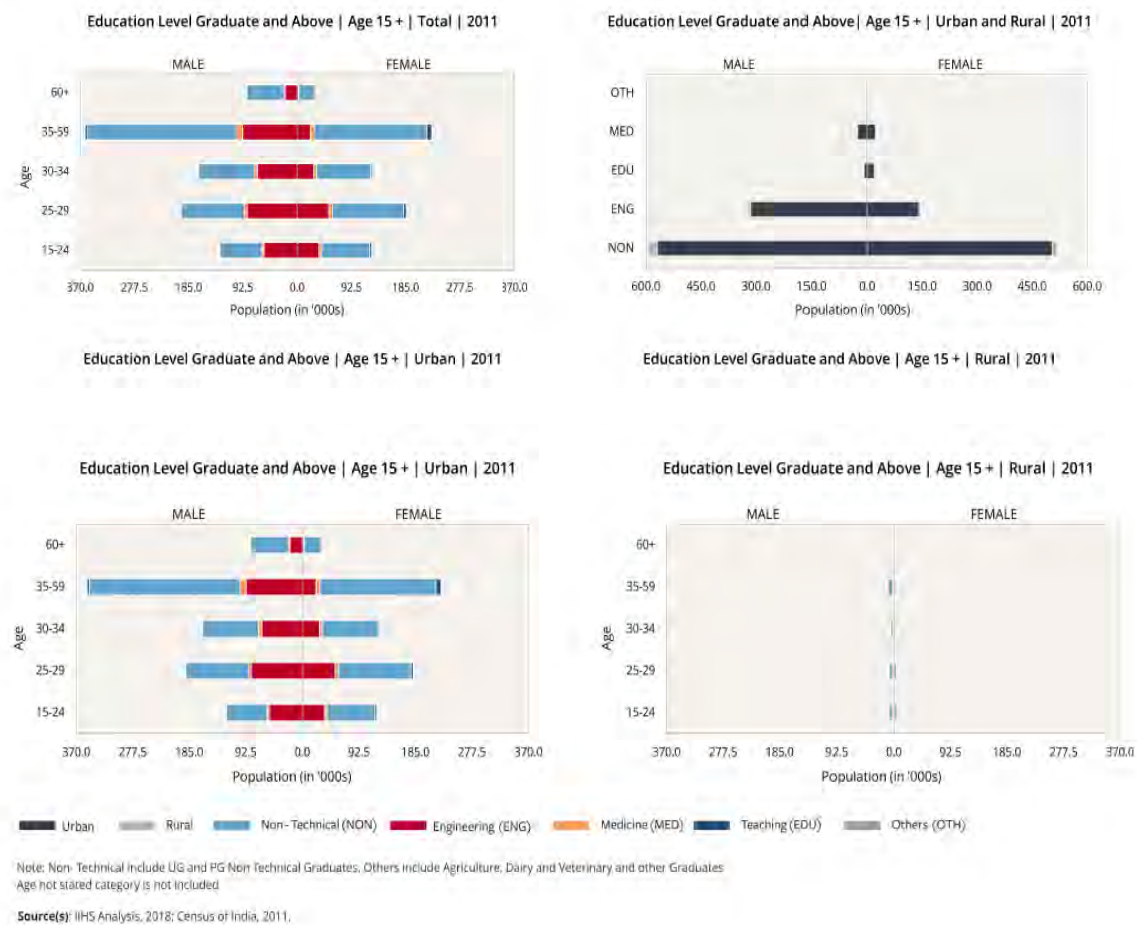


Figure 1. Higher education profile of Bengaluru

Objectives of the study and research process

This research was designed to gain an understanding of three overarching themes: (i) differentiated nature of experiences of different social groups around higher education; (ii) the nature of institutional and individual response to COVID-19; (iii) emerging policy and practice lessons from the COVID-19 experience for transforming education for sustainable futures.

Institutes of higher education ranging across diverse disciplines including architecture, law, natural sciences, social sciences, arts and humanities, and management were identified. Different categories of higher educational institutions – private, public, and public-aided – were selected for the study in order to get a wider as well as holistic understanding of the impacts across different institutions of learning. Interactions were organised with faculty members and students from 12 public and private higher education institutions in Bengaluru. Respondents were from four public education institutions; seven private institutions and one was a public-private undertaking. Existing academic networks were utilised to reach out to faculty members, who then further connected us to students and researchers studying and working with them. Given the differentiated nature of the impact of the pandemic as well as the diverse character of higher education, an attempt was made to interact with students with varied social profiles i.e., across gender, class, and regional groups.

Across 12 institutions, 40-minutes to an hour long interviews were conducted between November 2020 and January 2021, with faculty members, students, and researchers, including research associates, PhD scholars and postdoctoral fellows, specifically 11 faculty members, 6 students and 4 research scholars. A couple of interviews by faculty from University of Delhi have also been added in the report¹⁸. A focus group discussion with Delhi University undergraduate students of a teacher training programme named Bachelors in Elementary Education has been substantiated with the Bengaluru data, since a parallel can be drawn between the data collected in Bengaluru and the concerns shared by the Delhi University students¹⁹. A total of 25 female students participated in the focus group discussion. However, Table 2 does not include these students as they are technically not part of data collected in Bengaluru.

All interviews were conducted in English through online platforms such as Zoom and Google Meet. In interviews with faculty members, the aim was to understand their experiences and learnings from working with students from different backgrounds around issues such as access to online/digital learning infrastructures and conducting fieldwork during the pandemic. The interviews delved into the pedagogic constraints they faced as well as those faced by students from marginalised communities. Also, institutional, and non-institutional responses to these issues were inquired. In interviews with students, the focus was on understanding specific constraints such as impediments in access, and overall learning experience. The interviews were transcribed using the software Otter.ai and then independently analysed by the researchers. Table 2 notes the profile of the students, faculty and researchers interviewed.

Category	Participants			
	Students	Researchers	Faculty	Grand Total
Discipline				
Architecture	2		2	4
Agricultural Sciences	1		1	2
Natural Sciences	1	3	2	6
Humanities and Social Sciences	2	1	4	7
Teacher Education (Delhi)			1	1
Law			1	1
Total	6	4	11	21
Institutional Type				
Private	5	2	5	12
Public/Public-aided	1	2	6	9

Table 2: Distribution of participants across discipline and public (including public-aided) and private institutions

*Note: Amongst the participants, 3 students were pursuing a Bachelor's degree, 3 students were pursuing a Master's degree and 3 students were pursuing a PhD degree. In addition, one of the research scholars we interviewed was a research associate working at the university and was not enrolled in any programme.

¹⁸ The interviews were taken from the COVID-19 research data (Delhi) where two faculty members from Delhi University were interviewed as parents' respondents. Some of the concerns raised by them about their university resonate with the issues and concerns of higher education in Bengaluru and have hence been added to the report.

¹⁹ The TESF-India research team interviewed students of pre-service teacher education in Delhi, who were teaching in schools as part of their course requirements. Some of the concerns they raised resonated with the concerns of higher education and hence have been incorporated in this section.

Findings

This section presents the differentiated experiences of students and faculty²⁰ captured to understand the layered impact of the pandemic on the teaching-learning process, existing educational arrangements and how these affected people from different sections of society.

Impact of COVID-19 and the lockdown on higher education

In early 2020, when the pandemic was in its nascent stage, most higher education institutions in Bengaluru were wrapping up teaching sessions and preparing for end-semester assessments, when the decision was taken to suspend physical classes as a complete lockdown was announced. Higher education institutions in Bengaluru, like elsewhere in the world, shifted their pedagogical processes online. However, the transition to online learning was far from smooth. It posed new challenges while also exacerbating existing social and economic disadvantages. The sudden transition from physical to online classes had far reaching impact on the pedagogical processes and academic life of faculty members and students. The challenges faced by faculty and students in higher education institutes also resonate with the experiences of those in the school education sector, discussed in the previous section. Both faculty and students noted that in-class participation and discussions drastically reduced in the online space, having a bearing on the overall learning process. They noted that the spontaneous and organic discussions that happened inside classrooms and on campuses were lost online. The shift to an online mode severely impacted disciplines and courses that had practice-based learning components, such as fieldwork, practicum, and lab work. While an attempt was made to introduce these components in the online mode, in most cases it was limited to sharing audio-visual materials of experiments and demonstrations. The closure of laboratories, libraries, and restrictions on travel and face-to-face interactions led to the suspension of fieldwork, thereby resulting in research coming to an abrupt halt.

Loss of classroom space impacting overall learning process

The 'loss of a classroom experience' was an enduring theme across our interviews. Faculty members brought up the difficulties of transacting curriculum and engaging students, while students spoke about the challenges of comprehending lessons and instructions in an environment mediated by technology. For instance, in one or two cases, students were unable to follow instructions given by faculty for assignments and were not clear what they were required to do. Those who did not have English as a medium of instruction in their Bachelor's programme found it difficult to understand dense readings, and felt that they could have asked the instructor to clarify their doubts in a physical classroom. The online platform, respondents observed, was devoid of a 'human element', and that it could not reproduce in-person classroom interactions. Faculty members pointed out that they found it difficult to give individual attention to students in online classes. Physical classes allowed faculty members to move around, interact with each student at an individual level and gauge their understanding of ongoing discussions.



Image 5. Physical classes allow for impromptu interaction and organic discussion. A photo from a classroom before the COVID-19 pandemic.

²⁰ The names of the respondents have been changed to keep their identities confidential.

To replicate such processes online proved to be difficult. Students were often required to keep the cameras off due to bandwidth constraints, making it challenging for faculty members to understand their receptiveness. Most students hesitated to actively participate in discussions, and classes tended to become largely one-way lectures by the faculty. Students who were barely able to familiarise themselves with online platforms did not find it comfortable to engage in class discussions. Over the course of the semester, however, teachers noted that students were more forthcoming and engaged better in class discussions.

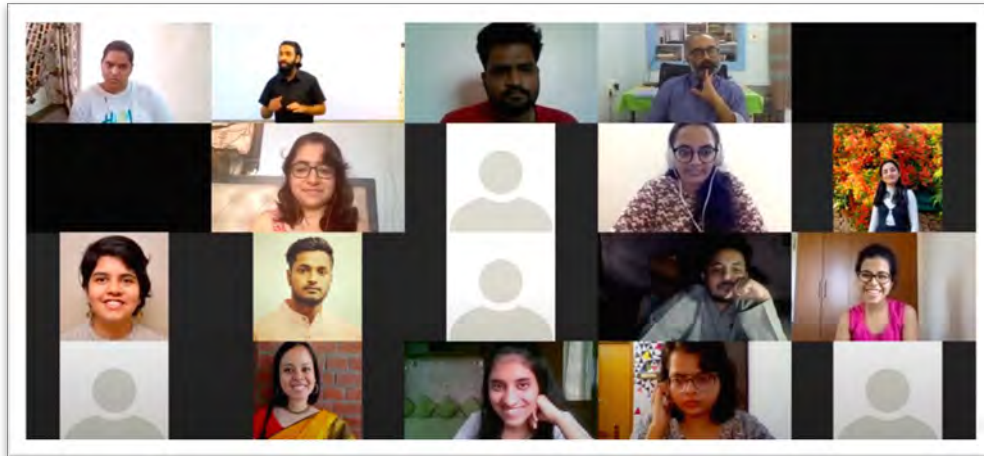


Image 6. Screenshot of an online classroom. Several students have their video turned off.

I asked fewer questions or did not initiate discussions in class as much as I would have done in one-on-one classes. (Poonam, Post Graduate Student of Social Sciences at a Private University)

In class, we usually have spontaneous and organic conversations about topics [...] but it took a while for that to happen in online classes. It was one-sided and it took a long time for them (students) to interrupt the instructor and say, "I have a question". (Prof Gayatri, Professor of Social Sciences at a Government-aided University)

The lack of a corporeal element in imparting lessons, in addition to having a bearing on the students' ability to participate in class, has also taken a toll on the motivational levels of faculty. With cameras often being turned off and microphones muted due to limited internet bandwidth and background noise, faculty members found it extremely difficult to gauge students' understanding of what was being taught or whether they were actually present in the class. This, coupled with the fact that students seldom raised questions or clarified doubts, often demotivated faculty members.

I had a two-hour class yesterday. I was teaching a topic which I thought was interesting, but there was a total silence on the other side. I have to get up the next day and teach the same class. From where will I get the motivation? (Prof. Ekta, Faculty, Department of Education at a State University)

While online platforms allowed the continuation of academic activities, it was devoid of a human element and it could not reproduce in-person classroom interactions.

While online platforms were projected as a means of sustaining academic activity, both students and teachers expressed that the richness of the learning experience was lost in this medium as opposed to classrooms, which provided a space for interaction, dialogue, and dissent. This had a considerable bearing on the overall teaching and learning process in higher education institutions.

Impact on practice-based learning

While online classes allowed the continuation of theory courses, albeit with its share of challenges, both faculty and students noted that for courses that had practical or more hands-on learning components the online mode was not conducive. For instance, faculty members and students from architecture colleges pointed out that in the initial months of lockdown they were unable to access stationery needed for sketching plans and model making, stalling their classes. Further, owing to travel restrictions, faculty members and students were unable to conduct field (site) visits – an integral component for drawing building plans and making models. These impediments forced both faculty members and students to adopt innovative practices. For instance, students used everyday household items to make models and used ruled paper or old newspapers for sketching. Few students tried to learn new software and programming tools that would allow them to digitally sketch and make models, which the faculty noted was an added skill. In the absence of field visits, faculty members utilised audio-visual resources available online to demonstrate certain activities and elements. For instance, faculty members who taught courses on agriculture and natural sciences reported that they shared audio-visual materials of experiments and activities which otherwise would have been conducted in laboratories. While these resources were useful in demonstrating activities, both students and faculty members note that concepts were best understood through hands-on engagement.

Activities like internships and fieldwork, which required immersion in a specific field site and context, were also impacted. Students either had to postpone their visit or conduct their research online. Some institutions held practica and other immersions, which were traditionally conducted in the field, online. Some faculty members also noted that techniques such as role-playing among students was employed to replicate field settings in the online space. Institutions also modified the scope of exposure visits. For instance, first year social sciences students of a private university were encouraged to engage with vulnerable communities in and around their own neighbourhood, to understand how the pandemic had impacted them.

Restrictions imposed on travel and physical distancing norms resulted in the closure of libraries and laboratories, and the suspension of fieldwork and exposure visits. This had far reaching impacts on practice-based learning courses and forced many researchers to re-orient their research to rely on secondary data.

Students pursuing initial teacher education faced a unique challenge. As part of course requirements, final year students are expected to teach in schools for 14 weeks. These students with no prior teaching experience were expected to conduct online classes for school-going children. Students pointed out that it was difficult for them to apply teaching techniques they were taught through online classes. It is ironic that aspiring teachers were taught how to teach in a traditional classroom through online classes when they themselves had to teach in an online setting as part of their school internship.

Thus, while faculty members were able to adapt theory courses to suit online modes of instruction, the same was not possible for courses that had practice-based learning components.

Impact on research work

During the COVID-19 crisis, while classes were taught online, research work, particularly the kind that involved laboratories (in the case of Natural Sciences) and fieldwork (in the case of Social Sciences) came to gruelling halt. This forced several researchers to re-orient their research to depend more on secondary rather than primary data. This impacted the direction and, in some cases, even the focus of research. Libraries continued to remain shut; access to digital libraries and resources was impacted because of limits set to databases on some library and 'campus only' terminals. Researchers working on large datasets hit roadblocks as personal computers lacked the computing power to process these.

Researchers studying natural systems and processes which are seasonal in nature faced major setbacks as they would have to wait another full year to go back to the field. Researchers who were to conduct qualitative field research also suffered, as there is no substitute for fieldwork, especially for those employing ethnographic approaches. A researcher pointed out that going to the field became a matter of calculated risk. Researchers who relied on human interactions, interviews and surveys for primary data also saw their research coming to a grinding halt, delaying their thesis submission. Ethical considerations of researchers being carriers of the COVID-19 virus and infecting communities was a major issue. Clearances from institutional ethics committees and government agencies proved difficult to navigate. Nevertheless, surveys and interviews were adapted to some extent to suit online modes of interaction. In most cases, conducting interviews online proved to be time consuming, resulting in researchers cutting down on sample size.

I was unable to get respondents to talk to me as freely as it would have been in a face-to-face interview. I also experienced difficulties in reaching people as some did not even answer calls. As a result, I had to reduce the number of interviews from the earlier planned 50 to 33. (Poonam, Post Graduate Student of Social Sciences at a Private University)

Prolonged confinement at home also had a bearing on research work as many homes could not provide a conducive environment to enable focused reading and writing. The isolation impacted research as scholars were unable to interact with their peers to share and fine tune their ideas. Several researchers noted that their work suffered for want of interaction and a sense of community.

On campus, you get to interact with fellow scholars. Being there for each other, being part of each other's journey is not happening. That stimulating environment, and camaraderie is difficult to reproduce over video calls. (Sayantan, PhD student of Social Sciences at a Government-aided University)

Further, it was noted that delays in carrying out fieldwork and experiments could have serious implications as research funding was time-bound. While institutions have relaxed their rules and granted extensions, it is yet to be seen whether they would be sufficient.

Emotional wellbeing and mental health

The COVID-19 pandemic and the resultant lockdowns have had a severe emotional impact on the wellbeing and mental health of people across the globe – either directly in terms of health issues or indirectly due to socio-economic consequences. This held true for both faculty members and students across educational institutions. A recurrent emotion in our interactions, especially with students, was that of 'feeling stuck'. Students observed that prolonged screen time led to boredom and stress due to not being able to relate to peers. A first-year masters student noted that he had never met his classmates in person and even after taking multiple classes and doing group assignments with them, he was unable to forge a bond.

