

STATE OF WORKING INDIA 2021

One year of Covid-19



Centre for Sustainable Employment

STATE OF WORKING INDIA 2021

One year of Covid-19



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About Azim Premji University's Work on Sustainable Employment

Azim Premji University was established in 2010, by the Azim Premji Foundation, with a clear social purpose of working towards a just, equitable, humane, and sustainable society. All of the University's programmes, teaching, research, and practice, work towards this purpose.

To contribute to the critical matter of India creating just and sustainable employment, the University has set up the Centre for Sustainable Employment (CSE), which conducts and supports research in areas of work, labour, and employment. The University is attempting to provide empirically grounded, analytical reflections on the state of work and workers in India, as well as to evaluate and propose policies that aim to create sustainable jobs. To this end the University also gives grants to create new knowledge in the above areas. It also hosts a working paper series to which contributions are invited from researchers, policy-makers, civil society actors, and journalists. The University's CSE website is an important part of this agenda. In addition to research papers and policy briefs, it hosts government reports, as well as data and statistics on the Indian labour market.

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In addition to an excellent in-house research team that worked with data from the Consumer Pyramids Household Survey of the Centre for Monitoring the Indian Economy, the report also draws on two field surveys, the India Working Survey (IWS) and the Azim Premji University Covid-19 Livelihoods Phone Survey (CLIPS).

IWS is a collaborative project between researchers at Azim Premji University, the Indian Institute of Management, Bangalore (IIMB), and the University of Western Australia. It is a random household survey in two states, Karnataka and Rajasthan, with the theme of Social Identities and the Labour Market in India. It is supported by the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) along with IIMB and Azim Premji University. The field survey was conducted by IFMR-LEAD and the phone survey was conducted by Azim Premji University. The principal investigators of the survey are Rosa Abraham, Amit Basole, Girish Bahal, Deepti Goel, Rahul Lahoti, Anand Shrivastava and Hema Swaminathan. Research assistance was provided by Sravan Pallapothu, Mridhula Mohan, and Atma Jyoti Mahapatra. The technical advisory committee of IWS consists of Farzana Afridi, Yamini Atmavilas, Sonalde Desai, Ashwini Deshpande, Katherine Hay, Alope Kar, Sona Mitra, Rinku Murgai, P. C. Mohanan, Madhura Swaminathan, Amit Thorat, and Mahesh Vyas.

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The Azim Premji University CLIPS was conducted in collaboration with various civil society organisations to understand the economic impact of the lockdown on the livelihoods of informal workers. It was supported in part by the Azim Premji Philanthropic Initiatives (APPI) as well as the Azim Premji Foundation. In particular M. Sreenivasa Rao of the Foundation and Zulfiqar Haider as well as Debmalya Nandy of APPI were of critical help in getting the survey going. The CSOs for the first round of the survey were Aga Khan Rural Support Programme, Centre for Advocacy and Research (CFAR), Gauri Media Trust, Paschim Banga Khet Majoor Samiti, Pradan, Samalochana, Self Employed Women's Association, Srijan and Vaagdhara. Six out of these nine organisations, namely, Centre for Advocacy and Research (CFAR), Gauri Media Trust, Paschim Banga Khet Majoor Samiti, Pradan, Samalochana and Self Employed Women's Association were part of the second

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We thank volunteers working with the Stranded Workers Action Network for arranging interviews with SWAN Fellows that feature in the report.

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Box colour key

-  General
-  India Working Survey
-  Azim Premji University Covid-19 Livelihoods Phone Survey

Abbreviations

AIMO: All India Manufacturers' Organisation

ASI: Annual Survey of Industries

CAGR: Compounded Annual Growth Rate

CLIPS: Azim Premji University Covid-19 Livelihoods Phone Survey

CMIE-CPHS: Centre for Monitoring Indian Economy-Consumer Pyramid Household Survey

CPC: Central Pay Commission

CPI: Consumer Price Index

CSO: Civil Society Organisation

CWS: Current Weekly Status

DHFL: Dewan Housing Finance Corporation Limited

FICCI-IAN survey: Federation of Indian Chambers of Commerce and Industry-Indian Angel Network survey

GAME: Global Alliance for Mass Entrepreneurship

GC: General Category

GDP: Gross Domestic Product

GIC: Growth Incidence Curve

Gol: Government of India

GST: Goods and Services Tax

IHDS: India Human Development Survey

IIFL: India Infoline Finance Limited

ILC: Indian Labour Commission

ILO: International Labour Organisation

IL&FS: Infrastructure Leasing and Financial Services

IWS: India Working Survey

IWWAGE: Initiative for What Works to Advance Women and Girls in the Economy

LEAD: Leveraging Evidence for Access and Development

LFPR: Labour Force Participation Rate

LSE-CEP: London School of Economics and Political Science-Centre for Economic Performance

MoSPI: Ministry of Statistics and Plan Implementation

MSME: Micro, Small and Medium Enterprise

NBFC: Non-Banking Financial Corporation

NCAER: National Council for Applied Economic Research

NCAER-DCVTS: National Council for Applied Economic Research- Delhi NCR Coronavirus Telephone Survey

NCAER-DMAS: National Council for Applied Economic Research- Delhi Metropolitan Area Study