Students often tell me that all of you (faculty members) think that we are safe and comfortable at home but sitting and looking at the screen for long hours, not meeting our friends, not having, at that age, a social life, and being at that age where they are difficult to manage at home with respect to parents also...all this is taking a toll on them, we can see the frustration. (Prof. Priya, Faculty, School of Architecture at a Private College)

Being confined to closed spaces, often with the parents and extended family in certain cases, without interaction with their peers took a toll on the emotional wellbeing of students. Final semester students pointed out that the uncertainty of securing a job or admission to further higher education made them anxious and caused severe emotional distress. Students also noted that most faculty members were cognizant of their situation and were accommodating with respect to delays in submission of assignments.

Prolonged stay-at-home orders and increased screen time have adversely impacted the mental health of faculty and students.

For faculty members, the shift to the online mode of instruction meant longer work hours. They noted that they had to put in much more time and effort in preparing for online classes than onsite classes, and that working from home for long hours severely affected their work-life balance as well.

Online teaching never ends, with the countless number of webinars and talks, work often bleeds into non-work hours, threatening personal time and space (Prof. Sebastian, Faculty of English at a Private College)

While working from home allowed for some flexibility, the number of hours and the effort one has to put in has increased thereby impacting my work-life balance (Prof. Nikita, Faculty, School of Architecture at a Private College)

In addition, faculty members also pointed out that they experienced a sense of guilt for not being able to teach 'effectively', and for the fact that students without access to adequate digital infrastructure were missing out.

Students who have been doing well, will continue to do well, the ones that are struggling are still struggling. This could be because of the lack of interaction. In college I could give individual attention to students and help them with their work. That makes a real difference, whereas in an online mode, it is very difficult to do that. I can do it, but it would be very draining. This leaves us with a lot of guilt. Teachers on the whole have been facing a lot of guilt. It is like a Pandora's box we have opened – can we ask students to work when they are in such conditions, it is raining somewhere, someone doesn't have internet, someone cannot afford a laptop, someone's ill at home, the entire family is ill – I think the amount of guilt which we had to deal with has been tremendous, somewhere it has taken a toll on us. (Prof. Priya, Faculty, School of Architecture at a Private College)

It is evident that a lack of awareness and attention to mental health itself presents many challenges in adequately addressing issues of emotional wellbeing. These challenges are compounded by situations that entail long periods of isolation for those involved in the educational ecosystem. It is therefore imperative that institutional responses are professionally designed to deal with mental health issues. In the absence of adequate institutional response, not only are students put at risk of not making academic progress but also of undermining their ability to cope with everyday challenges and resorting to self-harm. The suicide of Aishwarya Reddy, a student at Delhi University's Lady Shriram College and an INSPIRE scholarship holder whose scholarship was delayed,²¹ is a case in point. It showed how the pandemic has deepened inequality and apathy in education.

In September 2020, a committee of the college student representatives conducted an internal survey to assess the problems posed by online education. In her response to the survey, the aforementioned student said, *"They are teaching well but I don't have a laptop and my mobile is not working well, so I am unable to do any practical paper."* And because she was unable to attend online classes, she mentioned, her mental health was affected. She further informed that her *"internet connection wouldn't last more than three hours while her classes went on for double the amount of time"*. She was not the only student to have ended her life during the pandemic; this loss of life can be attributed, in part, to the lack of resources but also to the larger education system, which shifts the responsibility of procuring devices on to students without offering crucial monetary and other support. The state and educational institutions have a moral obligation to design appropriate guidelines and measures such as in-house counselling services, to reach out to students in distress, in adherence to the highest professional standards expected.

Exacerbation of existing vulnerabilities

The COVID-19 pandemic and the subsequent shift to online modes of learning, in addition to posing new challenges, deepened existing inequalities and vulnerabilities that plague the higher education system in India. The online learning process is discriminatory owing to the vast digital inequality that exists in our society. Students from socially and economically marginalised families and those residing in rural areas faced impediments in accessing online learning due to limited access to electricity, internet connectivity, affordable gadgets, and the lack of a dedicated study space in their homes. Prolonged work-from-home conditions proved to be particularly challenging for women who were expected to shoulder the burden of household chores and care work because they were 'at home'. Several women students were forced to discontinue their studies and were pressured into

²¹ LSR scholarship student dies by suicide in Telangana, hit by Covid lockdown and financial crisis

marriage by their families. Further, women faculty members with young children of school-going age had difficulty in juggling their classes alongside their children in the home space.

Video 2 shows faculty from National Law School of India University (NLSUI) talk about educational losses as a result of shift to online learning.

Digital inequalities

The pandemic and subsequent disruptions brought to the fore existing vulnerabilities and inequalities in society. With the shift to online modes of learning, computers, smartphones, and high-speed internet connectivity became essential tools for attending classes. The vast digital inequality in the country meant that a large proportion of students without these resources could not continue their learning process. Those attending classes using smartphones found it extremely challenging to look at small screens for prolonged periods of time. Further, students connecting through rudimentary mobile internet connections faced frequent disruptions, often making it difficult for them to feel engaged in classes. The fear of missing out on classes led to increased stress and anxiety among several students thereby negatively affecting their mental health. Access to fast and reliable internet connections, bandwidth, and to gadgets outside their institutions to attend classes was determined, to a great extent, by socio-economic factors. While access to digital infrastructures was an enduring subject among students from public universities, some students from private institutions belonging to marginalised groups also spoke about the digital inequality the pandemic had brought to light.

The online mode of teaching led to an unbalanced situation in our class [...] not everyone had access to fast internet or laptops and tabs (tablet computers) (Ravi, Undergraduate Student of Architecture at a Private College)

Missing classes for one day or two days is different from getting disconnected all the time. So, I got very frustrated it keeps getting disconnected. I could go back and watch. But it is not the same. (Poonam, Post Graduate Student of Social Sciences at a Private University)

The issue of adequacy was also closely linked to the question of affordability. With the closure of schools, higher education institutions, and workspaces, entire families were working or learning from home. In the absence of personal devices, and with classes coinciding with one another and with work hours, households had to prioritise usage of devices.

In addition to issues of affordability, spatial inequalities also determined access to reliable digital infrastructure. While students from both private and public universities faced these issues, the spatial divide was more apparent in the case of state universities like the University of Agricultural Sciences and Bangalore University, which attracts young people from rural pockets of Karnataka. Students from rural hinterlands were often forced to travel on foot as other modes of transportation were constrained, to reach locations which had better internet connectivity to attend classes.

Forty per cent of our seats are reserved for students from an agricultural background [...] their parents are farmers or farm labourers [...] when we started online classes, we got several complaints from students saying that they did not have computers. (Prof. Manjunath, Professor of Agricultural Sciences at a State University)

A student of mine in a tribal district used to walk or cycle three kilometres every day, to get to a spot with connectivity to attend the online classes (Prof. Kamala, Professor of Social Sciences at a Private University)

Students from conflict zones in India like Jammu and Kashmir and the north-eastern states faced several barriers in attending online classes. This was most marked in the case of Jammu and Kashmir, where the Indian state had shut down high speed internet on August 5, 2019 with the revocation of statehood to Jammu and Kashmir. Students from the region could only access 2G internet making it virtually impossible to attend online classes and participate in other learning activities. Prolonged internet shutdowns, in addition to adversely impacting the overall learning process in the region, also placed students, researchers and faculty members at a disadvantageous position when compared to their peers from other parts of the country.

The vast digital inequality in society along caste, class, community, and regional lines, meant that students from marginalised communities and those residing in rural and remote areas could not access online classes.

The aforementioned findings are further substantiated by a report from O.P. Jindal Global University (2020) which notes that there was a serious concern among institutions for not having sufficient technology infrastructure (hardware and software), connectivity, continued power and other resources required to effectively implement online learning. The closure of educational institutions forced several students to return to their hometowns, cutting off their access to library and internet facilities. Economic constraints often limited both faculty and students from availing resources including power and internet connections, posing a big challenge for participation and continuation of online classrooms.

In a bid to ensure that students facing connectivity issues do not miss out on classes, institutions recorded online sessions and shared them over messaging platforms like WhatsApp. However, institutions seldom had strategies to address lack of access to computers, tablets, and smartphones. The burden of ensuring access to these resources disproportionately fell on the students themselves. Several students were from communities and regions with deeply entrenched inequalities and vulnerabilities. Lack of access to digital learning platforms exacerbated these inequalities and adversely affected their academic progress and learning. Lack of resources and institutional negligence, in some extreme cases, has led to students from economically weaker sections taking their own lives (see footnote 21).

Gendered impact of the COVID-19 pandemic

Given the gendered segregation of work common in Indian society, women are expected to take the major responsibility for household chores. Due to the pandemic and the physical confinement that it entailed, women were encumbered with additional pressures and responsibilities. The lack of separation between the 'classroom' and the domestic space meant that women were expected to help with domestic chores and were often exposed to a distracting environment. Not having a separate room from where they could attend classes impacted several women students' ability to focus on learning. This was especially true for women respondents who found themselves in exacting environments and burdened with multiple responsibilities.

I did not have a study room and my parents came at any time. Studying needs focus. They tell me to feed the cows and I can't really deny it because I'm here in the house. (Shyam, Post Graduate Student of Social Sciences at a Private University)

Also, as care work has traditionally fallen on women, both women faculty members and students pointed out that they were stretched too thin, especially during the initial stages of the lockdown when care workers were not available. Young students were often pressured by their families to get married, adding to their stress and anxiety making it difficult for them to focus on studies and meeting deadlines.

When you're at home, you get involved in many things. You have to help and attend to any needs/emergencies. I have assignments but family thinks that it is important to cater to their needs (Poonam, Post Graduate Student of Social Sciences at a Private University)

A student of mine was being pressured to get married, she was not able to deal with that after a point and moved to her grandma's place, where there was less pressure (Prof. Kamala, Professor of Social Sciences at a Private University)

Apart from students, faculty members with young children and elderly parents found it difficult to juggle online teaching and care work. A faculty member pointed out that while teaching online, her mind would be preoccupied with the possibility of her young daughter appearing in the camera's field of view. Despite telling her several times, her daughter would indulge in this and it became hard to manage the child alongside teaching. Another female

faculty member who had just had a baby noted that she was hard pressed to find some time for herself given her multiple responsibilities.

Women faculty members and students had to shoulder the disproportionate burden of household chores and care work. Young women students were forced to discontinue their studies and pressured into marriage by their families.

I had had a baby when the lockdown was announced. I didn't have domestic help and had another child, and my husband was working. Also, we had deadlines. It became physically and mentally very taxing. (Prof. Asha, Professor of Social Sciences at a Government-aided University)

Female faculty members with their children attending online classes, highlighted the challenges they experienced in simultaneously balancing their children's and their own classes. They also commented on how the burden of childcare disproportionately fell on the women. More often than not, working mothers were expected to find time to sit along with their children, especially younger children, while they attended online classes.

[...].mere ghar mein ek laptop, ek Ipad aur teen kamre bhi ho to (We have one laptop, one Ipad and three rooms in our house) ...if everybody has a 9 am class and if we have four people in this home, you need 4 different rooms. If I am a teacher, and Abhishek's (her son's name, name changed) teacher is so loud, I cannot teach in the same room. My classes will be disrupted...but I have to face the brunt of it (Prof. Ekta, Faculty at the Department of Education at a Central University)

The pandemic also adversely impacted women researchers in academia. A panel discussion hosted by the TESF research team with panellists from Life of Sciences and groups advocating for social justice, pointed out that the pandemic created pressures for both early career and senior researchers, especially for women in science. The pandemic has reinforced the biases in Indian science by way of triple burdens, where women are burdened with attending to domestic obligations, professional responsibilities and the unique challenges that come with doing science. They further added that initial trends pointed to lower research productivity among women, at least in preprint servers, i.e., women have been publishing lesser than usual during the pandemic²². The limitations with regards to accessing laboratories and conducting field work, among others, are bound to have a lasting impact on the gender gap in science widely prevalent in India.

Response by Higher Educational Institutions and Faculty

While higher educational institutions the world over shifted all academic activities to the online mode, the transition was far from being smooth. The experiences of faculty members and students were varied and had a temporal nature. Both noted that the initial few weeks were marked by uncertainty. After the suspension of classes, students, particularly inter-city and inter-state students residing in hostels, were asked to return to their hometowns. Little was known about the pandemic or whether the closure of educational institutions was a short-term measure. As classes remained suspended for a substantial period, institutions were concerned about completing course requirements and assessments.

Initially there was a lot of uncertainty, we did not have a clear picture as to whether the semester would be extended or whether the course requirements were going to be the same since classes were suspended for 2-3 weeks. (Ravi, Undergraduate student of Architecture at a Private College)

²² The life of science is 'a science media platform focused on contemporary research and stories of scientific pursuit intersecting with various societal barriers in India'. Details about their work can be found at: <https://thelifeofscience.com/about-tlos/>

The transition to online classes was quick and not much time was available to re-design the curriculum and the pedagogy to suit the online mode of teaching. Faculty and students were encountering such forms of teaching for the first time.

We did not know what to expect as the online mode of teaching was new for both faculty and students. (Poorna, Undergraduate student of Architecture at a Private University)

Some institutions however, prepared themselves better than others for this transition. Faculty members, particularly those from private institutions, noted that prior to the commencement of the teaching sessions, their institutions had organised several rounds of training to familiarise them with online platforms and processes of online teaching. In several cases, faculty members put in efforts to tailor the pedagogy, course transaction and assessments to suit the online mode of instruction. Some private institutions also purchased licensed versions of popular online platforms such as Zoom and Mentimeter in an attempt to make online teaching more interactive. Private institutions also invested in online learning management system (LMS) platforms to share course material, submit assessments, and conduct online tests. Orientation sessions were conducted to introduce students to various online teaching platforms and tools. This, however, was not a uniform trend. Faculty and students of public institutions such as the University of Agricultural Sciences and the Bangalore University, shared that similar orientation exercises were not conducted by their universities. Moreover, faculty had to rely on unlicensed versions of applications such as Zoom, owing to which classes were disrupted every 40 minutes.

We were told to take classes on Zoom. The university purchased licensed versions for teachers only for courses where the class strength was over 100 [...] we learnt to use it by trial and error. Initially, for one or two classes we faced some problems, but it was not a great problem (sic) [...] the students are smarter than us, so they also did not have any problems. The software was user friendly. (Prof. Manjunath, Professor of Agricultural Sciences at a State University)

In order to ensure that students without adequate access to digital infrastructure were not alienated from the learning process, institutions recorded online sessions and circulated them through popular messaging platforms such as WhatsApp, so that they can be downloaded and viewed even with limited internet access. However, institutions were unable to address the lack of access to computers, tablets, and smartphones. It was noted that a private university, which was started as a philanthropic initiative, offered students from rural areas monetary support to rent a room in a place with good internet connectivity and offered data packages. Such efforts, however, were not common. In the semester beginning January 2021, students were given the option to move to hostels in the city from where they could attend online classes. Several students availed of this facility.

Apart from institutional response, some faculty members, on their own accord, aided students with the learning process. For instance, several faculty members from public-funded universities drew upon personal funds to help students purchase gadgets and internet packages. They also made themselves available to students on WhatsApp after working hours to clarify queries. In a few instances, there were additional support group meetings.

**Students and faculty had to shoulder the financial burden
of arranging digital infrastructure.**

Unable to glean the comprehension status of students as microphones were muted and cameras were turned off, faculty resorted to pop-quizzes and handed out assignments at the end of each class, to gauge their understanding of the lessons taught. Student and faculty workload substantially increased owing to this.

Assignments at the end of each class is a burden, we have three-four classes a day, so every day we have three-four assignments. This means we are glued to our screen for long hours [...] my parents complain that I am always in front of my computer and never spend any time with them, but I cannot help it, I have that much work. (Poorna, Undergraduate Student of Architecture at a Private University)

Courses like architecture, where students are expected to take up semester long internships as part of their course mandate, swapped teaching semesters with internship semesters. Students could not take up internships as most organisations were working remotely. In several cases, students were encouraged to take up internship opportunities in their hometowns owing to travel restrictions and quarantine protocols. However, this worked to the disadvantage of students residing in rural areas and smaller cities, where opportunities were limited.

This section highlighted how the COVID-19 pandemic and the consequent suspension of physical classes impacted teaching and learning processes in higher education institutions in Bengaluru. Like elsewhere in the world, institutions in the city responded by moving all academic activity online. However, this shift was fraught with problems and posed numerous challenges. Both faculty members and students noted that the loss of classroom space had severely impacted the overall learning process. While online platforms allowed the continuation of academic activities, discussions, dialogue, and dissent, the hallmark of higher education could not be replicated in the online environment, thereby impacting the overall learning process.

Restrictions imposed on travel and physical distancing norms resulted in the closure of libraries and laboratories, and the suspension of fieldwork. This had far reaching impacts on practice-based learning courses and research work. Prolonged stay-at-home orders, the inability to meet friends and peers, and the uncertainty of the pandemic had a bearing on the overall mental health and wellbeing of students and faculty members.

In addition to posing new challenges, the pandemic and the subsequent shift to online classes widened existing fault lines within the higher education sector. The vast digital inequality in the society along caste, class, community, and regional lines, meant that students from marginalised communities and those residing in rural and remote areas could not access online classes. There was also the systemic problem of the provisioning of adequate and reliable digital infrastructure. Prolonged stay-at-home orders proved to be particularly taxing for women, who had to shoulder the disproportionate burden of household chores and care work. Some women students were often forced to discontinue their studies and were pressured into marriage by their families. Owing to this, academic activities of women suffered, and many had to discontinue studies, widening existing gender disparities in higher education.