NCR: National Capital Region

NSS-EUS: National Sample Survey-Employment Unemployment Survey

NSSO: National Sample Survey Office

OBC: Other Backward Classes

PLFS: Periodic Labour Force Survey

RBI: Reserve Bank of India

RCRC: Rapid Community Response to Covid

SEWA: Self-Employed Women's Association

SC: Scheduled Caste

SHG: Self-Help Group

ST: Scheduled Tribe

SWAN: Stranded Workers Action Network

SWI 2021: State of Working India 2021

UPS: Usual Principal Status

UPSS: Usual Principal and Subsidiary Status

UR: Unemployment Rate

WIEGO: Women in Informal Employment: Globalising and Organising

WPR: Workforce Participation Rate

List of State Abbreviations

AP Andhra Pradesh

AR Arunachal Pradesh

AS Assam

BR Bihar

CG Chhattisgarh

CH Chandigarh

DL Delhi

GA Goa

GJ Gujarat

HP Himachal Pradesh

HR Haryana

JH Jharkhand

JK Jammu and Kashmir

KA Karnataka

KL Kerala

MH Maharashtra

ML Meghalaya

MN Manipur

MP Madhya Pradesh

MZ Mizoram

NL Nagaland

OR Odisha

PB Punjab

PY Puducherry

RJ Rajasthan

SK Sikkim

TL Telangana

TN Tamil Nadu

TR Tripura

UK Uttarakhand

UP Uttar Pradesh

WB West Bengal

Foreword

The Covid-19 pandemic has tested and hurt our society like no other crisis in recent memory. Migrant workers walking hundreds of kilometers in the summer heat are seared in our memory; death has knocked on too many doors. We must learn from the experience of the last year so that we do not repeat the mistakes. But not repeating the mistakes is not sufficient. It is the worst kind of systemic and moral failure that the most vulnerable always pay the greatest price for everything. We have to change this from the core.

This report is a small effort in this direction. It analyses information from the first year of the pandemic to draw lessons for the near and the not-so-near future. It shows us not only what happened to workers and their families, but also what we can do to prevent such suffering in the future, even if public health exigencies require restrictions on economic activity.

But alongside the deficiencies that were revealed in our social policies in the past year, there were also many lessons in how governments, communities, businesses, and ordinary people rose to the challenge and worked together. Unfortunately, none of that seems adequate. As I write this, the tsunami-like second wave of the pandemic is leaving an unimaginable trail of death and misery in India. While the lessons from the many efforts during the earlier part of the pandemic continue to be useful, the human devastation of the second wave only underlines that there is no substitute to strong fundamentals of a society: robust public systems of health and education, competent governance and administration, and basic social security for all. Heroic efforts are no substitute, and neither can they compensate, for structural weakness and injustice.

The challenge of providing dignified work, decent incomes, and social security, for all was with us before the pandemic, but its urgency and centrality for our national agenda has become inescapable now. If we focus on these fully, India can emerge stronger from these ruins.

Anurag Behar

Vice Chancellor, Azim Premji University

Bengaluru, April 27, 2021

Executive Summary

This report documents the impact of one year of Covid-19 in India, on jobs, incomes, inequality, and poverty. It also examines the effectiveness of policy measures that have thus far been undertaken to offer relief and support. Finally, it offers some policy suggestions for the near and medium-term future.

When the pandemic hit, the Indian economy was already in the most prolonged slowdown in recent decades. On top of this, there were legacy problems such as a slow rate of job creation and lack of political commitment to improving working conditions which trapped a large section of the workforce without access to any employment security or social protection.

Our analysis shows that the pandemic has **further increased informality** and led to a severe decline in earnings for the majority of workers resulting in a **sudden increase in poverty**. Women and younger workers have been disproportionately affected. Households have coped by reducing food intake, borrowing, and selling assets. Government relief has helped avoid the most severe forms of distress, but the reach of support measures is incomplete, leaving out some of the most vulnerable workers and households. We find that **additional government support is urgently needed now** for two reasons - compensating for the losses sustained during the first year and anticipating the impact of the second wave.

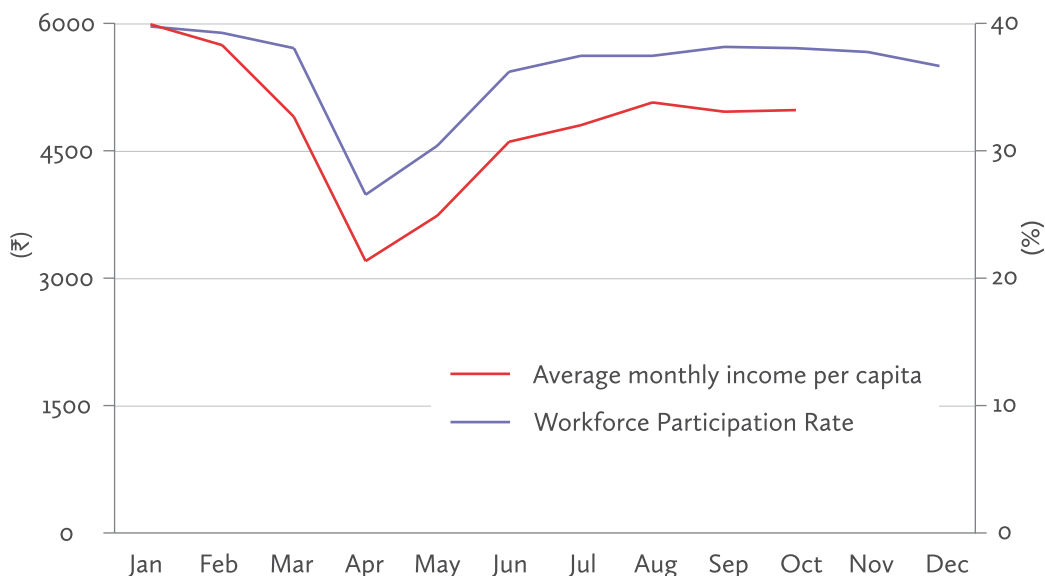
Our main data sources are the Consumer Pyramids Household Survey from the Centre for Monitoring the Indian Economy, the Azim Premji University Covid-19 Livelihoods Phone Survey (CLIPS) and the India Working Survey (IWS) (see [Appendix](#) of the report for details). We also draw on a large number of other Covid impact surveys conducted by Civil Society Organisations and researchers. In this Executive Summary, unless otherwise indicated, all estimates are from CMIE-CPHS. Most data pertain to the period between March 2020 and December 2020. We compare these months to pre-Covid periods as appropriate.