While private institutions adopted a range of strategies and measures to smoothen the transition to online classes and to address concerns of access; state institutions fell short of such efforts. Private institutions organised orientation programmes for faculty and students to familiarise them with various online platforms and tools. Well-funded institutions also purchased licensed software to make online learning interactive and hassle-free. This, coupled with the fact that students and faculty had to shoulder the financial burden of arranging digital infrastructure demonstrated that the ability to afford to pay determined individuals' access to education during the pandemic.

While institutions across-the-board recorded online sessions and circulated them using messaging platforms to tackle concerns of access, they did little to address concerns surrounding the unavailability of gadgets.

Institutions also made pedagogic changes, such as conducting pop-quizzes or handing out short assignments at the end of each class to assess the responsiveness of the students, and also used audio-visual resources for teaching.

To tackle concerns of access, institutions across-the-board, recorded online sessions and circulated them using messaging platforms, allowing students with limited internet access to attend classes. However, it was observed that institutions did little to address concerns surrounding the unavailability of gadgets. The burden of arranging the same was on students.

Inferences and Key Learning

The findings from the Bengaluru case study indicate that the impact of the pandemic was differentiated along the lines of caste, class, gender, community, language, and region. It is evident that the pandemic has had a far-reaching impact on students, particularly those from socially and economically marginalised communities. Findings point towards the need to augment public funding in higher education to ensure equitable and sustainable outcomes. Thus, two aspects – social exclusion and inequalities in higher education, and the commodification of higher education – are discussed below.

Social exclusion and inequalities

Higher education has been seen as a 'status stabiliser' by perpetuating 'status retention' in urban areas. Despite increased opportunities for education after independence, the privileges held by the upper stratum and the impediments to higher status occupations remained and further intensified (Jayaram, 1977).

However, more recent evidence suggests that higher education contributes to poverty reduction by ensuring social, occupational, and economic mobility, keeps households from falling back into poverty, and leads to an improvement in human development indicators (Tilak, 2012). While the role of higher education as an enabler in social and economic mobility has been recognised, entry into higher educational institutions and completion rates among students from poor households has been declining over the years, leading to a widening of educational inequality. In this section, we show how educational inequalities were on the rise even before the pandemic struck, largely due to inadequate state investment, privatisation and a rhetoric of quality which is based on market ideology.

In a study on what governs entry and completion of courses, Tilak draws upon data from the NSS rounds 1983 to 2009-10 and argues that among the axes of difference studied – gender, caste, religion, region (urban/rural), and economic class – all inequalities have reduced with varying degrees, but for economic inequality, which is, in fact, widening (Tilak, 2015). He observes that gender-based inequalities are higher in educational attainment in comparison with enrolment but overall gender-based inequalities have decreased over time (1983-84 to 2009-10). Similarly, while overall inequalities based on caste have declined over this period, the enrolment ratios are considerably less among Scheduled Castes (SC) and Scheduled Tribes (ST), and there are still wide inequalities between the SC, ST population and the non-scheduled groups. In terms of the rural-urban divide, while inequality has reduced in terms of rate of increase, rural areas still witness considerably low educational attainment in comparison to urban areas (Tilak, 2015). It is important to note, however, that inequalities based on economic class have consistently widened during this period, making it the most important axis of difference and social exclusion (Tilak, 2015). These inequalities, Tilak notes, should be read in the context of increasing privatisation within higher

education and the application of a cost recovery model along with a parallel reduction in public subsidies for disadvantaged communities.

Tilak argues that policy reforms encouraging private institutions – visible in the legislation to allow entry of foreign universities in India, in the approach paper to the 12th five year plan (2012-17), in the promotion of private institutions of excellence and in a general policy environment that is in line with the neoliberal framework – is a departure from 'welfare statism' to a system partially based on quasi-market principles and finally to a system based on neoliberal market philosophy' (Tilak, 2012).

Tukdeo argues that the Foreign Institutions Entry, Operations and Regulation Bill (2010), which allows foreign universities to operate campuses in India with the aim to lift the standards of higher education and reverse migration, is actually designed to cater to the requirements of a global economy that demands new skills, while allowing transnational capital (2015). The efforts to attract diasporas and transnationalisation patterns within higher education should be seen in the context of broader socio-political and global economic arrangements (Tukdeo, 2014). Together with low public funding, higher education in India suffers from the lack of equitable access and inadequacies in regulation to maintain quality standards. It therefore, becomes imperative that these deficits are met by adequate financing from central and state governments, households and through education loans along with setting up a social equity fund and formulating an affirmative action policy to help students from poor backgrounds gain access to higher education (Agarwal, 2006).

The fissures created by a policy environment that, for more than a decade, has actively promoted privatisation and concurrently reduced public spending in higher education, have only been reinforced by the pandemic and the resultant lockdown. Writing about gender and COVID-19 from a Dalit standpoint, Patil (2021) alerts us that the focus on social distancing norms in particular, has resulted in the reproduction of discriminatory practices relating to caste. This has especially impacted women sanitation workers and domestic workers. Also, the shift to online education, without first addressing the digital divide, has reinforced caste-based inequalities in education, as Dalit students are most likely to lack the means to access digital infrastructures (Patil, 2021). The suicides by Dalit girl students in Punjab and Kerala, both teenagers, Patil (2021) argues, are testimony to the adversities being faced by the Dalit community during the pandemic, as also by students from economically marginalised communities. The fathers of both the girl students from Kerala and Punjab who committed suicide were wage workers and their family did not have the wherewithal to buy smartphones required to attend online classes²³. It is important to also note that the National Education Policy (GoI, 2020b), which is bound to have a considerable impact on school and higher education, was brought into effect during the pandemic, when there was little opportunity to contest or debate it. The policy, Batra (2020a) observes, is wanting in critical understanding of ground realities, and may well further inequalities. She notes that by abdicating its responsibility to the disadvantaged sections of society, the state jeopardises constitutional principles of ensuring equality and particularly, equitable quality education for all (Batra, 2020a). The shifts in educational arrangements, including digital learning resorted to during the pandemic and institutionalised through the NEP (2020), are creating further layers of inequality and new forms of exclusion, impacting the most disadvantaged.

A shift to online education, without addressing the digital divide, has reinforced caste-based and economic inequalities in education. Online learning favours the elite classes in not just gaining access to higher education but also in retaining their hold over these privileges.

Notwithstanding the ruptures created by a policy regime favouring privatisation and more recently, a shift to digital learning, in the 2021-22 Union Budget, the allocation towards education was brought down by 6 per cent. Higher education receives a lesser share in comparison to the previous years. The Higher Education Funding Agency (HEFA) proposed in the NEP 2020, could in effect be starved of funds. Deepening of inequalities in higher education is a result of an arrangement that favours the 'upper' castes and elite classes over others in not just gaining access to higher education but also in retaining their hold over these advantages and its nexus with private interests along with a parallel withdrawal of the state (Batra et al., 2021). The following paragraphs discuss how a neoliberal agenda, visible in education policies and through a thrust to private institutions, is being pushed in higher education.

Commodification of higher education

The higher education sector in India witnessed a steady expansion in the decades following independence. At present the higher education sector comprises 38.5 million students across 1043 universities, 42,343 colleges and 11,779 stand-alone institutions (Ministry of Education, 2020). A closer examination of this expansion process reveals that expansion is largely dominated by the private sector. Currently, nearly 38 per cent of universities and 78 per cent of colleges are managed and run by the private sector. Higher education institutions run by the private sector account for nearly 66 per cent of the total enrolments in higher education in India. The opening up of the higher education sector to market forces owing to structural reform policies, resulted in (i) reduced public spending on higher education, (ii) increased presence of private actors, (iii) rise in student fees, and (iv) pushing universities to mobilise private funding even at the expense of compromising constitutional aims and values of higher education (Das, 2007).

²³ <https://www.tribuneindia.com/news/punjab/couldnt-take-online-classes-teen-ends-life-96481>, <https://indianexpress.com/article/education/kerala-dalit-student-kills-herself-parents-say-upset-over-not-being-able-to-attend-online-classes-6439682/>

The unregulated growth of the private sector in higher education led to the rampant commercialisation and commodification of higher education. With this, the financial burden of higher education shifted from the public to individual shoulders. In essence, higher education became a marketable commodity, where an individual's ability to pay determined his or her access to it. This, coupled with the gradual withdrawal of the state that was expected to play a redistributive role, has resulted in higher education becoming inaccessible for the socio-economically marginalised sections of society. Thus, higher education continues to favour upper class and caste students, thereby reproducing existing hierarchies which it aims to topple. The COVID-19 pandemic and the subsequent shift to online classes made these fault lines in the higher education sector even more apparent.

Our findings show that well-funded private higher education institutions were better placed to respond to the disruptions caused by the pandemic. These institutions invested in setting up robust digital infrastructure for online teaching and learning, which included LMS platforms, licensed versions of video-conferencing applications, interactive tools for online teaching and conducting examinations. Often, these institutions had dedicated Information Technology (IT) teams either in-house or on hire to assist faculty members and students as they navigated the hitherto unfamiliar territory of online teaching and learning. Student and faculty development programmes were conducted to familiarise them with various tools and platforms to make the transition to online learning as smooth as possible.

On the other hand, fund-starved public universities had to rely on free versions of software and tools, which had limitations thereby hindering the functioning of classes. Institutions, in a bid to ensure that online classes were inclusive, ensured that online sessions were recorded and shared with students over messaging platforms. Such asynchronous measures allowed students without high-speed internet access to 'attend' classes. However, students relying on these measures missed out on in-class discussions and dialogue. Institutions did little to address issues regarding non-availability of gadgets. While, in certain instances faculty members utilised personal funds to assist students, institutional support on this front was lacking. With reduced public funding, the onus of ensuring access to adequate digital infrastructure required to attend classes fell on the students. Computers and reliable, high speed internet connectivity became essential tools to access higher education, pushing up the costs of higher education in India.

The COVID-19 pandemic exposed deep-seated inequalities in the higher education system and pointed towards the need for increased public funding of the sector. However, recent policy measures by the Indian state, under the garb of promoting 'student-interests', advances privatisation and existing educational challenges in the system. The recent push by the National Education Policy 2020 to encourage 'blended learning' in higher education institutions is also a step in this direction. The proposal notes that the blended approach would accord more autonomy to the students and enable them to learn at their own pace. The role of faculty members is envisioned to be those of coaches or mentors (UGC, 2021). In proposing this, the UGC, similar to the British colonists, reduces higher education institutions to factories churning out 'industry-ready graduates' to serve the neoliberal economy. This stems from the increased sense of commodification of education, where students are reduced to knowledge consumers and faculty members to knowledge providers. Policymakers, by reducing students and faculty to mere knowledge consumers and providers, ignore the fundamental premise of education – to democratise society and push for equity and social justice (Batra, 2020b; Apoorvanand, 2021).

**Increased commodification of education will further marginalise disadvantaged sections.
There is an urgent need to increase public funding in higher education to
ensure equitable and sustainable outcomes.**

Thus, policymakers have used the pandemic-induced restrictions on offline classes to push the site of education to online platforms. Existing inequalities along caste, class, gender and regional lines, and educational inequalities institutionalised via macroeconomic policy reforms, exacerbated by the pandemic, have failed to persuade policy makers to rethink education. The digital divide in the country is stark and neatly intersects with prevalent socio-economic inequalities. If the shift to online classes necessitated by the pandemic is any indication, neoliberal focus on education will further marginalise the disadvantaged sections. Thus, there is an urgent need to rethink the

meanings and purposes of education, by placing constitutional values of social justice, democracy, and equity at the centre.

Key takeaways for decision and policymakers in the context of higher education are presented below.

(i) *Need to address existing vulnerabilities and inequalities:* The pandemic exposed the highly iniquitous and exclusionary nature of the higher education system in India. The vast number of students who were unable to attend online classes demonstrate that the challenge of exclusion in higher education institutions is not merely that of access, but that the structure and arrangements of higher education tend to favour the privileged. In shifting the responsibility of procuring gadgets for digital learning onto students, institutions have further burdened disadvantaged communities. There is a need to address this through policies and programmes that provide monetary support and subsidies to those who may not have the means to access digital infrastructures. The pandemic has reinforced the obligation of state and educational institutions to support the most vulnerable students, paying close attention to the intersections of caste, gender, and region.

(ii) *Need for increased public spending in higher education:* The pandemic demonstrated the dangers of increased commercialisation and commodification of education. While the shift to online modes of teaching and learning were necessary given the ground situation, the burden of ensuring adequate infrastructure required to access classes fell squarely on the students. This can have serious ramifications for equity and justice, as it pushes up the cost for higher education, making it unattainable for disadvantaged sections of society. Given that the state is aspiring towards blended modes of teaching and learning, it is pertinent that policymakers ensure that the financial burden of education is not shifted to the individual. For the state, this entails increased public spending in higher education, while for private actors this means treating higher education not as a for-profit venture (a Supreme Court ruling)²⁴ but treating the goal of inclusive education and diversity as necessary and worthwhile.

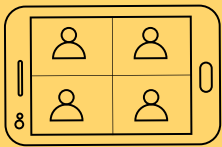
(iii) *Need to focus on mental health:* Being confined to closed spaces, often with parents and extended family in certain cases, without interaction with peers took a toll on the emotional wellbeing of students. For faculty members, the shift to online mode of instruction also meant longer work hours. While mental health issues have compounded as a result of the physical confinement and isolation brought on by the pandemic, the stigmatisation of people suffering from these issues is not a new feature in Indian society. It is evident that a lack of awareness and attention to mental health presents many challenges in recognising and adequately addressing issues of emotional wellbeing. There is recognition and talk of addressing the emotional hardships resulting due to limiting situations that entail long periods of isolation for those involved in the educational ecosystem in the wake of the pandemic. But interventions should extend beyond responding to this immediate crisis, and address long standing prejudices and lack of awareness by including modules about self-awareness and managing stress and anxiety, among other things. It is therefore imperative that institutional responses professionally deal with mental health issues that may not only thwart academic progress but also undermine one's ability to cope with everyday challenges. The state, through education departments, should design guidelines to ensure in-house counselling services that adhere to the highest standards of professional ethics for institutions of higher learning, and these interventions should extend beyond the current crisis.

²⁴ The Supreme Court order states that 'there should be no capitation fee or profiteering'; and that 'the expression "education" in all the Articles of the Constitution would mean and include education at all levels, from primary education level up to postgraduate level and the expression "educational institutions" would mean institutions that impart education as understood in the Constitution' (para 43). 'Both Pai Foundation and Inamdar have clearly denounced commercialization of education' (para 142). Source: Supreme Court of India (2012). *Society for Un-aided Private Schools of Rajasthan Vs. Respondent: Union of India (UOI) and Ors.* MANU/SC/0311/2012.

Higher Education

This research aimed to understand the differentiated nature of the impact of Covid-19 on students, research scholars and faculty members from higher education institutions in the city of Bengaluru.

Access



The burden of ensuring access to online classes fell squarely on individual students, pushing up the cost for higher education; making it unattainable for disadvantaged sections of society, marginalised communities and those residing in remote areas.

Well-endowed private institutions used different digital platforms to smoothen the transition to online classes, while public institutions fell short of such efforts, leaving many out of the learning process.

Teaching and Learning



The digital space reduced in-class participation and impacted the motivation levels of faculty and students.

Closure of laboratories and libraries, and the suspension of fieldwork impacted research and practice-based learning.

Well-being



Prolonged stay-at-home orders and the impediments to access online classes increased stress levels, impacting the mental health of students.

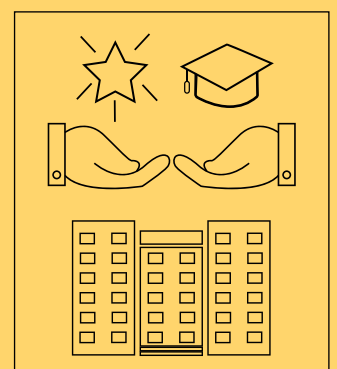
The burden of household chores and care work fell on women, impacting their productivity. Several women students were pressured into marriage, forcing them to discontinue their studies.

Social exclusion and commodification of higher education

The challenge of exclusion in higher education is not merely that of physical and digital access; the structure and arrangements of higher education favour the privileged.

There is need to increase public spending in higher education to make it accessible to the socially and economically disadvantaged; and to reduce the financial burden of digital learning on students.

It is critical to address the emotional hardships that emerged as a result of long periods of isolation during the pandemic. Interventions must extend beyond making technical provisions for digital learning.



Trichy: Livelihoods

Trichy²⁵, a major tier II city in Tamil Nadu, a state in Southern India, was an appropriate site for this study given its size and socio-economic characteristics. As 80 per cent of India's poor reside in cities with a population of less than 1 million (Revi et al., 2011), Trichy, with a population of 847,387 and an average literacy rate of 91 percent in 2011 (Census, 2011), was a suitable site for this research. The city is governed through the Trichy City Corporation (TCC) and is the administrative headquarters of the district comprising of four revenue divisions and 11 taluks (CDP, n.d.). Located in the middle of the state, Trichy is an important hub for transportation and tertiary activities i.e., services, trade, and commerce (ibid) and has a rich cultural heritage as it is home to many temples and historical monuments (Tiruchirappalli City Municipal Corporation, 2021; State Planning Commission, 2017). Over the past decade, the city has been a popular destination for higher education courses in engineering and management (CDP, n.d.).

Trichy attracts many landless farm labourers, construction workers and domestic workers in search of employment, which may be contractual or casual labour and they seek temporary dwellings within the city (ibid). Many informal workers like barbers, ironers, tailors, cab and auto drivers, load man²⁶ and vegetable segregators also support the auxiliary services of the agricultural and education market in the city. Most informal workers live in city slums that are ill-ventilated, poorly lit, have clogged drains and lack clean water and toilet facilities (CDP, n.d.). The City Corporation accounts for 1.62 lakh slum dwellers in 2001 (Census, 2011) that constitutes 11.42 per cent of the city's population. Slum dwellers contribute to 34.87 per cent of the city's workforce with about 92.12 per cent being informal workers in the tertiary sector (CDP, n.d.). The workforce in the remaining parts of the city is mostly engaged in self-employment (street vendors, small shop owners, hawkers) and household work (State Planning Commission, 2017). Whether located in slums or low-income settlements, the urban poor face issues with adequate housing, food security and borrowings.