At the time of writing, the country is in the throes of a second wave of infections and renewed restrictions on mobility. Hence findings presented here must be regarded as provisional. Neither the short-term impact nor the longer-term effects are fully clear. But this analysis can form the basis for policy action as we find ourselves in the midst of the most severe humanitarian crisis in recent memory.

1 / Employment and incomes bounced back in June 2020 but recovery remained incomplete

a. About 100 million lost jobs during the nationwide April-May 2020 lockdown. Most were back at work by June 2020, but **even by the end of 2020, about 15 million workers remained out of work**. Incomes also remained depressed. For an average household of four members, the monthly per capita income in Oct 2020 (₹4,979) was still below its level in Jan 2020 (₹5,989).

Figure 1 :
Employment and income had not recovered to pre-pandemic levels even in late 2020

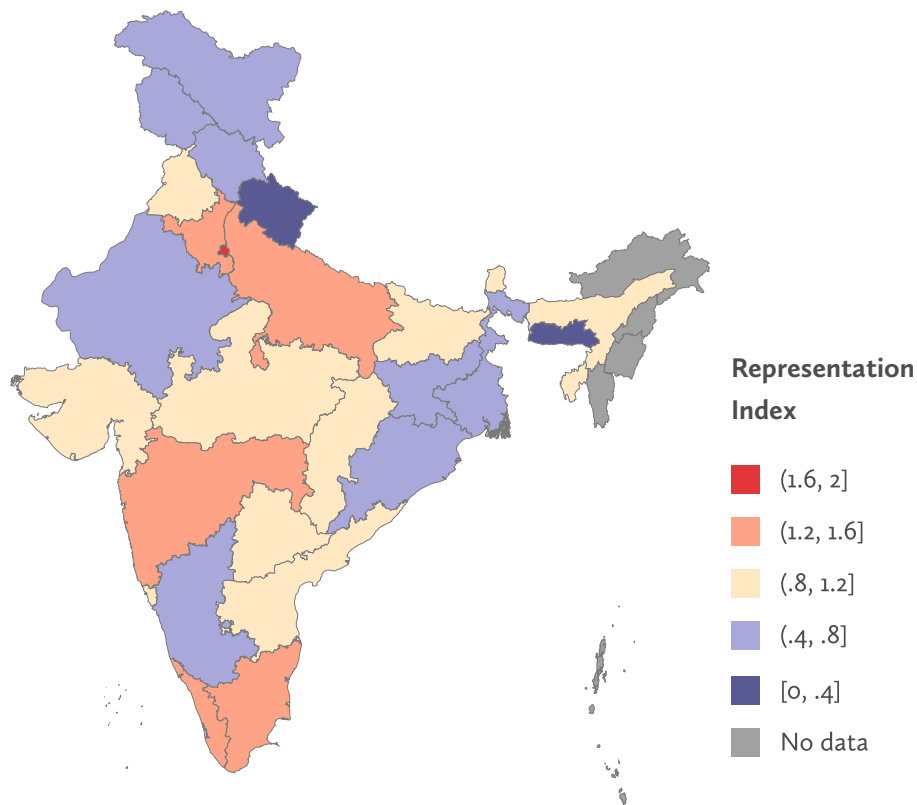


Sources and notes: Authors' calculations based on CMIE-CPHS. Incomes are in Jan 2020 prices and adjusted for seasonality.

b. As a result of the employment and income losses, the **labour share of GDP fell by over 5 percentage points** from 32.5% in the second quarter of 2019-20 to 27% in the second quarter of 2020-21. Of the decline in aggregate income, 90% was due to reduction in earnings, while 10% was due to loss of employment. This means that even though most workers were able to go back to work they had to settle for lower earnings.

c. Job losses were higher for states with a higher average Covid case load. The map shows a state-level job loss representation index, or the ratio of the state's share in jobs lost to its share in India's workforce. Maharashtra, Kerala, Tamil Nadu, Uttar Pradesh, and Delhi, contributed disproportionately to job losses. Mobility restrictions, such as those caused by lockdowns, predictably led to income losses due to decreased economic activity. We find that a 10% decline in mobility was associated with a 7.5% decline in income. This number is useful to keep in mind when estimating the impact of future lockdowns.

Figure 2 :
Ratio of
state's share
in jobs lost
to its share
in the
national
workforce

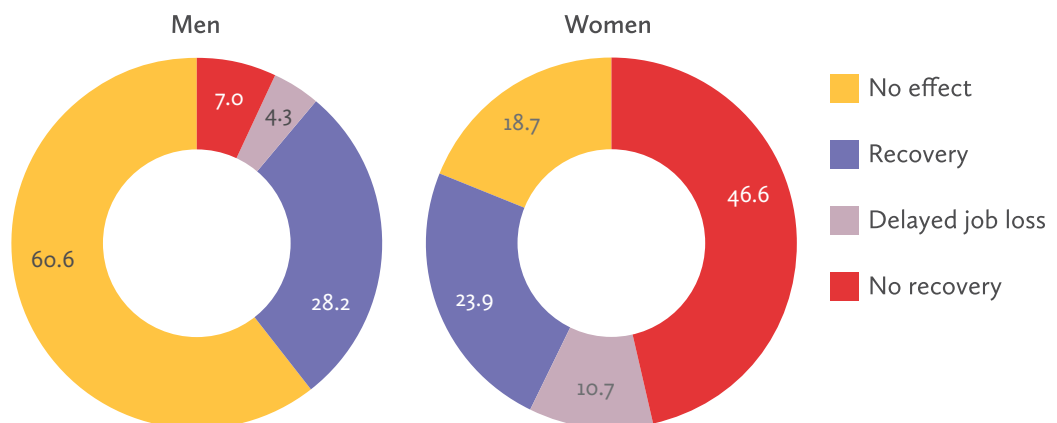


Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December of 2019 and 2020. See [Appendix section 2](#) for details. The representation index is a ratio of the state's share in employment loss to its share in the pre-Covid total workforce.