Insecure tenure is one of the most common issues in terms of housing. The urban poor face issues of high rental costs, poor quality housing, and in certain instances eviction, displacement, and homelessness. Their weak dwellings are also exposed to environmental risks such as floods and cyclones. Poor quality housing interferes with their upward mobility towards a more dignified life, out of poverty (Anand et al., 2014). The Public Distribution System (PDS) that sells food grains at subsidised rates through the Fair Price Shop (FPS) availed through a ration card (an eligibility document), is an important source of food procurement for the urban poor who have limited sources of income. The urban poor are also part of a volatile credit system where they borrow money from family, friends, and micro-finance institutions against their meagre income to meet various educational needs, and personal needs (electronic appliances, vehicles). Some of the health concerns that the urban poor face are related to malnutrition, adverse health effects due to poor water and sanitation facilities (image 8), high rates of anaemia and other diseases such as malaria and dengue due to poor waste management (Anand et al., 2014). The urban poor tend to visit private healthcare institutions rather than public institutions since public healthcare initiatives are fewer in number and are either poorly resourced or dysfunctional. As a result, the urban poor often face exclusion due to lack of monetary resources to pay for the facilities. They are less likely to use free education centrally legislated at the elementary level²⁷ and to continue to higher levels of education. This further impacts their socio-economic status in society (ibid).

Objectives of the study and the research process

The objective of this research was to explore the experiences of informal workers during the COVID-19 pandemic. How did these individuals with their physical and economic vulnerabilities cope and survive through the lockdown? What measures – state and non-state – were taken to mitigate the impact of the health and economic crisis? With these questions in mind, this research attempted to gather the experiences of select informal workers in the city of Trichy particularly in relation to their livelihoods, health, and education. We aimed to investigate how their livelihoods in terms of employment and income had been affected and how they managed to cope during this

²⁵ Trichy is also called Tiruchirappalli. In this report, we use Trichy.

²⁶ A load man is an individual who helps carry and transport agricultural produce in Trichy city's markets.

²⁷ The reason can be attributed to the poor infrastructure and perceived poor quality of education in state schools.

period. What were their coping mechanisms and the nature of assistance received (or not) from state and/or non-state actors? These questions provided insights into the existing mechanisms that benefited individuals and shed light on specific structural loopholes. As the COVID-19 pandemic is a health crisis, we explored their mental and physical wellbeing through this period. With online learning taking centre stage due to the closure of educational institutions, it was crucial to capture how students and parents from these communities responded to the alternative medium of education.

The primary data for this study was gathered between September and October 2020, through semi-structured interviews with select informal workers and online panel discussions with various non-state actors. Secondary data collected through market scans facilitated in articulating the insights gathered. Research participants were approached through an institutional gatekeeper working with some of the city's marginalised communities. After fixing initial appointments, the researcher conducted the interviews either with or without the gatekeeper. Most of the interviews were conducted in the participants' homes or workplaces. These interviews could not be carried out online due to participants' limited access to and awareness of technology required to support online interviews. Each interview took about 20-45 mins, and were scheduled at the convenience of the participants to ensure minimum disruption to their livelihood activities. The COVID-19 health safety protocols of wearing masks and maintaining social distancing were followed. A semi-structured interview guideline was developed based on the broad research questions. The flexibility of semi-structured interviews allowed the researcher and the participants to engage freely in dialogue, covering several issues. Respondents spoke in Tamil, the local state language, and interviews were conducted in person, audio-recorded, translated and transcribed into English. The transcripts²⁸ were coded on NVivo, a qualitative software that served as a useful filing system. The codes were inductive and emerged from the data. They broadly revolved around the themes of livelihoods, health, and education.



Image 7: Construction workers

²⁸ The participants were given pseudonyms in the transcripts and are used likewise in this report, keeping with research ethics.



Image 8: A women fetching water in a low income settlement

The sample size of the study was 48 respondents that included non-state actors, children, and different categories of informal workers. The informal workers could be classified into two broad categories: (i) Self-employed workers – individuals who engaged in a trade or profession on their own account or with partners; (ii) Waged workers – individuals who were employed for a remuneration either directly by the employers or contractors. These waged workers may be regular salaried workers who got regular wages like a monthly salary or casual workers who received wages according to daily or periodic contracts (NSO, 2020; Sengupta et al., 2007). The categories of the sample were selected keeping in mind research objectives and appropriateness for the city of Trichy. The breakdown of the sample is provided in Table 7.

(i) Daily wage earners (Casual labourers)			
Nature of work	Male	Female	Total
Plumbers	2		2
Electricians	2		2
Carpenters	2		2
Vegetable segregators	1	1	2
Sanitation worker ²⁹	2		2
Load man	2		2
Construction workers ³⁰	1	1	2
Total	12	2	14
(ii) Self-employed			
Nature of work	Male	Female	Total
Street Vendors		3	3
Music band owner	1		1
Tailors		2	2
Auto drivers		2	2
Cab driver	1		1
Sanitation worker		1	1
Barbers	2		2
Photographer	1		1
Laundry man	2		2
Owner of business		1	1
Medical shop	1		1
Total	8	9	17
(iii) Monthly wage earners			
Nature of work	Male	Female	Total
Domestic workers		4	4
Worker in a private company		1	1
Sanitation workers		1	1
Employees of grocery stores		2	2
Total	0	8	8
(iv) Others			
Nature of work	Male	Female	Total
Children		6	6
Non-state actors	1	2	3
Total	1	8	9
Total sample size of study	21	27	48

Table 3. Sample size details

²⁹ Sanitation workers are split across three categories: self-employed, daily-wage, and monthly wage earners.³⁰ Construction workers are weekly wage earners.

Two online panel discussions were organised to discuss the relief work provided by non-state actors for (i) migrant workers, and (ii) the LGBTQIA+ community (Lesbian, gay, bisexual, transgender, queer, and intersex) during the pandemic. The participants were workers and volunteers from various NGOs and civil society organisations (Stranded Workers' Action Network (SWAN)/ Gurgaon Nagrik Ekta Manch (GNEM), Aajeevika Bureau, Paras India, Working Peoples' Charter, Sappho for Equality, Nazariya and The Life of Sciences). Besides relief work, participants discussed the various institutional and structural failures that were visible during the pandemic. Secondary data on livelihood and health in the form of reports, articles, case studies and rapid assessment studies were gathered from government sources, NGOs, civil societies, and educational institutions. The secondary data was used to triangulate evidence and support findings present in other contexts as well.

Findings

The findings are discussed in two sections. The first section analyses the impact of the lockdown and the pandemic on the livelihoods of people; how it affected their lives, their mental health, and the education of their children. It also discusses the various coping measures adopted by individuals to survive the pandemic, the specific state and non-state response. The second section narrates how individuals attempted to re-build their lives and the education of their children once the lockdown restrictions were eased.

Immediate impact of the lockdown

The pandemic brought to light the unstable and precarious nature of the lives and livelihoods of informal workers. The nature of work for waged workers (monthly or casual) and self-employed workers such as construction workers, domestic workers, auto drivers, barbers, involved going to their worksite (construction sites, employers' homes, schools, salons) and performing physical labour (construction work, cooking/cleaning, driving, cutting, and shaving). As a waged earner, they did not have a legal working contract that offered them employment or income guarantee, which could have supported them during these unforeseen times. As the nature of their livelihoods involves going to a 'worksite', there was no opportunity for them to work remotely or online. Given the contagious nature of the pandemic, most of the worksites were closed and people had to stay indoors to mitigate the spread of the virus. Alex, a cab driver engaged in pick-up and drop-off services for schools and commercial trips, expressed that *"everything was under lockdown. We could not go anywhere and so could not go for school trips or other trips"* Jan Sahas (2020b) notes that 92.5 per cent construction workers³¹ had lost their livelihood during the initial days of the lockdown.

Besides the lockdown restrictions, the fear of the virus itself impacted people's livelihoods. Livelihoods that involved physical contact such as those of domestic workers were particularly affected. Ramya, a domestic worker who worked in five households was told not to come to work by her employers.

In the beginning, employers from three different households told me to stop coming and to come only after the lockdown was over. I was working in two houses and 10-15 days later they told me not to come and to come after everything gets over and when everything is normal.

The inability to work led to complete loss of income. Construction workers who were migrants were unable to collect wages as their workplaces were shut down. As payments were disbursed on a weekly basis, many workers were not able to get their wages for the third week of March 2020. Some of the workers had less than Rs. 300 left with them when the lockdown was announced (SWAN, 2020a). Due to the pandemic and the lockdown these individuals were left in an even more precarious situation as they lacked any form of employment security or social protection. This 'large scale precarity' was due to an external shock that heightened their *economic vulnerability* (Batra et al., 2021).

³¹ The sample size was 3,196 construction workers from Madhya Pradesh and Uttar Pradesh.

The pandemic exposed the economic vulnerability of informal workers - the precarious nature of their livelihoods, low-wages, and intense physical labour in the absence of safety measures.

With the loss of income, they struggled to meet expenses, as expressed by Raju, a photographer.

It was very difficult. We had to pay rent for the house, office rent and pay employees. It was difficult for everyone. Secondly, there were no functions since everything was closed. For monthly expenses, we will need at least Rs 15,000, for family and rent, which we did not have.

Paying rent (residential or commercial) seemed to be a common hardship faced by several people who were either self-employed or who worked as daily wagers. Murugan, a painter and electrician had rental dues of Rs 9,000 for three months deducted from the security deposit, without being informed by his landlord.

Stating that I had not given the rent for three months, (the house owner) deducted the rent from the deposit I had given. I had given a security deposit of Rs.12,000. The homeowner did not ask me if he could deduct the rent from the deposit that we had given or if I will pay the rent. Instead, he said, "I have reduced from the deposit that you had given".

Even though the Tamil Nadu state government issued an order to not collect rent from occupants who are daily workers, labourers, and students for one month during lockdown (GoTN, 2020b), occupants like Murugan had their rents deducted from their security deposit without being informed. This was a clear violation of the government order. Migrant workers employed in Delhi, Mohali, and cities across the states of Madhya Pradesh and Uttar Pradesh were forcefully evicted by their landlords as they could not pay rent (Jan Sahas, 2020b; MWSN, 2020). This led to a precarious situation. While occupants struggled to pay rent, some small house owners struggled to sustain themselves as their primary – and at times only – source of income was rental income. In such a scenario, both the landlords and occupants were vulnerable. The orders of rent moratorium exacerbated the vulnerability of the former by offsetting the vulnerability from one category of people (occupants) to another (house owners). Rakesh, a load man explained this situation when he was approached by his landlady for rent.

The house owner is an old lady. Instead of the 5th of the month, on the 1st of the month itself, she said "I do not have money to buy medicine. If you give the rent, it will be nice!". She never asks like this, but on the 1st of that month, she came into the house and asked for the rent in advance.

In these circumstances, Rakesh stated that he did not “want to keep the rent pending even if it came at the cost of not having enough to eat”. Several people struggled to meet basic needs such as food and housing, indicating the severe lack of social protection for vulnerable communities. A study by Azim Premji University conducted in April-May 2020 highlights that rental expenses were a common issue amongst respondents³²; 89 per cent urban households reported that they could not pay the next month’s rent and about 41 per cent urban households reported that they had to take loans to meet daily expenses (APU, 2020). Despite state government orders several people were forced to pay rent during the lockdown, putting them in the even more precarious situation with the possibility of not having a roof over their heads in case they defaulted on rent.

In the case of Trichy and Tamil Nadu, while the lockdown continued for two months, the rent moratorium period was for only one month. The inadequacy of government orders in covering rental dues was an issue for informal workers in the state of Sikkim and Delhi as well (Bhan et al., 2020). Besides the inadequate duration of the moratorium, the government order failed to cover those whose primary income was based on rent. Overall, there was poor on-ground implementation of the government order. The inadequacies inherent in the offered rent moratorium added to the existing challenges of accessing quality and affordable housing for marginalised communities. The pandemic exacerbated the conditions of *physical vulnerability* that the marginalised continuously

³² The respondents were from 161 districts across 12 states, representing workers from more than 30 different occupations.

face (Batra et al., 2021), due to lack of affordable housing (Anand et al., 2014). This untenable situation that the most vulnerable live in is an ongoing challenge, characteristic of several cities.

Inadequacy of rent moratorium offered by the state aggravated existing challenges of access to quality and affordable housing and hence physical vulnerability.

Grappling with the uncertainty of the pandemic and in desperation, some individuals stepped out during the lockdown to earn a living. They faced state brutality as police personnel adopted violent physical measures – hitting them for being on the roads, even when they were attending to emergencies; seizing vehicles; and taking away items such as weighing scales from vendors – in an attempt to deter the public from venturing outside their homes. Simran, a street vendor who sold flowers before the pandemic, attempted to sell vegetables during the lockdown as an alternative form of livelihood. However, she was at the receiving end of police brutality as well:

Policemen asked why I had set up a shop during this lockdown. He kicked and pushed everything down from my handcart. Since they said I could not set up my flower shop, I sold vegetables on my hand cart. After that, they said they will fine us if we set up a shop on the roads and hit my husband. They took our weighing scale.

Despite the central government order of early April (GoI, 2020a), which listed street vendors selling groceries, fruits, and vegetables as essential services and permitted them to carry on their livelihood activities, there were several instances of police atrocity. Police personnel vandalised the street vendors' carts and harassed them as they attempted to carry on their work during the lockdown (IGSSS, 2020). With the lockdown and restrictions on the movement of people being imposed at short notice, migrant workers were stranded in destination states with no money or food (IGSSS, 2020; Kumar, 2020). Although states attempted to distribute food ration, SWAN (2020c)³³ reported that over 82 per cent migrant workers did not have access to food ration and 97 per cent had not received any cash relief from the government. There were instances of force used against migrant workers in cities like Delhi and Mumbai as they attempted to walk back to their villages (MWSN, 2020; SWAN, 2020a). Language barriers did not allow migrants from Bihar, Madhya Pradesh, Jharkhand, and Uttar Pradesh, who often spoke Hindi³⁴ to understand police instructions which were being delivered in Kannada³⁵ and the police did not refrain from using physical violence under any conditions (Madan, 2020; Srivastava, 2020). Even though transportation was subsequently arranged for migrant workers a month after the lockdown, 971 workers died³⁶ due to hunger, dehydration, financial distress, suicides, road and train accidents (SWAN, 2020d). The state system and police force seemed apathetic towards the plight and suffering of informal workers who struggled to survive through the lockdown and pandemic³⁷.

Faced with the loss of livelihood and the complete absence of any source of income generation, many individuals were distressed as the future was uncertain. Uma, a tailor, shared how she was shocked and scared about how she was going to manage and carry forward after the pandemic. Despite the dire situations, some people were determined to pull through keeping in mind their family commitments. This is reflected in Ambika, a domestic worker's statement.

The situation was difficult! (But) the drive to bring up the children was there. Because of that, I thought "I will manage anything!" and I carried on.

The mental health of individuals was severely impacted due to the pandemic. Nevertheless, some people's resilience and adaptability although slow and difficult was also visible. Besides their mental health, their physical wellbeing was also affected. As the prices of various food items surged during the pandemic, it became difficult for

³³ The sample size was 16, 863 workers with a majority stranded in Maharashtra, Karnataka, Uttar Pradesh, and Delhi.

³⁴ Hindi is one of the official languages in India.

³⁵ Kannada is the regional language spoken in the state of Karnataka, a southern state in India.

³⁶ As on 4 July 2020 (SWAN, 2020d)

³⁷ This was widely covered in social media platforms, mainstream mass media and the print media.

poor families to procure fruits and vegetables (Pragati et al., 2020). This was compounded by the lack of a stable income. Since many marginalised communities are already undernourished as a result of a continuous state of *economic vulnerability*, the pandemic created conditions that further worsened their physical health.

With the lockdown imposed in March 2020, all educational institutions were closed in India. The Ministry of Human Resource Development (MHRD) issued directions to all autonomous organisations and educational boards to postpone examinations as a precautionary measure in the wake of the pandemic (PIB, 2020). The children of migrant workers walked with their families to their source state (CRY, 2020) and this disrupted their learning. PUCL (2020) reported that 28.12 per cent students between grades one and eight in government schools in Mumbai had left the city with their parents and even subsequently, schools witnessed a drop in enrolment in the upcoming academic year (2020-21).

Coping strategies

To deal with the disruption of livelihoods, the uncertain conditions of the pandemic, and the lockdown, individual families resorted to various strategies to cope with the hardships they faced. They relied on traditional self-help measures such as borrowing money from within the community. Some were able to receive support from the state³⁸ and the several initiatives taken by non-state actors and civil society organisations. Each of these are discussed below.

Self-help measures

While borrowing money was a useful short-term measure, in the long run, informal workers continued to be *economically vulnerable* as they struggled to repay such loans due to the lack of a steady income³⁹. Those who managed to find alternative livelihood activities such as selling vegetables and packaging food were largely either self-employed or daily wage workers. **Video 3** notes an auto driver's experience of finding a job. Options such as utilising savings and pledging valuables (like jewellery) with the local pawnbroker were common strategies for monthly wage earners (domestic workers, workers in stores). Evidence suggests that monthly salaried workers had some investments, even though meagre, to drawn upon, and were therefore exposed to lower risks. Their pre-COVID stable monthly income may have contributed to making these investments. Table 4 presents four dominant self-help measures that workers relied on.