2 / Women and younger workers were disproportionately affected and many could not return to work even by the end of the year

a. During the lockdown and in the months after, 61% of working men remained employed and 7% lost employment and did not return to work. For women, only 19% remained employed and 47% suffered a permanent job loss during the lockdown, not returning to work even by the end of 2020.

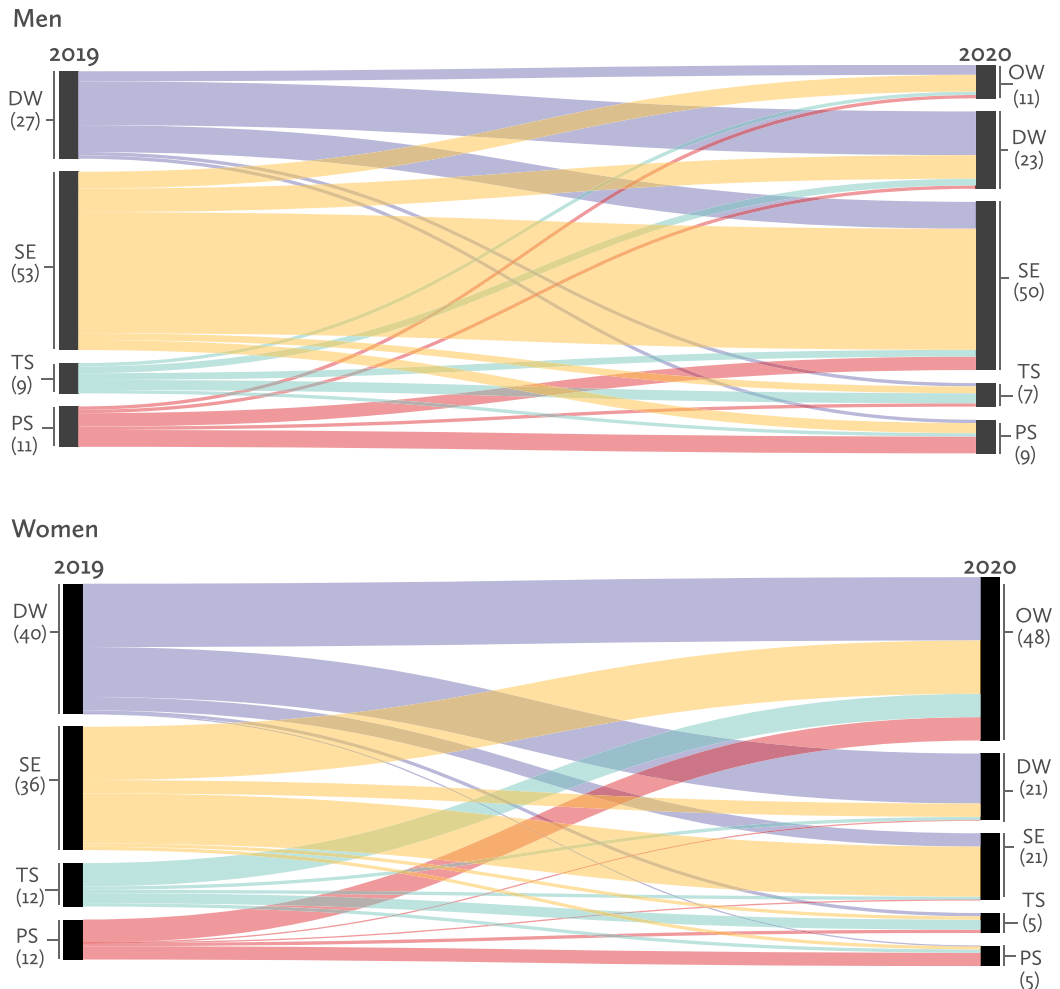
Figure 3 :
Women
more likely
to lose
employment
compared to
men



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the December 2019-April 2020-December 2020 panel. No effect: did not lose work during lockdown or after. Recovery: lost work during lockdown and recovered by Dec. Delayed job loss: did not lose work during lockdown but lost it by Dec. No recovery: lost work during lockdown and did not recover by Dec.

b. The **lack of fallback options for women** is clear in Figure 4. It shows women leaving the workforce from every employment arrangement. For men, the share leaving the workforce is much smaller. Rather, when they lost jobs, they transitioned to self-employment.