Self-help measures	Quotes
Borrowings from friends and family	<i>Right from food, even for deposits to run business, house rent, we were forced to borrow to pay for them.</i> Veena, self-employed
Pledging valuables	<i>We pawned our jewellery and got money.</i> Devi, a sanitation worker
Utilizing Savings	<i>Rs.15000 had to be paid for LIC (insurance). (I) had saved it little by little. With that money, I managed those months.</i> Rakesh, load man
Finding alternative livelihoods	<i>The government said you cannot drive the vehicle or anything during the lockdown. Since then, I am surviving by selling these vegetables.</i> Robert, former auto driver

Table 4. Self-help measures

³⁸ Relief offered by the Government of Tamil Nadu is discussed in this section.

³⁹ This is discussed in detail in the section on - The continued impact of lockdown restrictions

Self-help mechanisms worked well as short term measures but were insufficient and therefore subsequently amplified economic and physical vulnerabilities.

State measures

The Tamil Nadu state government offered free ration and monetary compensation through ration cards, as well as distributed herbal concoctions as part of health initiatives⁴⁰. Through the Public Distribution System (PDS), free food ration, consisting of rice and sugar (quantity as per ration card entitlement⁴¹), one kg lentils and one packet of palm oil could be availed at Fair Price Shops (FPS) through a ration card from April to July 2020. In addition, Rs 1,000 allotted per ration card was also distributed in April 2020 (GoTN, 2020a). However, there were several issues with regard to access, quantity, and quality of the food ration distributed. Alex, a cab driver stated that *"since he had got married only recently, he did not have a chance to apply for a ration card"* due to the pandemic. Like Alex, several migrant workers stuck in different cities could not access free food ration as the PDS system did not allow portability of ration cards. They could also not access rations in the destination states since they were migrants, and the ration cards could be used only in their registered city or village and at a specific FPSs (Jan Sahas, 2020a). The central government attempted to resolve this issue by introducing the 'One Nation One Ration Card' scheme⁴², which offered interstate portability of food subsidies so that ration is available to migrants anywhere in the country (MWSN, 2020). The pandemic brought to light such structural issues that exist in the PDS system, and which compounded the vulnerability of migrant workers during this unprecedented crisis.

In relation to the quantity of food ration, Santosh, an electrician stated that the *"monthly ration was not enough to feed"* a family of 6-8 people and *"they had to buy more"*. Veena, a self-employed individual, was frustrated with the poor quality of rice and mentioned that *"the rice smelt bad once it was cooked"*. The lack of ration cards also meant that several people could not avail of the monetary compensation offered by the government. Those who did receive compensation, highlighted the insufficiency of the amount to support the family through the lockdown. Ambika, a domestic worker stated that *"Rs 1000 was not enough; she had to buy milk, vegetables, and other items for a family of five"* and therefore *"could not manage"*.

While the share of PDS rice and wheat consumption increased throughout the country in 2014-15, this indicated that it was a significant source of essential grain for the poor (Anand et al., 2014). However, several people did not have access to this form of food security. For instance, in New Delhi, while 72 lakh residents had ration cards when the pandemic struck, the government received six lakh new applications for ration cards and 38 lakh applications for the e-coupon⁴³ to avail of dry rations (Bhan et al., 2020). This suggests that several individuals had fallen through the structural gaps of the PDS system, and highlights a weak social protection system with regards to food. Therefore, the approach of 'one package for all' coupled with an eligibility criterion (ration card) which could not be met by some individuals (especially migrant workers), pushed them towards the higher end of the vulnerability spectrum and highlighted structural concerns of social justice and poverty.

State measures taken were standardized and exclusionary due to structural issues and eligibility criteria within the PDS.

⁴⁰ The state's measures in relation to education are discussed in - The continued impact of lockdown restrictions section

⁴¹ There are rice cards (4 kg per adult and 2 kg per child; minimum 12 kg and maximum 20 kg; sugar—500 gm per head), *Antoydaya Anna Yojana* Cards (35 kg; sugar—500 gm per head), and Sugar card holders (3 kg of sugar instead of rice). The latter gets all commodities except rice (GoTN, 2020b).

⁴² Although the scheme was started in four states in August 2019 (Rajagopal, 2021), the large scale roll out of the scheme occurred in response to the portability issue of ration cards that became apparent during the pandemic.

⁴³ The Delhi government issued e-coupons for those individuals who had no ration cards. This helped them avail free ration from FPS in Delhi (Bhan et al., 2020).

The state government also distributed a herbal concoction – *Kabasura Kudineer* – that was said to improve the body's immunity (The Hindu, 2020a). This was either distributed in residential neighbourhoods or made available at government centres for the public to drink free of cost. Pooja, a construction worker, stated she had the drink when it was *"distributed from vehicles in her area"*. The government also *"organised camps twice a month to conduct COVID-19 tests for the general public"* (Charulatha, domestic worker).

Many participants also received help from politicians from various state and national level political parties. Relief measures included distributing dry rations either as one-time initiatives or periodically, in and around residential neighbourhoods. These were initiated by Tamil Nadu state parties Dravida Munnetra Kazhagam (DMK) and All India Anna Dravida Munnetra Kazhagam (AIADMK) and by the national ruling party Bharatiya Janata Party (BJP). Riya, a tailor shared that she received *"5 kgs rice from AIADMK and 5 kgs rice and a packet of dates from DMK"*. With raw rice being the most common food commodity distributed by politicians, it seemed as though they were attempting to address and compensate for rice quality concerns within the PDS.

Civil society measures

Informal workers received various forms of relief, such as cooked or dry food, monetary compensation, support for health, education and logistical needs from their customers, employers, and individuals from NGOs, CSOs and Associations of professions.

Provisioning Food

Simran, a street vendor mentioned how the public provided cooked food for individuals; *"idlis in the morning and rice in the afternoon"*. In addition, *"college girls distributed biryani to the children"* in the community. Bhuvana, a street vendor elaborated how her religious community from Haj gave *"10 kgs rice and other items such as sugar, chilli powder, coriander powder"*, required for a month. Meena, a domestic worker got *"free ration through her employers (oil and rice)"* as she did not have a ration card of her own. Her employees were kind to share the food ration they received from the FPS that helped her and her three children survive during the lockdown period. Food kits and groceries were distributed by volunteers and philanthropists. Sampath, a philanthropist, provided *"gift packs that consisted of food grains for 100 physically handicapped people"* through donations from his network. He got *"donors together and provided free food through Amma Canteens⁴⁴"* and coordinated the distribution of *"50kgs of cooked rice for the street dogs"* in Trichy. Another philanthropist, Vani, gave *"masks, sanitisers and bought groceries for about 30 transgender people twice a month"* through the funds she collected from her *"network of family and friends"*.

Ashish, from GNEM (Gurgaon Nagrik Ekta Manch) /SWAN (Stranded Workers Action Network)⁴⁵, described how *"35,000 cooked meals per day were prepared by community kitchens, run by labour unions and a school in Gurgaon. GNEM extended financial support for the distribution of food, and over the course of three months, around 20 lakh cooked meals were distributed"*. In addition, ration kits were distributed to *"35,000 families in over 30 bastis in Manesar, Gurgaon, and some parts of Delhi"*. Krati, from Paras India⁴⁶, described how food packages were given to migrants who were leaving the city (*"transit points"*) and once they reached their villages (*"destination points"*) in Delhi and the Bundelkhand region. They coordinated with district authorities in Delhi and Jhansi. From the *"first week of April, e-passes were arranged for vehicles used to source, pack, and distribute food"*. Those without ration cards were *"enrolled in the e-coupon scheme of the Delhi government"*. However, since the scheme was implemented *"only after first two months, the workers were able to receive the benefit for only one month, even though the e-coupons were planned to be distributed for a period of three months"*.

Providing Monetary compensation

Kamlesh, an iron man received help from his customers during the lockdown.

⁴⁴ Amma canteens are centres that offer subsidised food and are run by the Government of Tamil Nadu.

⁴⁵ Source: Panel discussion on Migrant workers

⁴⁶ Source: Panel discussion on Migrant workers. Krati, is a former employee of Paras India.

In a place where they (the customer) can give Rs 100, they will give Rs 500. They will say "During corona time you keep. You have a child as well. You are struggling"...

Associations of professions also provided monetary benefits for participants. Senthil, a plumber mentioned that he received a monetary benefit of *"Rs 2000 from the Construction Worker's Welfare Association which was deposited in his account"*. Rajesh, a band player stated he also received *"Rs 2000 as compensation"* from the welfare association that recognised the clarinet as a 'gramiya' (rural) instrument. Some philanthropists made personal donations and gathered funds to contribute towards food and other expenses. For instance, Vani, a philanthropist gave *"money to migrant workers for the preparation of food"*. She also gave *"money to another social worker who was looking after beggars and homeless people on the streets"*. Preethi collected *"Rs 5000 from her family and friends"* that was spent on *"cooking food for load men in the city"*. She also made a personal *"contribution of Rs 10,000 for blind people"*. Ashish⁴⁷ elaborated how SWAN (Stranded Workers Action Network) reached out to over *"36,000 workers in 20 states through micro cash transfers. The amount ranged from Rs 500 to Rs 2,000 and a total of over Rs 60 lakh was dispersed"*. Monetary assistance was used by workers to *"buy cooking gas or sanitary napkins for women"*. For the LGBTQIA+ community, Rituparna⁴⁸ stated that her organisation, Nazariya, raised *"Rs 4 lakh worth of funds and distributed the money for three months to around 72 trans-masculine, trans-feminine and queer persons located in different parts of India"*.

Supporting children's education

Charulatha, a domestic worker, mentioned how her former employer who funded her child's education *"from the 2nd standard, paid Rs 8,500 during the pandemic"* to ensure that the child finished her undergraduate education. At a time when employers were not paying salaries for their domestic help during the pandemic, Charulatha's employer continued to support her child's education despite her not working for them anymore taking cognizance of their possible financial tightness due to the pandemic. Sampath, another philanthropist stated that members of his network/organization bought *"five smartphones worth Rs 7000-Rs 7500 for deserving children"*. Through the LEAD Initiative, Krati⁴⁹ elaborated how volunteers from Paras India reached out to *"individual students to provide mobile phones or laptops, and helped them learn English"*. Many girls dropped out of the programme due to parental pressure and because girls were not able to access devices like mobile phones for online learning. Clearly then, existing gender inequality was aggravated during the pandemic as girl children were often denied access to online education. This is covered in greater detail in the earlier sections.

Initiating COVID-19 awareness and health measures

Vani, a philanthropist, *"conducted COVID-19 awareness programmes for sanitation workers at five different locations in Trichy"* during the early days of the pandemic. She *"informed the workers about the virus, the need to maintain social distance, and distributed masks and gloves"*. As frontline workers in the fight against the pandemic, she explained to the workers *"how to be careful when they cleared the garbage"* especially since they were susceptible to *"catching the virus due to the nature of their work"*. Vani *"distributed 100 masks and 100 gloves to sanitary officers for them to distribute to the remaining sanitary workers"* in the city. She also gave *"masks to the bank manager for distribution to bank employees of Indian Bank"*, at a time when there was a shortage of masks. She designed COVID-19 awareness posters through her *"Inner Wheel Club"*. These were *"displayed in public spaces such as markets and bus stands"*. Once the posters were put up, *"the officials took photos and sent them to her"*. This suggests that the material had been effectively used. Krati⁵⁰ stated that *"face masks, sanitisers, slippers, sanitary napkins were distributed as they collaborated with other NGOs"*. Vani supported the livelihood of her tailor who *"used to stitch blouses⁵¹"* for her. She helped him *"buy the material; he stitched masks which she distributed to transgender people, bank managers and employees, and sanitations workers"*. This initiative is an example of how a health initiative – making and distributing masks – can support the livelihood of individuals.

Krati⁵² described how awareness campaigns were organised under the Samarpan programme to control *"the spread of false news and information regarding COVID-19. Through social media platforms, many communication*

⁴⁷ Source: Panel discussion on Migrant workers

⁴⁸ Source: Panel discussion on Inequalities

⁴⁹ Source: Panel discussion on Migrant workers

⁵⁰ Source: Panel discussion on Migrant workers

⁵¹ A blouse is garment that is worn with a Saree, a traditional Indian outfit.

⁵² Source: Panel discussion on Migrant workers

channels were set up to share information on safety rules, quarantine duration and health protocols (wearing and disposal of masks, handwashing techniques) in the local language” to mitigate the spread of the disease. These initiatives were covered in areas of Delhi, Bundelkhand, Uttar Pradesh, Madhya Pradesh, and Chhattisgarh.

Rituparna discussed how Nazariya⁵³ ran a “helpline service from Monday to Saturday from 10 am to 6 pm”. The calls were related to the “mental health issues and suicidal concerns of the callers and included parents passing homophobic and transphobic comments”. The callers discussed various “mental health stressors such as how they faced surveillance, were forced to wear clothes that conformed to their gender at birth which they did not conform to because they are transgender; instances of being forced to undergo conversion therapy and not having money to recharge phones and therefore not being able to talk to their peer group, friends, or lovers”. Rituparna mentioned how some individuals committed suicide “because they were forced into conversion therapy by family and by the medical institution”. There were “instances of lesbian and gay couples committing suicide in parts of Tamil Nadu, Muzaffarnagar in Uttar Pradesh, and Guwahati”. Many were pushed to the brink of survival as they were stuck at home in a toxic environment that failed to understand or support them. The usual external support systems were also not easily accessible due to the lockdown and there was a lack of monetary support. Experiences of NGOs like Nazariya working with the LGBTQIA+ communities indicate how people like these were further marginalised and felt even more vulnerable during the pandemic and lockdown.

Providing logistics of travel

Since migrant workers had no food or income to support themselves and were unable to access government schemes, they began to walk back to their respective villages on foot. Almost a month after the mass exodus of migrant workers leaving the cities, the central government organised train services known as the *Shramik* trains from the 1st of May 2020 to help migrant workers reach their destinations (SWAN, 2020b). Despite this, many workers were neither aware of them nor were they able to access the correct details to get to the station on time (ibid). Raghav⁵⁴ recollected how informal agents were charging high prices for tickets on the *Shramik* trains⁵⁵ from people in the informal settlements. Once it was brought to their notice, necessary action was taken.

Informal agents were charging as high as Rs 4000 for one ticket that should have been free. Two of our community members, in particular, witnessed this happening in a maidan (park) that is close to the settlement and brought it to the attention of our team. We informed the media, the media contacted the police, as the result of which FIRs were registered against these agents. And that practice shut down, at least in our area.

**Non-state measures lacked the necessary resources to carry out
the wide-scale implementation of relief work.**

Both state and non-state measures largely focused on COVID-19 health initiatives, providing food (dry and cooked) and financial assistance, since there was a grave loss of livelihoods and income. While state measures reached out to many beneficiaries, the relief material was *standardised* and *exclusionary in nature*. While the PDS was organised to provide food security free of cost, many individuals could neither avail free ration at the Fair Price Shops nor monetary compensation due to two reasons: (i) Structural constraints: non-portability of ration cards (in the case of migrant workers) to claim entitlements; absence of database required to access and monitor the distribution of relief for migrant workers; pending ration card applications due to bureaucratic delays; and (ii) inaccessibility of documents required to fulfil eligibility criteria for PDS entitlement (proof of identity and residence). The requirement of domicile documents curtailed migrant workers and homeless people's access to food entitlement (Aajeevika Bureau, 2020).

⁵³ An organisation represented in the Panel discussion on Inequalities

⁵⁴ Source: Panel discussion on Migrant workers Raghav is a former employee of Aajeevika Bureau

⁵⁵ *Shramik* is a Hindi word that means ‘one who labours’. *Shramik* trains were meant to be free of cost for workers in distress during the pandemic.

Inadequate quantity and quality of food rations, insufficiency of cash transfer points and limited coverage of these measures were indeed grave concerns. This highlights the interlinkage between food security, inadequate housing (*physical vulnerability*) and informal employment (*economic vulnerability*). It is evident that effective social protection measures need to account for these interlinkages and dimensions of vulnerabilities rather than just measures of poverty (Bhan et al., 2020). Relief measures in terms of supporting health and children's education were limited in terms of quantity and quality, as they were carried out by non-state actors through community networks that did not have the scale of monetary or infrastructural support required for wide-scale implementation.

Evidence points towards two key arguments: that the existing state social protection system is inadequate, fragile with several structural gaps. When brought into gear to respond to the crisis, it fell short of providing adequate assistance and was unable to cover all who required assistance. As argued by Bhan et al., (2020), the system was not able to withstand the shock created by the pandemic due to inherent structural gaps and exclusivity in the eligibility criteria. Non-state actors tried to address this fallout by attempting to develop, expand and build some form of social protection in terms of food, finance, education, and health for all those who could not access state relief. While this reduced the severity of suffering for some, the bulk of informal workers continue to struggle to access relief measures within urban spaces.

Existing systems with regard to food, housing, education, and employment were found to be inadequate and fragile and therefore failed to support the most vulnerable, highlighting the need for instituting social protection measures.

The continued impact of lockdown restrictions

Once lockdown restrictions were eased, some people were able to go back to work and many attempted to rebuild their livelihood. Devi, a sanitation worker⁵⁶ shared that things were “*normal*” since she was “*managing work, looking after children, and repaying dues*”. Several people, however, struggled to generate income due to the sudden and continued lockdown of major cities and the economic downturn, which began earlier but was aggravated by the pandemic. Uma, a tailor, seemed to understand why her customers were not availing of her services:

The customers are not coming. You need food only! Clothes are only the next consideration. It is not a basic/necessary expenditure, right? First, we need to save our lives, we should eat. That is what they will see. They will wear what they already have.

Customers were saving up on monetary resources to spend on basic food, thereby indicating a financial crunch even in middle-class families as people had lost jobs or had salary cuts due to the pandemic. Murugan, a painter and electrician remarked how he was turned down by the previous employer as the latter did not have “*any money in hand to pay either the salaries or for the raw materials*” required to re-start construction work. The continued impact of the pandemic in terms of the fear of getting infected and the restrictions imposed, continues to impact income generation. Deepak, a salon owner explained how customers did not want to wait at the premises due to fear of contracting the virus

Now they are not waiting. Because they are scared. If there is one person here and I am cutting for another person, they (the customer) are not staying. They are going away...

Besides a reduction in the footfall of customers, the frequency of their visits also reduced due to fear of the virus.

Usually, per month, four weeks means, some people shave for those four weeks. Now per month, they are doing only one shaving. Because they are scared! “Oh no! If I come here, something may happen.”

⁵⁶ Self-employed worker

As the nature of work for a barber involves human beings coming in proximity (cutting and shaving), it created the fear and risk of exposure. Even though lockdown restrictions were eased, the flexible nature of work for self-employed individuals had been disrupted.

It was difficult for Tanya, a street vendor, to do business due to time restrictions imposed as part of easing the lockdown. Although street vendors had been permitted to open their shops that sold “*biriyani and chapati*”, they had to close by 9 pm (GoTN, 2020c). As a result, Tanya lost out on income that could have been generated during peak business hours which she shared were usually post-9 pm.

After people finish their duty, they come in their vehicles to buy food. For street vendors like us, business happens after 9 pm and often between 10 pm - 11 pm. Because of this wrapping up at 9 pm, our business itself is greatly affected.

Many struggled to generate income due to the economic downturn aggravated by the pandemic and the continued public fear of the virus. The financial crunch witnessed by the upper and middle class who experienced their share of job loss and salary cuts, pushed them to cut back on expenses that were forms of income for informal workers. For instance, the monthly salary for domestic workers was reduced; payment towards stitching and ironing clothes which were revenue for self-employed workers like tailors, ironers were reduced; people put on hold renovation work which had a trickle-down effect on workers in the construction sector such as electricians, painters, carpenters, and construction workers.

Even though upper and middle-class families continued to have formal employment along with job security, regulated wages, and working hours, they chose to reduce their expenses by cutting into the meagre salaries they gave for informal work. Few were sensitive to the fact that informal workers were often dependent on economically well-off families. In a few instances, middle and upper-class families continued to pay monthly salaries to their domestic and other workers because of which they were able to sustain themselves (Rai Chowdhury et al., 2020). However, some Residential Welfare Associations⁵⁷ (RWA) in Delhi required domestic workers to show *Aadhar* cards⁵⁸ before they entered the residential colonies to ensure that they were not coming from a containment zone, or they had fixed timings for entry (Hindustan Times, 2020). Some housing societies in Mumbai forced domestic workers to begin work only after taking a bath and wearing fresh clothes (Singh, 2020). These demeaning practices reflected the middle-class apathy toward domestic workers who were *socially vulnerable* due to their occupation and socio-economic status.

Besides economic vulnerabilities being amplified due to the pressure to repay debt, many remained socially vulnerable as they faced discrimination by employers and customers on grounds of the fear of catching the virus.

While middle-class apathy further enhanced the vulnerabilities of informal workers, it is also critical to understand how the fragile economic network within which the vulnerable and various middle-class individuals were enmeshed, impacted the most vulnerable. The consequences of this were far more severe for those already marginalised. The lack of income and cash flow heightened the precarity of unskilled and semi-skilled workers, who were already on low wages with no job security. No large gathering in public spaces and having to maintain social distancing impacted the footfall of people at social gatherings such as weddings, and customers in service centres such as salons and iron shacks (small shops where clothes are ironed). As a result, self-employed individuals in the service sector, such as photographers, music band players, barbers, ironers, and street vendors struggled to get their business up and running even after the lockdown restrictions were eased, thereby weakening their already volatile sources of income. Narratives suggest that most informal workers did not get a respite even when the lockdown was eased. Continued restrictions due to the pandemic did not in any way reduce their economic vulnerability.

⁵⁷ RWA is an organisation that represents the interests of the residents of a specific urban locality in Indian cities.

⁵⁸ Aadhar card is a 12-digit individual identification number issued by the Government of India.

One of the consequences of sporadic income is that people struggled to repay interest dues, Equated Monthly Instalments (EMIs) and loans they had borrowed to sustain themselves during the lockdown. Simran, a street vendor mentioned how during the lockdown, *“lenders did not trouble her”*. But as soon as the lockdown restrictions were eased, the lenders started threatening her to repay the loans she had borrowed for medical expenses.

I could not repay the loan, I gave Rs 50,000. I told him “I do not have a business now please take this Rs 50,000 brother. He said “Is this money? When you must pay Rs 1,00,000 you are paying this? I will come to your house and trouble you. I will get four guys and fight with you. Every time your daughter goes, I will pull her legs.”

Facing a lack of stable income, informal workers like Simran faced an increased risk of getting into debt cycles as they were compelled to pay high interest rates for borrowed money. Some even faced violence due to default payments. Jan Sahas (2020b)⁵⁹ reports that more than 79 per cent (774 out of 984) of labourers interviewed, believed that they would not be able to pay off their debts in the near future. Around 146 (out of 984) mentioned that they did not know how it would affect them, thereby reflecting the grim reality faced by the marginalised. Over 50 per cent workers feared that their inability to repay debt could put them in danger or expose them to some form of violence. The pandemic brought many to a point of slipping into abject poverty, deepening the concerns of urban inequality and poverty that characterises several cities (Batra et al., 2021). In addition, it exposed them to the risk of getting into debt cycles and the dangers of facing some form of violence in case of defaulting on their payment.

This led to tremendous stress affecting their mental health as well. Charulatha, a domestic worker, expressed her anxiety and concerns about repaying loans that she took for *“food expenses while not having any work or a proper job”*. Therefore, loan repayments and clearing debts seemed to cause great anguish for the vulnerable community and plagued them as they attempted to rebuild their lives and livelihoods, post-lockdown. Some were able to cope better. For instance, Renuka, an employee of a grocery store, was *“hopeful that the situation would improve”*, and that she would be able to recover from the impact of the pandemic.

Workers who returned to work post-lockdown, followed COVID-19 health protocols at their workplace to protect themselves and the people who availed their services. Senthil, a plumber mentioned how his customers were cautious and told him *“to wash his hands before he entered their houses and was given a mask”* if he was not wearing one. Similarly, Anand, a salon owner, elaborated on various safety measures he followed to ensure customers felt safe and regularly come to the salon to avail his services.

For the people who are coming, we are giving sanitisers, we are spraying Lizol⁶⁰ on the seats and cleaning it. We are wearing face masks. We are also wearing gloves.

Despite these measures, some customers were *“hesitant”*. They brought *“their own towels and blades”* for shaving. Anand also asked them to bring these if they wanted to. Health concerns began to take centre stage as individuals re-built their livelihoods.

Due to school closures, all students remained at home and there was a major disruption in their education during the lockdown as evidenced in earlier sections of this report. The Trichy data revealed the plight of children of the most vulnerable communities. Participants who had put their children in government schools stated that they had received free food grain as part of the Mid-Day Meal Scheme⁶¹. Meena, a domestic worker, remarked that she got a monthly dry ration – *“uncooked rice, 10 eggs and pulses”* from the school for her child studying in 8th grade. In addition to dry food rations, books were also distributed by government schools. Post the lockdown, schools run by the Tamil Nadu state government attempted to reach out to students through Television by setting up a channel *“Kalvi Tholaikatchi”*. The channel streamed programmes related to the state curriculum for students and telecasted lessons delivered by teachers from Monday to Friday at pre-set times (MHRD, 2020). Private schools attempted to reach out to students through various online platforms such as WhatsApp and Google Meet.

⁵⁹ Jan Sahas carried out a study in March-April 2020 to understand the impact of the COVID-19 pandemic on migrant construction workers in North and Central India.

⁶⁰ Lizol is a disinfectant surface cleaner that can be used on countertops and furniture.

⁶¹ The Mid Day Meal scheme provides free nutritious meals for children in primary (aged 5–9) and upper primary level (aged 10–15) in government and government-aided schools (MDM, 2018). During the pandemic, primary school children were given 3.1 kg of rice and 2 kg of pulses and upper primary children were given 4.65 kg of rice and 1.25 kg of dal (The Hindu, 2020b).

While some participants acknowledged online education as a 'need' given the circumstances brought about by the pandemic, several others highlighted the limited access they had to online learning. Several difficulties were voiced with regard to accessing gadgets like a smartphone and TV; technical issues of software, data requirement and bandwidth; lack of monetary resources for payment of school fees despite government orders that prohibited the collection of fees. These impacted the quality of teaching and learning imparted through the online medium. Several children of informal workers, especially those studying in private schools did not have access to the required resources, resulting in their education being suspended. These issues reflect and resonate with those experiences discussed in the section on Delhi. The loss of livelihoods coupled with financial distress and school closures resulted in students becoming child labourers as they lacked bargaining power and are considered cheap labour (CRY, 2020). Shah and Luthra (2020) report⁶² that amongst 235 migrant children 5 per cent said they would not return to school, 17 per cent mentioned violence at home, and about 42 per cent were more involved in household chores. In addition, children from households that faced food and cash shortages were at greater risk of not returning to school in comparison to their counterparts who did not face food or cash crunch (Ghatak et al., 2020). Subsequently, the digital divide and disruption to education not only amplified the risks faced by marginalised children but also resulted in significant learning loss. This is likely to further widen the existing educational inequality gap that has been institutionalised through neoliberal policy measures including the privatisation of education and low investment of the government in public education (Batra et al., 2021).

Inferences and Key Learnings

Urbanisation in India is the most dominant transformative project underway. Due to massive shifts from an agrarian economy to a service economy, the unfolding demographic shifts characterised by a younger, educated, and – debatably – skilled population, is visible in Indian cities, which are sites of unplanned and rapid urbanisation with massive infrastructural and public service deficits. Poverty, social and economic inequalities remain core challenges in Indian cities, as the informal nature of economic activity grows amidst deep economic, social, and physical vulnerabilities. Indian cities and towns serve as epicentres of economic activity and opportunities, are underpinned with hopes to alleviate poverty, and are also – paradoxically – agglomerates of every day and structural vulnerability. With slums forming 17.4 per cent of urban households (Census, 2011), informal workers deal with complex and dynamic dimensions of vulnerabilities: they engage in low waged informal employment that lacks job security and wage regulation; are entrapped in complex webs of informal debt economy owing to their inability to tap into formal debt markets; live in poor quality dwellings that lack basic services like water and sanitation; face dangers of eviction and are, in many cases, engaged in hazardous occupations. Cities are home to migrant workers who navigate these challenges but lack political 'voice' within urban spaces.

While cities in India have been evolving and grappling with the multiple challenges identified, they also had to deal with the crisis thrown up by the ongoing pandemic. Our aim in this research was to assess how the vulnerabilities were unfolding during the pandemic and during the long unlock phase, and what lessons can be derived, for city planning, from the collation of these experiences. We propose that these lessons be seen at three levels:

- (a) how do we respond in emergency situations, like the pandemic, to ensure that we do not face situations of widespread suffering and exacerbation of vulnerabilities;
- (b) how to conceptualise and initiate public policy efforts towards addressing deeply and structurally entrenched multi-dimensional vulnerabilities; and
- (c) are there specific public policy interventions aimed at addressing the core challenge of vulnerabilities in the city?

Operationally, the idea was to identify intervention agendas that could be critical to ensure the well-being of vulnerable populations – ideas that need mainstreaming into local development and delivery frameworks. The aim was to understand the nature and dimensions of vulnerabilities, therefore, we focused on different vulnerable groups based on their occupation: *self-employed, and monthly, daily, or weekly wage earners*. We intended to explore how the pandemic impacted their livelihood, health, and the education of their children; with a particular interest in how different dimensions of vulnerabilities were perpetuated, were multi-layered and had complex interactions

⁶² The sample for study was 1,598 parents and 989 children (aged between 11–17 years) from marginalised and vulnerable families. These were split across two population groups: Migrants (606 parents and 235 children) and Save the children programme participants (992 parents and 754 children).

and interlinkages; how state and non-state relief work respond to these vulnerabilities, and whether they were able to alleviate their suffering. *Overall, the intention was to explore and account for the role of individual vulnerability as a factor while developing a framework for resilient and sustainable cities.*

Due to the lockdown, individuals were unable to go to work, faced job and income loss and struggled to meet regular expenses on food and utilities (electricity, gas, and rent). They managed to cope through the lockdown by drawing on various measures such as borrowing money from family, friends, and micro-finance institutions, finding alternative livelihood activities, pledging valuables, and utilising savings – the first two being the most common measures and thereby highlighting how savings were uncommon amongst workers due to their volatile and limited income. State actors attempted to mitigate wide-spread suffering by offering free PDS (subsidised food) ration and monetary compensation through ration cards (low-income social protection). However, access to these measures was an issue due to structural constraints within the PDS: beneficiaries that did not have ration cards due to pending applications, eligibility criteria and non-portability of ration cards that impacted uptake amongst migrant workers⁶³. In addition to providing food assistance and monetary support for those who were not in the system of state support or were unable to access state support, specific non-state actors attended to some of the needs, such as those related to the education of children, preventive health care (COVID-19 awareness campaigns, distribution of masks, and gloves) and transportation assistance for migrant workers.

Post lockdown, the overall economic situation remained volatile due to limited cash flows that led to cutting back on expenses such as paying domestic workers, putting on hold renovation projects⁶⁴ and COVID-19 restrictions in social gatherings and work time restriction⁶⁵ impacting the livelihood landscape. As workers borrowed money pre-COVID and during the lockdown to manage expenses, many struggled to repay loans and clear debt in the absence of a steady income. The absence of a uniform financial security net coupled with being part of a volatile credit system, poor on-field implementation of government orders (with regards to rent collection, work timing restrictions, school fees collection), made them more *economically vulnerable*. The education of children was suspended as they did not have the necessary financial and physical resources to engage in online education offered by private schools, leading to learning-related challenges that would subsequently widen and deepen educational inequality. The physical and mental wellbeing of workers was severely compromised as they struggled to get quality food and were anguished due to the loss of livelihood and an uncertain future.

Reflecting on the experiences of informal workers in Trichy, the pandemic brought to light their *economic* and *physical vulnerabilities*. Their *social vulnerability* was also exposed as customers (at service centre-salons) and employers (of domestic workers) discriminated against workers on the grounds of fear of catching the virus⁶⁶. These individuals embody and negotiate various forms of vulnerabilities that are complex, differential, interconnected and interwoven in the lived experiences of daily lives, which became distinctly visible during the pandemic. While the focal point of concern for individuals was the nature of employment (livelihood), the vulnerabilities manifested in many ways were dynamic and subjective. For instance, lack of livelihood (*economic vulnerability*) had a more severe impact on those who had to pay residential rent (*physical vulnerability*) in comparison to those who had an opportunity to pay later.

Economic vulnerabilities in terms of limited or loss of income impacted their physical and social vulnerability as they struggled to retain affordable housing, acquire basic food for survival and keep their children's education going.

Drawing on the issue of rent, there were concerns for landlords and house owners, whose primary source of income was rent⁶⁷. This indicates that vulnerabilities are layered within the city economy. In addition, inadequate

⁶³ Refer to the section: State measures

⁶⁴ Refer to the section: The continued impact of lockdown restrictions

⁶⁵ Refer to the section: The continued impact of lockdown restrictions

⁶⁶ Refer to the section: The continued impact of lockdown restrictions

⁶⁷ Refer to the section: Immediate impact of lockdown

housing (*physical vulnerability*) hindered access to subsidised food (PDS ration)⁶⁸. Besides the subjective and stratified dimensions of vulnerabilities, it was also dynamic and is in a constant state of flux. The lived realities of vulnerabilities had a predominantly economic locus when the lockdown was imposed (lack of income) and, was slightly alleviated during the unlock period; the issue of rent (*physical vulnerability*) and lack of access to food became more prominent during, and post lockdown. The social identities of workers (*social vulnerability*) were in constant flux as they went from being the hidden drivers of the city economy to being completely neglected without any social assistance through the pandemic.

This study highlights how different dimensions of vulnerability – *economic, physical, and social* – were amplified due to the pandemic, impacting the most marginalised in unprecedented ways. The city was inhospitable, its public services failed to support them, and many individuals have, potentially, slipped much further into poverty. The World Bank estimates that between 110 million to 150 million new people would be living in extreme poverty by 2021, out of which 82 per cent will be from middle-income countries (2020b).

To mitigate this substantial economic fallout, the key need is to put in place strategies that can deal with future emergencies using robust response mechanisms, and that can develop viable, resilient cities. In situations of crisis such as the pandemic, relief responses should include immediate and adequate access to food for all affected, cash support in the interim to meet immediate and unavoidable expense requirements, and livelihood reconstruction in the short and medium term. The universalisation of PDS ration for all – those with no ration cards as well – will provide food security through FPS. Cash transfers can be made through the system of direct distributions including at ration shops, post offices and through direct transfer systems, such as bank accounts.

Key response to emergencies, such as the pandemic, should be to reduce widespread suffering by immediate focus on adequate food for all, cash support for basic expenses and livelihood reconstruction in the short and medium-term.

What is lacking and what we need is a systematic account of who these vulnerable people are, where are they located and what is the best mechanism for the state and non-state system to reach them. There is also the need to distinguish between the poor and the vulnerable, and to put in place assistance systems that can reach the entire vulnerable population and to the documented 'poor'. To achieve this, existing record systems need to be leveraged and new 'registries' created to be constantly aware of the vulnerable population. In addition, as a pre-emptive measure, service delivery mechanisms have to be intelligently thought to ensure that in moments of crisis, we reach the vulnerable quickly e.g., during the pandemic, public schools in Delhi were used to set up and manage temporary relief kitchens (Bhan et al., 2020). Existing delivery mechanisms will need to be strengthened and reimaged. For instance, auto drivers and street vendors can be used as part of the implementation and delivery of food security programmes.