Figure 4 :
Men moved into informal employment while women moved out of the workforce



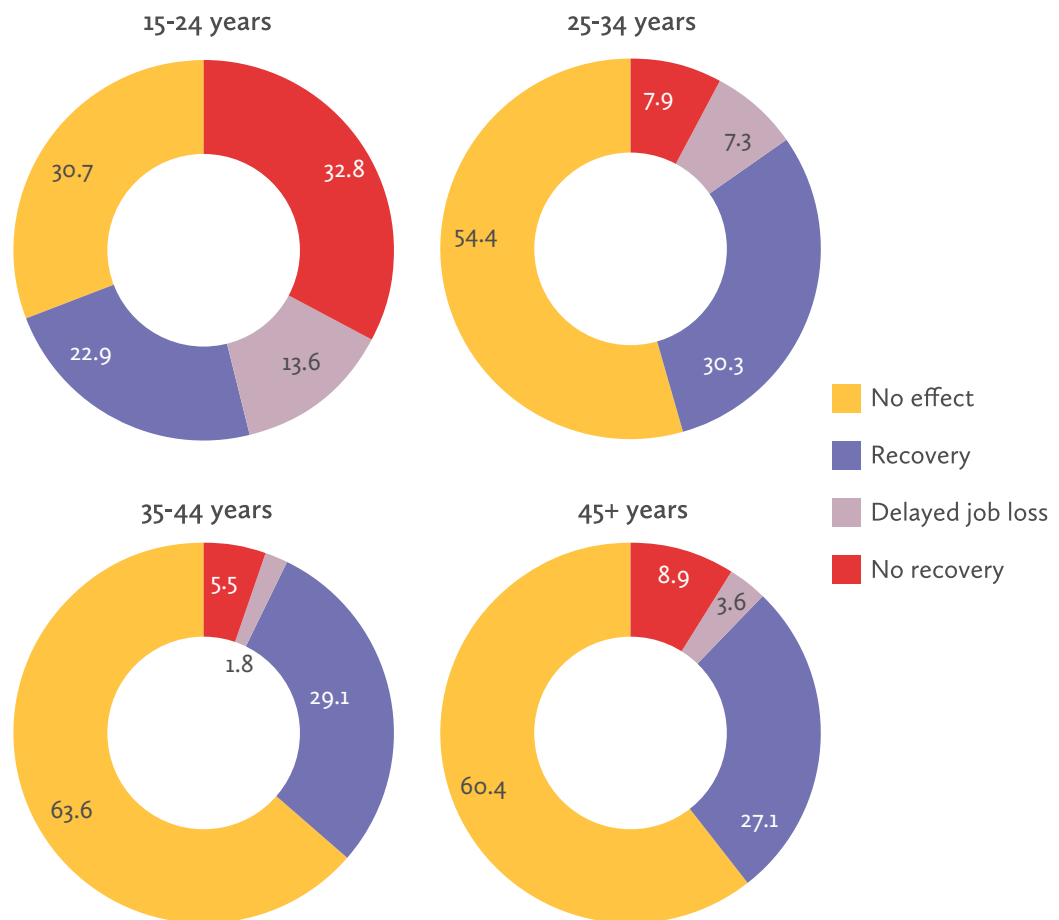
OW - Out of Workforce, DW - Daily/Casual wage worker, SE - Self-employed, TS - Temporary Salaried, PS - Permanent salaried

Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020. Numbers on the left indicate percentage share of that employment arrangement in total workforce in 2019. Numbers on the right indicate percentage share in total working age population in 2020.

c. For working women, **the burden of domestic work increased** without any corresponding relief in hours spent in employment. According to the India Working Survey conducted in Karnataka and Rajasthan, the proportion of working women who spent more than 2 hours a day cooking went up from 20 per cent to almost 62 per cent in Karnataka and from 12 to 58 per cent in Rajasthan.

d. Alongside women, younger workers were much more impacted, experiencing higher job losses and a weaker recovery. 33% of workers in the 15-24 years age group failed to recover employment even by Dec 2020. This number was only 6% in the 25-44 years group.

Figure 5 :
Young
workers
most
vulnerable
to job loss
with no
recovery



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the December 2019-April 2020-December 2020 panel. No effect: did not lose work during lockdown or after. Recovery: lost work during lockdown and recovered by Dec. Delayed job loss: did not lose work during lockdown but lost it by Dec. No recovery: lost work during lockdown and did not recover by Dec.

3 / There was a large increase in informal employment. Salaried workers moved into self-employment and daily wage work. Agriculture and trade emerged as fallback sectors.

a. After the lockdown, workers came back into more precarious and informal forms of employment. **Nearly half of formal salaried workers moved into informal work**, either as self-employed (30%), casual wage (10%) or informal salaried (9%) workers, between late 2019 and late 2020.

b. The nature of the fallback option also varied by caste and religion. General category workers and Hindus were more likely to move into self-employment while marginalised caste workers and Muslims moved into daily wage work.

Table 1 :
Nearly half
of formal
salaried
workers
moved into
informal
work

Employment arrangement in 2020						
Employment arrangement in 2019		Casual/daily wage worker	Self employed	Temporary salaried	Permanent salaried	Overall (2019)
	Casual/daily wage worker	57.9	33.1	5.6	3.4	27
	Self-employed	15.0	75.5	4.1	5.5	53
	Temporary salaried	22.5	31.3	35.6	10.7	9
	Permanent salaried	9.8	34.1	8.5	47.6	11
	Overall (2020)	27	55	8	10	100

Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020. See [Appendix Section 2](#) for details of the sample.

c. Agriculture, construction and petty trade emerged as fallback sectors. Education, health and professional services sectors saw the highest outflow of workers into other sectors. About 18% of education sector workers were now in agriculture and a similar share of health sector workers were engaged in petty trade (see [Table 4.6](#) in the report). For Hindus, agriculture was a major fallback sector absorbing between 10 to 20 percent of workers from other sectors. For Muslims, trade was the major fallback sector and about 20 to 35 percent of workers from other sectors were now in trade.

d. As a consequence of the move into informal work, as well as due to depressed economic conditions, **monthly earnings of workers fell on an average by 17%** during the pandemic. Self-employed and informal salaried workers faced the highest loss of earnings.