The state needs to account for and record who and where vulnerable individuals are located and identify suitable mechanisms to reach them, such as, leveraging existing and 'new' social registries.

Our study indicates that the city's existing structures in terms of food, education, housing, and employment were unable to absorb the shock caused by the pandemic and in fact aggravated the different dimensions of vulnerability. Therefore, to create resilient and sustainable cities, this research suggests that public policy interventions need to re-imagine and design social protection measures based on the complexities and interlinkages of *vulnerabilities* at the core, rather than basing those on static poverty dimensions. The pandemic

⁶⁸ Refer to the section: State measures

weakened and at times broke coping mechanisms (such as borrowings or using savings) of already vulnerable informal workers.

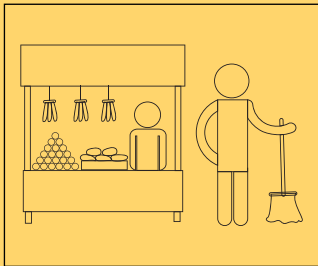
There is a strong case, during the post-COVID era, to think about urban employment schemes that help build adequate social infrastructure to allow for better coping, reduce distress and to ensure consistent upward economic and social mobility (Bhan, 2020). Housing and food systems need careful consideration while we rebuild after the pandemic. Local government bodies and private organisations can partner with low-income settlement inhabitants to design and work on infrastructure upgradation projects. The example of Jaga Mission in Odisha⁶⁹ can help generate local employment and build a comprehensive social infrastructure that can improve service delivery. As argued by Rai Chowdhury et al., (2020), it is imperative for policy makers to understand the linked component of debt and vulnerability and not just focus on income loss. Urban practitioners need to re-examine the institutional credit system that exists and reimagine those to be more supportive. Robust examples in the Self-Help Groups (SHGs) framework need to be leveraged and strengthened.

Public policy needs to develop robust social protection measures based on the multi-faceted nature of vulnerabilities, instead of a static measure of poverty.

⁶⁹ Jaga Mission is a slum upgradation project carried out by the Government of Odisha by giving non-transferable land titles to over 200,000 households in 2,000 slums across the state. The project draws on community mobilisation by settings up Self-Help Groups (SHGs) and Slum Development Associations (SDAs) to articulate the needs of the residents, who are also implementation partners of the project (Chakrabarty, 2020).

Livelihoods

The study aimed to understand how the pandemic impacted the livelihoods of informal workers; their everyday lives, as they struggled to access state and non-state relief measures in the city of Trichy.



Livelihoods and lives of informal workers

The pandemic exposed the precarious nature of livelihoods of informal workers - characterised by low wages, intense physical labour in the absence of safety measures.

The different dimensions of vulnerability- economic (no income and livelihood), physical (lack of affordable housing), and social (discrimination based on caste, work) were exposed and exacerbated during the pandemic.

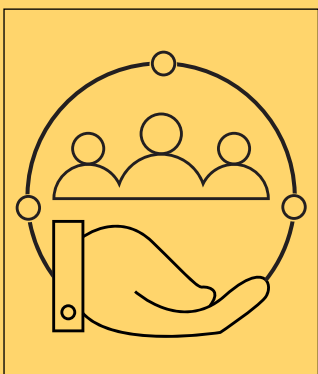
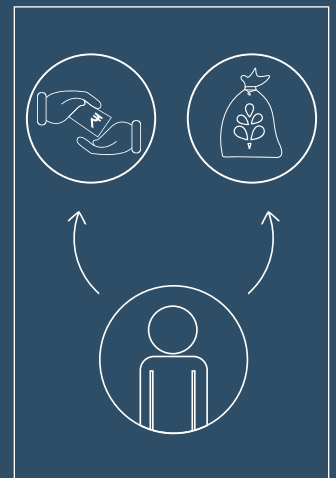
Coping strategies and relief measures

Self-help mechanisms such as borrowing money, pledging valuables, finding alternative livelihoods and community support measures in terms of provisioning of food, monetary compensation and Covid-19 health initiatives worked well as short-term measures for some.

However, these short-term measures proved to be insufficient as they subsequently amplified economic and physical vulnerabilities.

State relief measures that distributed food ration and monetary compensation through the Public Distribution System (PDS) were standardized and proved to be exclusionary due to structural issues and eligibility criteria.

Non-state measures lacked the necessary resources to carry out wide-scale implementation of relief work.



Reimagining social protection measures

To reduce widespread suffering in emergency situations such as the pandemic, policy should focus on providing adequate food access, cash support for basic expenses and livelihood reconstruction for the affected.

It is critical to develop records of vulnerable individuals and their locations and to identify suitable mechanisms to reach them. This can be achieved by leveraging existing and 'new' social registries.

Social protection measures need to be re-conceptualised along the multi-faceted nature of vulnerabilities that are complex, interlinked, and dynamic.

Conclusion

Following the onset of the COVID-19 pandemic, educational institutions in India remained inaccessible for over a year. The pandemic was used by the Government of India to shift the primary site of education to online platforms. Schools and higher education institutes were directed to construct online learning platforms, positioning them as the ‘future of education’. The COVID-19 crisis was seen as an opportunity to enhance a neoliberal focus on learning outcomes via online learning support systems.

The COVID-19 pandemic appears to have created the space for a coalition of interests, built on a controversial juxtaposition of lives vs. livelihoods, that neglects the massive impact on children and young people’s education, nutritional security, and mental health.

With a forced transition to digital platforms, children of the most vulnerable sections of society have been almost cut off from schooling processes and practices. Yet, technocrats are looking at the forced closure of institutions as business and profit-making opportunities, claiming that the current crisis shows “that digital learning can be effective” and the extended lockdown period might provide opportunities for “incentivizing for-profit companies to develop products for the underserved communities” (CSF 2020a). State governments are making public commitments to scale up the use of digital technologies in schools, using platforms set up by non-state actors, even as 250 million children have been pushed out of classrooms during the lockdown.

Several non-state actors have had a considerable agenda-setting influence in this space, especially as they work closely with the central and state governments, on behalf of global advocacy networks. While the share of India’s state schools⁷⁰ declined to 65 per cent as parents preferred private schools in a reported search for quality, learning levels continue to stagnate across several states (ASER, 2019b). This is one of the causes of a serious education crisis during the COVID-19 pandemic. A large number of low-fee paying private schools faced bankruptcy and hence closure, as large sections of parents lost their livelihoods and were unable to afford even these low fees. Simultaneously, private-sector lobbyists are advocating for the state to bail out these schools as MSMEs (CSF, 2020a). The evidence presented in this report suggests that a return of students to state schools is an important opportunity for its post-COVID revitalisation.

The challenge of exclusion in higher education institutions is not merely that of access due to digital inequities. In shifting the responsibility of accessing the means for digital learning onto students, higher education institutions have differentially burdened disadvantaged communities.

The consequent commercialisation and commodification of education is likely to have serious ramifications for equity and social justice in India, as it pushes up the cost of higher education, making it inaccessible for the disadvantaged.

The pandemic has reinforced the need to meet the Constitutional obligation of state and educational institutions to support the most vulnerable students, paying close attention to intersections of caste, gender, and backward regions and areas.

It is no surprise that the current crisis and long periods of lockdown have given free rein to state tendencies to use coercive and authoritarian methods, forcing teachers to comply with state instructions to move to digital platforms

⁷⁰ Unified District Information System for Education (UDISE, 2018). Source: <http://udiseplus.gov.in/mainhome#>.

for education. With an undue focus on the instrumental aims of education, such as developing skills and competencies, “knowledge” itself is being repositioned, even marginalised (Batra, 2020a). The emphasis on scaling up the use of online platforms and projecting online learning as the future of school and higher education is in consonance with India’s National Education Policy (GoI, 2020b); and is positioned to increase India’s gross enrolment ratio in higher education (Bhattacharya, 2020).

The state, must increase public spending in school and higher education, and private actors, must treat education not as a for-profit venture and treat inclusive education and diversity, as a necessary and worthwhile national goal.

The COVID-19 pandemic appears to have created the space for a coalition of interests, built on a controversial juxtaposition of lives vs. livelihoods, that neglects the massive impact on children and young people, especially on their education, nutritional security, and mental health. Added to that is a proposed new panacea for educational inequality and poor learning – the digitalisation of education. This could diminish many of the educational gains of the last few decades, by heightening the large divide between those who have access to bandwidth, devices, and software – resources not available to hundreds of millions of Indian children and youth. The push for online education is likely to make many of the critical debates around quality education and the “learning crisis” simply irrelevant (Batra, 2020a).

The impact of the lockdown uncovered the fragile existence of hundreds of millions of Indians and the abysmal capacity of public and formal systems to respond in sustainable ways. It exacerbated the risks that many marginalised communities face – from loss of livelihood to hunger to abject poverty, with serious consequences for the education and health of their children. *Jamlo Walks: An Illustrated Book about Life During Lockdown*⁷¹, a children’s book that traces the impact of the 2020 lockdown on the most vulnerable, highlights how injustice and inequality imbue our day-to-day interactions. The pandemic has made discernible blatant economic, health, caste-based, gender, and educational inequalities that face the poor, the homeless, socially disadvantaged, migrants, refugees, and those in informal settlements. It brought to the surface the wider structural dynamics and inequities that reinforce each other during crises and differentially impact communities, regions, and institutions.

The study highlights how different dimensions of vulnerability – *economic, physical, and social* – were amplified during the pandemic, severely affecting those who had moved to cities in the hope of living a life of wellbeing and dignity. The city was inhospitable, its public services failed to support them, and many have now slipped into poverty. Estimates suggest that 15 million workers were out of work by the end of 2020 and around an additional 230 million people have fallen below the national poverty line (APU, 2021). It is evident that the education of their children is heavily impacted, pushing a generation of them out of learning opportunities and diminishing their life chances. Hence, informality remains the core challenge in our education system as much as in our cities. Much of the poorly regulated private school and higher education sector needs to be paid close attention to if these interrelated challenges are to be addressed.

While we may not eliminate informality in our economic activity, we can create an effective and efficient labour market, with hard coded social protection measures. Addressing vulnerabilities that are complex, interconnected and layered, would be a critical entry point for public policy in the immediate future, as demonstrated in this research.

The pandemic has reinforced the fact that there are far more vulnerable people living in cities than what the official system captures. India’s urban systems are not only weak in ensuring uniform access to basic services for those living on the margins, but also exclusionary in terms of limiting access to quality school and higher education. Close attention needs to be paid to the intersections of caste, gender, community, class, and region in addressing inter-related urban challenges, including those that have compounded educational inequality during the pandemic. Understanding and accounting for the dynamic interplay of urban inequality and vulnerabilities could assist in the reorientation of urban policy and urban practices, to be far more just, equitable and humane.

⁷¹ See Samina Mishra and Tarique Aziz (2021).

References

Aajeevika Bureau (2020). *Unlocking the urban: Reimagining migrant lives in cities post Covid-19*. Udaipur: Aajeevika Bureau. Retrieved from <https://www.aajeevika.org/assets/pdfs/Unlocking%20the%20Urban.pdf>

Agarwal, P. (2006). Higher Education in India: The need for change. *Working Paper, No.180, Indian Council for Research on International Economic Relations (ICRIER), New Delhi, 40(3)*. DOI: <https://doi.org/10.4324/9780429305962-14>

Ahvaan Trust. (2020). *Quarterly Programme Update*.

Anand, S., Bhan, G., Idicheria, C., Jana, A. & Koduganti, J (2014) *Locating the debate: Poverty and vulnerability in urban India*. Bengaluru: Indian Institute for Human Settlements. Retrieved from https://iihs.co.in/knowledge-gateway/wp-content/uploads/2015/07/IIHS-RF_Poverty_Edited-changes-accepted_Reduced-size.pdf

Apoorvanand (2021, May 29). Why UGC's proposal for 'blended teaching' is a bad idea. *The Indian Express*. Retrieved from <https://indianexpress.com/article/opinion/columns/ugc-online-classes-blended-teaching-covid-7334748/>

APU (Azim Premji University) (2020). *COVID-19 livelihood survey-compilation of findings*. Bengaluru: Azim Premji University. Retrieved from <https://cse.azimpremjiuniversity.edu.in/>

APU (Azim Premji University) (2021). *State of working India 2021: One year of Covid-19*. Bengaluru: Azim Premji University. Retrieved from https://cse.azimpremjiuniversity.edu.in/wp-content/uploads/2021/05/State_of_Working_India_2021-One_year_of_Covid-19.pdf

ASER (2019). *Annual Status of Education Report (Rural) 2018*. New Delhi: ASER Centre.

Batra, P. (2020a). NEP 2020: Undermining the Constitutional Education Agenda? *Social Change, 50(4)*, 594-598.

Batra, P. (2020b). Re-imagining curriculum in India: Charting a path beyond the pandemic. *Prospects*, 1-18.

Batra, P., Revi, A., Bazaz, A., Singh, C. & Poonacha, P. (2021). *TESF India background paper*. Bristol: TEF and IIHS. DOI: <https://doi.org/10.5281/zenodo.4331432>

Bazaz, A., Jana, A., Revi, A. & Malladi, T. (2016). *Urban India 2016: Evidence*. Bengaluru: Indian Institute for Human Settlements

Bêteille, A. (2010, April 22). Viable universities - Set conflicting goals, centres of higher learning cannot prosper. *The Telegraph*. Retrieved from <https://www.telegraphindia.com/opinion/viable-universities-set-conflicting-goals-centres-of-higher-learning-cannot-prosper/cid/532832>

Bhagat, R. B., Reshmi, R. S., Sahoo, H., Roy, A. K., & Govil, D. (2020). *The Covid-19, migration, and livelihood in India*. Mumbai: International Institute for Population Sciences.

Bhan, G, Chowdhury, A; Margosa, N; Sampat, K & Sohane, N (2020) *Lessons for social protection from the COVID-19 lockdowns report 1 of 2: State relief*. Delhi/Bengaluru: Indian Institute for Human Settlements. DOI: <https://doi.org/10.24943/LSPCL11.2020>

Bhan, G. (2020, May 27). View: India should make its cities worker friendly. *The Economic Times*. Retrieved from <https://economictimes.indiatimes.com/news/economy/policy/view-india-should-make-its-cities-worker-friendly/articleshow/76047166.cms?from=mdr>

Bhattacharya, S. (2020). What is so wrong with online teaching? *Economic and Political Weekly*, 55(23), 19–21.

Bissoyi, S. K. (2018, October 14). The perils of inequality: The ugly face of Delhi. *Daily O*. Retrieved from <https://www.dailyo.in/politics/delhi-poverty-aam-aadmi-party-education-rte-anganwadi-bjp-odf-water-swachh-bharat/story/1/27180.html>

Bose, A. (2021, June 12). Pulled Out of School, Pushed Into Marriage: What the Pandemic is Doing to India's Teenaged Girls. *News 18*. Retrieved from <https://www.news18.com/news/buzz/pulled-out-of-school-pushed-into-marriage-what-the-pandemic-is-doing-to-indias-teenaged-girls-2665297.html>

Census of India (2011). *District census handbook: Tiruchirappalli. Village and town wise primary census abstract*. Tamil Nadu: Directorate of census operations.

Central Square Foundation (CSF) (2020a). The future of EdTech: Gaps and learnings from implementation during Covid-19. An interview with Prachi Windlass, Director of Education at the Michael & Susan Dell Foundation in India. *The Edge* Retrieved from <https://www.centralsquarefoundation.org/articles/The-future-of-EdTech-gaps-and-learnings-from-implementation-during-COVID-19-prachi-windlass-msdf.html>

Central Square Foundation (CSF) (2020b). *State of the Sector Report on Private Schools in India*. Retrieved from <https://centralsquarefoundation.org/State-of-the-Sector-Report-on-Private-Schools-in-India.pdf>

Chakrabarty, A. (2020). COVID-19, JAGA Mission and the value of already existing solutions. *International Institute for Environment and Development*. Retrieved from <https://www.iied.org/covid-19-jaga-mission-value-already-existing-solutions>

Child Rights And You (CRY) (2020). *COVID-19: Its impact on children*. Retrieved from <https://www.cry.org/wp-content/uploads/2020/08/COVID-19-Its-Impact-on-Children.pdf>

City Development Plan (CDP). *City development plan for Tiruchirappalli local planning area draft final report*. Tiruchirappalli: Infrastructure Management and Advisory Services Private Limited

Das, S. (2007). The higher education in India and the challenge of globalisation. *Social Scientist*, 47-67.

Deccan Herald. (2020, April 06). COVID-19 lock down: TCS offers free, 15 day digital certification programme. *Deccan Herald*. Retrieved from <https://www.deccanherald.com/business/covid-19-lockdown-tcs-offers-free-15-day-digital-certification-programme-821954.html>

Department of School Education & Literacy. (2020). *PRAGYATA Guidelines for Digital Education*. Ministry of Human Resource Development. https://www.mhrd.gov.in/sites/upload_files/mhrd/files/pragyata-guidelines_0.pdf
Deshpande, S., & Zacharias, U. (Eds.). (2013). *Beyond inclusion: The practice of equal access in Indian higher education*. New Delhi: Routledge.