Table 2:
Monthly
earnings
fell for all
workers
irrespective
of
employment
type

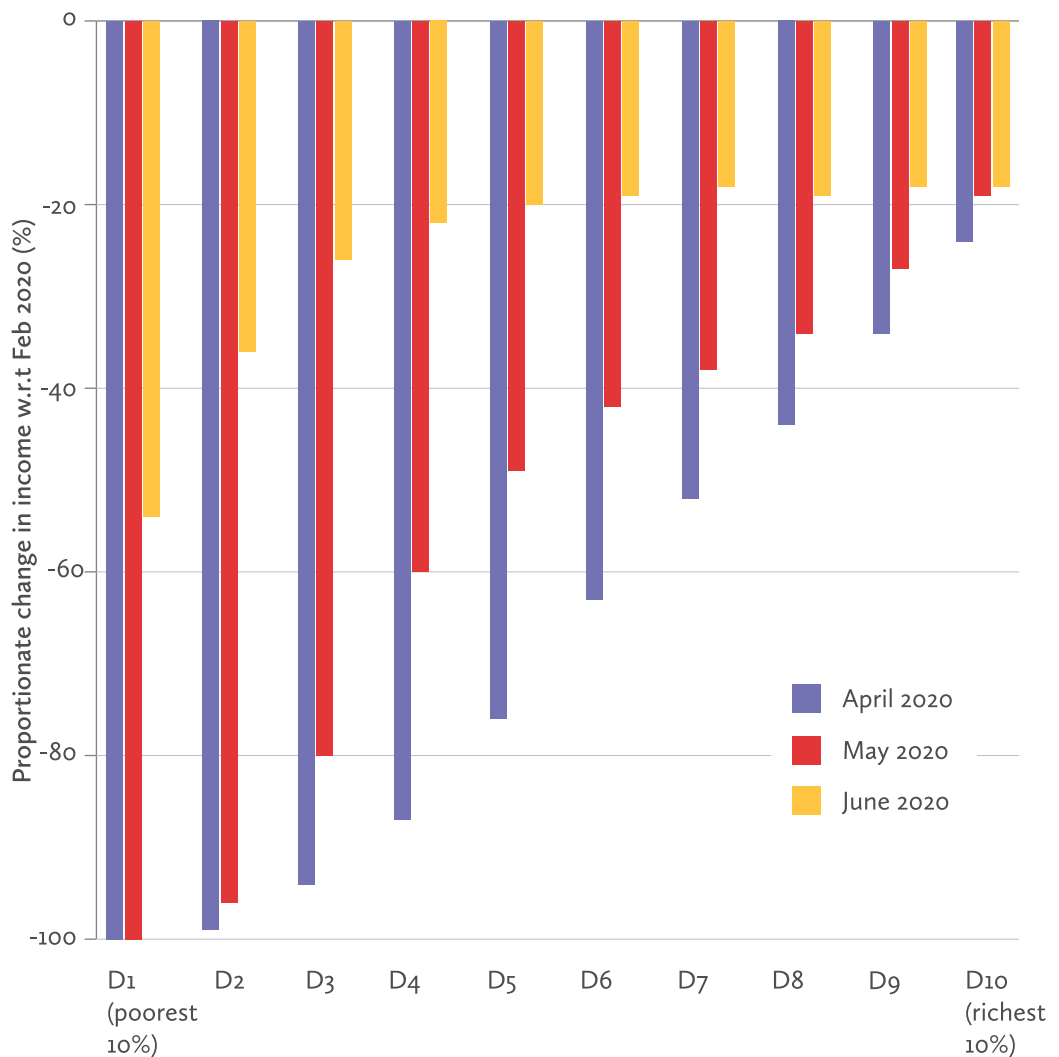
Employment Arrangement	2019	2020	Change in earnings (%)
Casual/Daily wage worker	₹9,135	₹7,965	-13
Self-employed	₹15,831	₹12,955	-18
Temporary salaried	₹11,422	₹9,441	-17
Permanent salaried	₹29,226	₹27,697	-5
Overall	₹15,210	₹12,625	-17

Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September-October of 2019 and 2020. Earnings include income from wages and salaries and income from business. Earnings are reported in Jan 2020 prices using rural/urban CPI. See [Appendix Section 2](#) for details.

4 / Poorer households were worse affected, and poverty and inequality has increased.

a. Though incomes fell across the board, the pandemic has taken a far heavier toll on poorer households. **In April and May the poorest 20% of households did not earn any income** (Figure 6). The income decline was much smaller, in proportionate terms, at the top of the distribution. Over the entire eight month period we analyse (Mar to Oct), average incomes in the bottom 10% were lower by ₹15,700, or just over two months' income.