EMpower (2021) *Covid in her Voice: A girl-lead and a centred participatory research study*. Delhi: EMpower. Retrieved from https://empowerweb.org/assets/uploads/publications/COVID_In_Her_Voice.pdf

Ghatak, N., Yareseeme, A. S. & Jha, J. (2020). *Life in the time of Covid-19: Mapping the impact of Covid-19 on the lives of school-going children especially girls in India*. Centre for Budget and Policy Studies and India Champions for Girls' Education. Retrieved from <http://cbps.in/wp-content/uploads/Report-Final-1.pdf>

Ghosh, R. (2020, November 03). In Odisha, Children of Returnee Migrants See Bleak Future with School Closure Notice. *News Click*. Retrieved from <https://www.newsclick.in/Odisha-Children-Returnee-Migrants-Bleak-Future-School-Closure-Notice>

Government of India (GoI) (2020a) *Allowing identified urban street vendors to sell essential items during the lockdown period due to COVID-19*. New Delhi: Ministry of Housing and Urban Affairs, Government of India
Government of India (GoI) (2020b). National education policy. New Delhi: Department of School Education and Literacy, MHRD. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

Government of Tamil Nadu (GoTN) (2020a). *Public Distribution System*. G.O. (Ms) No. 72. Chennai: Government of Tamil Nadu

Government of Tamil Nadu (GoTN) (2020b). *Violation of the lockdown measures on maintaining social distance*. GO. (D). No. 195. Chennai: Government of Tamil Nadu

Government of Tamil Nadu (GoTN) (2020c). *Extending restrictions in the territorial jurisdiction of the state of Tamil Nadu up to 30.06.2020 with guidelines and relaxations*. GO. (Ms). No. 262. Chennai: Government of Tamil Nadu

Hindustan Times (2020, May 20). As Delhi returns to work, RWAs set guidelines for domestic help. Retrieved from <https://www.hindustantimes.com/delhi-news/rwas-set-rules-for-domestic-help/story-kJZfeBofu4oi0df0enLxQN.html>

Iftikhar, F. (2020, June 13). Two more Delhi teachers succumb to COVID-19, others demand protective gear. *Hindustan Times*. Retrieved from <https://www.hindustantimes.com/delhi-news/two-more-delhi-teachers-succumb-to-virus-others-demand-protective-gear/story-ZBXg0LS4XyUniPISGntkOO.html>

IGSSS. (2020). *Seeking justice for the informal sector during Covid-19 lockdown: An analysis of government policy for informal sector workers during the nationwide lockdown*. IGSSS

Indian Express (2021, April 10). As learning moves online amid COVID-19, EWS students worst hit: Survey. *Indian Express*. Retrieved from <https://indianexpress.com/article/education/lack-of-infrastructure-to-move-online-students-find-learning-amid-covid-19-hard-ews-worst-hit-6355212/>

Jain, G., Jigyasu, R., Gajjar, S.P. & Malladi, T. (2015). *Cities provide transformational opportunity to reduce risk accumulation*. Bengaluru: Indian Institute for Human Settlements.

Jain, S., Lall, M., Singh, S. (2020) Teachers' voices on the impact of Covid-19 on school education: Are ed-tech companies really the panacea? *Contemporary Education Dialogue*, 18 (1) 58-89.DOI: <https://journals.sagepub.com/doi/full/10.1177/0973184920976433>

Jan Sahas (2020b). *Voices of the invisible citizens: A rapid assessment on the impact of Covid-19 lockdown on internal migrant workers, recommendations for the state, industry & philanthropies*. Retrieved from <https://freedomfund.org/wp-content/uploads/Voices-of-Invisible-Citizens.pdf>

Jan Sahas. (2020a). *Rapid assessment report: The impact of Covid-19 lockdown on internal migrant workers in India*. New Delhi: Jan Sahas. Retrieved from <https://coronapolicyimpact.org/2020/04/05/rapid-assessment-report-the-impact-of-Covid-19-19-lockdown-on-internal-migrant-workers-india/>

Jayaram, N. (1977). Higher Education as status stabilizer: students in Bangalore. *Contributions to Indian Sociology*.

Juneja, N. (2010). Access to what? Access, diversity and participation in India's schools. Sussex: CREATE (Consortium for Research on Educational Access, Transitions and Equity). Retrieved from <https://archive.azimpremjiuniversity.edu.in/sitepages/pdf/Scale-and-Diversity.pdf>

Kumar, V. (2020). *The Perils of being poor in the age of Covid-19: A report on the situation of south Rajasthan migrant workers after the lockdown*. Udaipur: Aajeevika Bureau.

Madan, K. (2020, July 24). Migrant crisis or cosmopolitan crisis: India's middle-class apathy to the plight of the migrant class. *The New Leam*. Retrieved from <https://www.thenewleam.com/2020/07/migrant-crisis-or-cosmopolitan-crisis-indias-middle-class-apaty-to-the-plight-of-the-migrant-class/>

MHRD (2020). *India report: Digital education: Remote learning initiatives across India: June 2020*. New Delhi: Ministry of Human Resource Development, Government of India.

Mid-Day Meal Scheme (MDM) (2018). *About the Mid-Day Meal scheme*. Retrieved from: <https://middaymeal.tn.gov.in/Pages/about>

Ministry of Education. (2020). *All India Survey on Higher Education 2019-20*. New Delhi: Government of India.

Mishra, S. and Aziz, T. (2021). *Jamlo Walks: An Illustrated Book about Life During Lockdown*. Penguin Random House India Pvt. Ltd: India Puffin.

Mohanty, B. K. (2021, July 09). Pandemic excuse to sterilize syllabus. *The Telegraph Online*. Retrieved from <https://www.telegraphindia.com/india/coronavirus-outbreak-pandemic-excuse-to-sterilise-syllabus-by-cbse/cid/1785782>

MWSN (2020). *Citizens and the sovereign-Stories from the largest human exodus in contemporary Indian history*. Retrieved from <http://ruralindiaonline.org/en/>

Nair, J. (2019). Seeing like the Missionary: An Iconography of Education in Mysore, 1840–1920. *Studies in History*, 35 (2), 178–217. DOI: <https://doi.org/10.1177/0257643019865233>

National Statistics Office (NSO) (2020). *Annual report: Periodic labour force survey (PLFS) July 2018-June 2019*. New Delhi: Ministry of Statistics and Programme Implementation, Government of India. Retrieved from http://mospi.nic.in/sites/default/files/publication_reports/Annual_Report_PLFS_2018_19_HL.pdf

NCERT. (2020). *Student's Learning Enhancement Guidelines*. New Delhi: Department of School Education and Literacy. Retrieved from https://ncert.nic.in/pdf/announcement/Learning_%20Enhancement_Guidelines.pdf

Oxfam India. (2020). *Status report- Government and private schools during COVID-19*. Oxfam India. Retrieved from <https://www.oxfamindia.org/sites/default/files/2020-09/Status%20report%20Government%20and%20private%20schools%20during%20COVID%20-%202019.pdf>

Patil, S. M. (2021). Gender equity and COVID-19: Dalit standpoints. *Economic and Political Weekly*, 56 (11).

Pragati, B. H., Sudha, A., Dsouza, V., Chilgod, L. & Amin, A. (2020). Healthcare delivery in India amid the Covid-19 pandemic: Challenges and opportunities. *Indian Journal of Medical Ethics*, 5 (3), 215-218

Press Bureau of India (2020). *MHRD issues directions to UGC, AICTE, NTA, NIOS, CBSE, NCTE and all autonomous organisations under it for the postponement of all examinations till 31st March 2020 as a precautionary measure in the wake of Novel Coronavirus (COVID-19)*. New Delhi: Ministry of Education. Retrieved from <https://pib.gov.in/PressReleasePage.aspx?PRID=1607035>

PUCL. (2020). *Broken slates and blank screens: Education under lockdown*. Maharashtra: PUCL. Retrieved from <http://pucl.org/sites/default/files/reports/pucl%20lockdown%20series%20-%20education.pdf>

Rajagopal, K. (2021, June 14). 'One Nation One Ration Card' scheme makes food security portable: Centre tells SC. *The Hindu*. Retrieved from <https://www.thehindu.com/news/national/one-nation-one-ration-card-scheme-makes-food-security-portable-centre-tells-sc/article34810261.ece>

Rai Chowdhury, A., Bhan, G., Sampat, K. & RMKU. (2020). *Impact of Covid-19 and lockdowns on domestic workers: First report*. Rajasthan Mahila Kaamgaar Union (RMKU) and the Indian Institute for Human Settlements (IIHS). DOI: <https://doi.org/10.24943/ICLDW10.2020>

Revi, A., Idicheria, C., Jain, G., Anand, G., Sudhira, H. S., Seddon, J., . . . Srinivasan, S. (2011). *Urban India 2011: Evidence*. Bengaluru: Indian Institute for Human Settlements.

Sangal, A. (2021, January 18) India Covid 19: New Delhi's teachers are being sent to the Covid frontlines, some without training, PPE or even pay. *CNN*. Retrieved from <https://edition.cnn.com/2021/01/17/india/delhi-covid-teachers-frontlines-hnk-intl-dst/index.html>

Sarkar, S. (2020). The Idea of a University in India. *Economic and Political Weekly*, 55(14). Retrieved from <https://www.epw.in/journal/2020/14/commentary/idea-university-india.html#:~:text=Speaking%20of%20the%20%E2%80%9Cidea%20of,Catholic%20priest%20John%20Henry%20Newman%20>

Sengupta, A., Kannan, K., Srivastava, R. S., Yugandhar, B. N., & Papola, T. S. (2007). *Report on social security for unorganised workers*. New Delhi: National Commission for Enterprises in Unorganised Sector.

Shah, F. & Luthra, D. (2020). A generation at stake: Protecting India's children from the impact of Covid-19. Gurugram. Retrieved from https://resourcecentre.savethechildren.net/node/18515/pdf/a_generation_at_stake_report_final_3.pdf

Sharma, K. (2021, January 28) Can't go back to classroom-only teaching, 'blended learning' is the future, say experts. *The Print*. Retrieved from <https://theprint.in/india/education/cant-go-back-to-classroom-only-teaching-blended-learning-is-the-future-say-experts/590556/>

Singh, G. (2020, June 14). Maid in India, banned by housing societies. *The New Indian Express*. Retrieved from <https://www.newindianexpress.com/opinions/2020/jun/14/maid-in-india-banned-by-housing-societies-2156454.html>

Srivastava, R. (2020). Labour Migration, vulnerability, and development policy: The pandemic as inflexion point?. *The Indian Journal of Labour Economics* volume 63, 859–883.

State Planning Commission (2017) *Tiruchirappalli: District human development report 2017*. Tiruchirappalli: State Planning Commission

Sudhira, H. S., Ramachandra, T. V., & Subrahmanya, M. H. B. (2007). Bangalore. *Cities*, 24 (5), 379–390. DOI: <https://doi.org/10.1016/j.cities.2007.04.003>

SWAN (2020a). *21 days and counting: Covid-19 lockdown, migrant workers, and inadequacy of welfare measures in India*. SWAN. Retrieved from <http://strandedworkers.in/mdocuments-library/>

SWAN (2020b). *To leave or not to leave: Lockdown, migrant workers, and their journeys home*. SWAN. Retrieved from <http://strandedworkers.in/mdocuments-library/>

SWAN (2020c). *32 days and counting: Covid-19 lockdown, migrant workers, and inadequacy of welfare measures in India*. SWAN. Retrieved from <http://strandedworkers.in/mdocuments-library/>

SWAN (2020d). *No data, no problem: Government of India in denial about migrant worker deaths and distress in the monsoon session of parliament*. SWAN. Retrieved from <https://www.im4change.org/upload/files/SWAN%20Response%20to%20GoI%26%23039%3B%20Data%20on%20Migrant%20Workers%26%23039%3B%20Deaths.pdf>

The Hindu (2020, July 24). Online Education: With scanty access to the Internet, the poor are excluded. *The Hindu*. Retrieved from: <https://www.thehindubusinessline.com/opinion/editorial/online-education-with-scanty-access-to-the-internet-the-poor-are-excluded/article32185041.ece>

The Hindu (2020a, April 23). Government to distribute herbal concoction to boost immunity. *The Hindu*. Retrieved from <https://www.thehindu.com/news/national/tamil-nadu/government-to-distribute-herbal-concoction-to-boost-immunity/article31415335.ece>

The Hindu (2020b, July 03). Primary and upper primary school children to get dry rations under midday meal scheme. *The Hindu*. Retrieved from <https://www.thehindu.com/news/national/tamil-nadu/primary-and-upper-primary-school-children-to-get-dry-rations-under-midday-meal-scheme/article31979470.ece>

The Logical Indian (2021, April 29) Teachers Died During Panchayat Poll Duty in UP: Teachers' Unions. *The Logical Indian*. Retrieved from <https://thelogicalindian.com/trending/577-teachers-died-panchayat-poll-duty-uttar-pradesh-sec-27996>

Tilak, J. B. G. (2012). Higher Education Policy in India in Transition. *Economic & Political Weekly*, 47 (13), 36–40.

Tilak, J. B. G. (2015). How Inclusive Is Higher Education in India? *Social Change*, 45 (2), 185–223. DOI: <https://doi.org/10.1177/0049085715574178>

Tiruchirappalli City Municipal Corporation (2021). *City information*. Retrieved from <https://www.trichycorporation.gov.in/cityinfo.php#menu>

Tomar S. (2021, June 2) 850 teachers died of Covid during pandemic-related duties in Madhya Pradesh. *The*

Hindustan Times. Retrieved from <https://www.hindustantimes.com/cities/bhopal-news/850-teachers-died-of-covid-during-pandemic-related-duties-in-madhya-pradesh-101622621584385.html>

Tukdeo, S. (2014). The not-so-hidden power of mobility and education: Indian diaspora, knowledge industries and the development imperatives. *Diaspora Studies*, 7 (1), 56–69. DOI: <https://doi.org/10.1080/09739572.2013.871892>

Tukdeo, S. (2015). Class divided: Global pressures, domestic pulls and a fractured education policy in India. *Policy Futures in Education*, 13 (2), 205–218. DOI: <https://doi.org/10.1177/1478210314567287>

Tukdeo, S., & Mali, A. (2021). Urban Dislocations and the Politics of Educational Access: Metro Colonies, Bengaluru.. *Education and the Urban India*, 14, 1-28.

UNESCO (2020). *Education: From disruption to recovery*. Paris: UNESCO.

United Nations, Department of Economic and Social Affairs, Population Division (2019). *World urbanization prospects: The 2018 revision (ST/ESA/SER.A/420)*. New York: United Nations. Retrieved from <https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf>

World Bank (2020a). *The Covid-19 pandemic: Shocks to education and policy responses*. Washington, DC: World Bank. Retrieved from: <https://openknowledge.worldbank.org/bitstream/handle/10986/33696/148198.pdf?sequence=4&isAllowed=y>

World Bank (2020b) *Reversal of fortunes: Poverty and share prosperity 2020*. Washington DC: World Bank. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/34496/9781464816024.pdf>

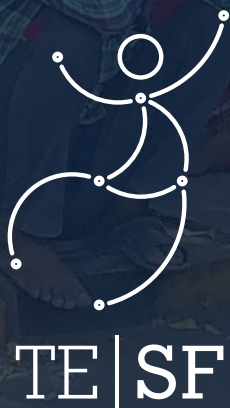
Yadav, S. (2020, July 28). 43,000 children shift from private to government schools in Haryana. *The Tribune*. Retrieved from <https://www.tribuneindia.com/news/schools/43-000-children-shift-from-private-to-government-schools-in-haryana-119027>

Appendix

List of online panel discussions and focus groups discussions

No.	Title of online panel discussions	Date	Details of Panellist		
			Name	Designation	Organisation
1	Relief work for migrant workers during the COVID-19 pandemic: Response of non-state organisations	30 th September, 2020	Chandan Kumar	National Co-ordinator	Working Peoples' Charter
			Krati Gupta	Co-ordinator	Paras India, Delhi
			Raghav Mehrotra	Researcher	Ajeevika Bureau, Udaipur
			Ashish Sood	Co-ordinator	Stranded Workers Action Network (SWAN) Gurgaon Nagrik Ekta Manch (GNEM)
2	Impact of COVID-19 on school education: Response of non-state organisations (Panel I)	5 th October, 2020	Anustup Nayak	Director-Classroom Instruction and Practice team	Central Square Foundation, New Delhi
			Arjun Sanyal	Senior Programme Manager	Aga Khan Foundation, New Delhi
			Sayantani Gaddam	Executive Director	Ahvaan, New Delhi
			Mihika Sharma	Senior Manager-Program Management	Pratham, New Delhi
			Sheshadri Anandrao	State Head (Karnataka)	
			Sreehari Ravindranath	Associate Director-Research and Impact	Dream a Dream, Bangalore
3	Impact of COVID-19 on school	6 th October, 2020	Leena Rajoria	Senior Co-Worker-Education	SOS Villages of India, New Delhi

	education: Response of non-state organisations (Panel II)		Nandini Mishra	Curriculum Designer	Eklavya Foundations, Bhopal
			Isha Prashant	Project in charge (Linking community and schools towards quality education, Khed, Pune) Maharashtra Project	
			Trishala	Project in charge (Transforming Learning Outcomes in 'Mission Antayoday' Blocks), Madhya Pradesh Project	
			Purnima Gupta	Program Director- Women's Literacy and Education	
			Jaswant Kaur	Executive Director	Deepalaya, New Delhi
4	'Inequalities during COVID-19 times'	23 rd October, 2020	Aashima Freidog	Co-Founder & Editor	The Life of Science.com
			Koyel Ghosh	Managing Trustee	Sappho for Equality, Kolkata
			Kumar Shailabh	Co-Director	HAQ: Centre for Child Rights, New Delhi
			Rituparna Borah	Co- Founder & Co-Director	Nazariya, Delhi
Online focus group discussion					
1	Impact of COVID-19 on Higher Education	29 th October, 2020	27 third and fourth year students of the Bachelors of Elementary Education Programme (BEEd), University of Delhi		



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