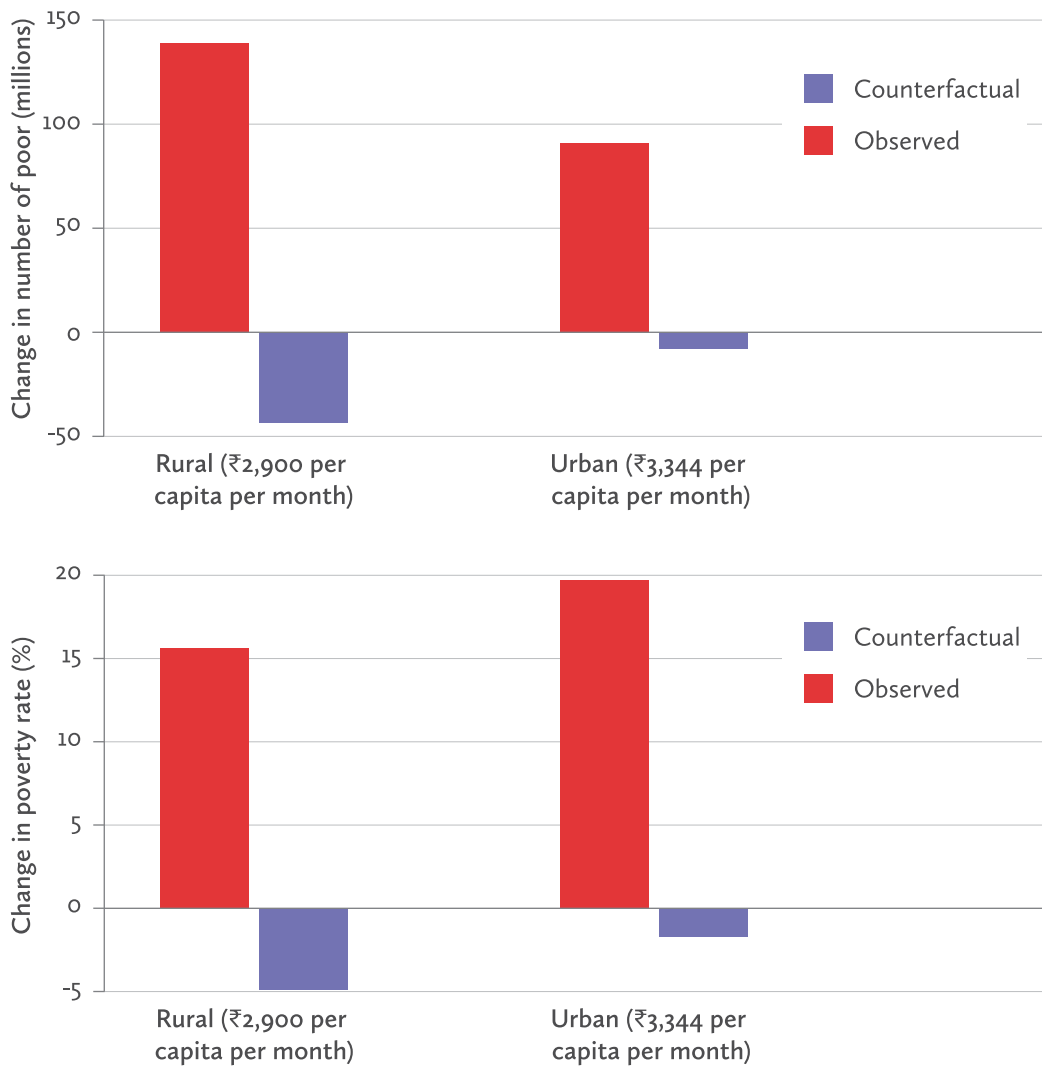
Figure 6 :
Poorer households experienced far higher losses in income during the lockdown period



Sources and notes: Authors' calculations based on CMIE-CPHS. The graphs plot the proportionate change in per capita income from an event study regression model, for each income decile. The event study estimates measure the impact of the the pandemic and the containment measures on the monthly per-capita household income, controlling for various household characteristics. The change in monthly incomes is reported as compared to incomes in February 2020. Households are classified into income deciles in each month separately based on their per capita incomes in that month. See [Appendix Section 2](#) for the event study model as well as seasonality calculations.

b. Coming on a low income base, this shock meant that the number of individuals who lie below the national minimum wage threshold (₹375 per day as recommended by the Anoop Satpathy committee) increased by 230 million during the pandemic. This amounts to an increase in the poverty rate by 15 percentage points in rural and nearly 20 percentage points in urban areas. Had the pandemic not occurred, poverty would have declined by 5 percentage points in rural areas and 1.5 percentage points in urban areas between 2019 and 2020, and 50 million would have been lifted above this line.

Figure 7 :
230 million additional individuals fell below the national minimum wage poverty line

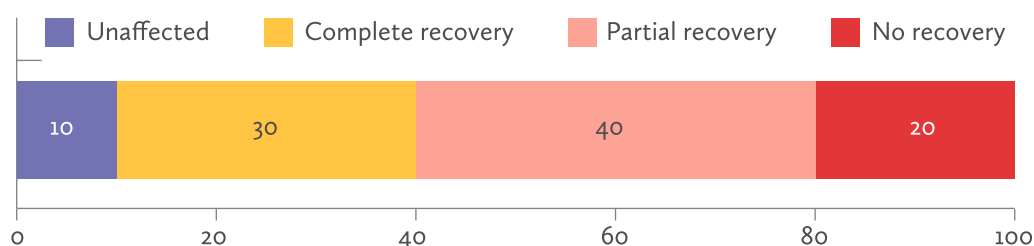


Sources and notes: Authors' calculations based on CMIE-CPHS. The first panel is the change in number of people and lower panel is the change in proportion of people below the national minimum wage threshold. The observed change is the change between covid months (March to October 2020) and the preceding months (July 2019 to February 2020). The average seasonally adjusted monthly per capita real incomes over the two periods are calculated and used to estimate the proportion of individuals who live in households earning below these levels. The change without Covid is the counterfactual scenario in which household incomes would have grown at the same rate as prior to the pandemic (see [Chapter Five](#) for details).

5 / Households coped by decreasing food intake and by borrowing

a. Households coped by cutting back on food intake, selling assets, and borrowing informally from friends, relatives, and money-lenders. An alarming 90 per cent of respondents in the Azim Premji University CLIPS reported that households had suffered a reduction in food intake as a result of the lockdown. Even more worryingly, 20 per cent reported that food intake had not improved even six months after the lockdown. These findings are consistent with other Covid impact surveys.

Figure 8 :
Six months later, food intake was still at lockdown levels for 20% of vulnerable households



Sources and Notes: Azim Premji University CLIPS. The figure plots the response of survey respondents regarding the level of food recovery experienced by their households post the lockdown. The respondents could choose one of the following options to document how the lockdown impacted the food intake of the households and the level of recovery post the lockdown: No effect- Household's food intake was not affected by the lockdown; Complete recovery- Household's food intake fell during the lockdown, and was back to prelockdown levels during the post lockdown survey months; Partial recovery- While the food intake fell during the lockdown and, subsequently, improved post lockdown, it has still not recovered to the prelockdown levels; No recovery- Food intake fell during the lockdown and there has not been any improvement since then. The figure plots the proportion of respondents that chose each of these options. See [Appendix Section 3](#) for survey details.

b. In the India Working Survey, over 90 per cent of respondents from Karnataka and Rajasthan reported having borrowed money sometime between April and August. The median loan amount was ₹15,000 (mean amount of ₹26,300). CLIPS revealed that **amounts borrowed by poorer households were a much higher multiple of their pre-pandemic incomes** compared to better-off households (Table 3). And 84% of those who had borrowed money reported doing so to finance food, health, and other daily expenditures.

Table 3 :
Indebtedness increased, especially among poorer households

	Overall	Bottom 25%	Second 25%	Third 25%	Top 25%
Median income in Feb 2020 (₹)	8,500	4,000	7,000	10,000	18,000
Loan amount (₹)	18,000	12,000	15,000	20,000	30,000
Ratio	2.1	3.8	2.1	2	1.4

Sources and notes: Azim Premji University CLIPS (October-November 2020) See [Appendix Section 3](#) for survey details.

6 / Government relief measures helped, but exclusions were also common

a. Free rations, cash transfers, MGNREGA, PM-KISAN payments, and pension payments were some of the major support measures announced in 2020 as part of the Pradhan Mantri Garib Kalyan Yojana (PMGKY) and the Atmanirbhar Bharat packages, to combat the effects of the pandemic on vulnerable households. We report survey evidence on the reach of food and cash elements of these packages. **PDS coverage far exceeds the coverage achieved by Jan Dhan so far.** Across multiple surveys, around 90% of households had a ration card but the Jan Dhan coverage was much smaller, around 50% of households had a woman-owned Jan Dhan account.

However, **the efficacy of PMGKY was similar for both types of relief measures.**

The India Working Survey (a largely rural random survey in Karnataka and Rajasthan conducted in August-September 2020) showed that, conditional on eligibility (those with priority ration cards or Jan Dhan accounts), 65% of card holders received some PMGKY allocation (i.e. grains in excess of the usual quota) while 35% only received their usual PDS quota (no extra grains). For cash, out of those having women-owned Jan Dhan accounts 60% received one or more transfers, around 30% did not receive any transfers (and 10% did not know).

b. MGNREGA has played a vital role as a safety net in rural areas. As per the official database, till November 2020 over 252 crore person-days of work were generated, an increase of 43 per cent compared to previous year. Over 10 million (1 crore) more households worked in MGNREGA in 2020-21 as compared to previous year. The Azim Premji University CLIPS showed **large unmet demand for MGNREGA work** even as late as October-November 2020. Since April, only 55 per cent of those rural respondents who demanded work had been able to get it. Further almost everyone (98 per cent) who got work said they would like to work for more days.

c. States experimented with many policies to offer more support -e.g. Supplementing the cash amount, delivery of cash via ration shops, door delivery of cash, supplementing PDS, and launching urban employment programmes.

d. Circular migrants have borne the harshest impact of the Covid-19 shock. Class, caste, ethnic or linguistic identity, and lack of stable residence as well as political voice render casual wage migrants in industries such as construction, the most precarious and hard to reach with social protection policies. In Azim Premji University CLIPS 81% migrants lost employment in the lockdown compared to 64% non-migrants. 31% reported not being able to access rations compared to 15% non-migrants.

7 / Bold measures will be required to emerge stronger from the crisis

a. So far, India's fiscal response to Covid, amounting to around 1.5-1.7% of GDP, has been conservative. The impacts of the second wave are still unfolding and may be as large, or larger than those we report for the first wave. Further, coming as it does on the back of depleted savings, debt, and reduced fallback options, the second wave can lead to potentially larger impacts on work, incomes, food security, health and education. The states, who are at the forefront of the pandemic response in terms of containment as well as welfare, are severely strained in their finances. Thus there are compelling reasons for the Union government to undertake additional spending now.

b. We propose the following urgent policy measures -

- **Extending free rations** under the PDS beyond June, at least till the end of 2021.
- **Cash transfer of ₹5,000 for three months** to as many vulnerable households as can be reached with the existing digital infrastructure, including but not limited to Jan Dhan accounts.
- **Expansion of MGNREGA** entitlement to 150 days and revising programme wages upwards to state minimum wages. Expanding the programme budget to at least ₹1.75 lakh crores.
- Launching a pilot **urban employment programme** in the worst hit districts, possibly focused on women workers.
- Increasing the central contribution in old-age pensions to at least ₹500.
- Automatically enrolling all MGNREGA workers who do construction work, as registered workers under the Building and Other Construction Workers (BoCW) Act so that they can access social security benefits.
- A **Covid hardship allowance** to 2.5 million Anganwadi and ASHA workers of ₹30,000 (5,000 per month for six months).

These measures, taken together, will amount to approximately ₹5.5 lakh crores of additional spending and bring the total fiscal outlay on Covid relief to around 4.5% of GDP over two years. We believe that this large fiscal stimulus is justified given the magnitude of the crisis. For example, the proposed cash transfer is just equal to incomes lost last year by the poorest 10% of households, leaving alone the second wave impact.

c. Failure to take action now will cause short-term hardship to continue, and may compound the long-term effects leading to years of lost welfare gains. Increased poverty as well as loss of savings and productive resources can lead to poverty traps. Nutritional and educational deficits, occurring due to stressed household finances, can have long-term effects. Women leaving the labor market can lead to long term increases in already large gender gaps. Youth may also experience long-term impacts on earnings and productivity due to these lost years.

d. Some day the pandemic will be behind us, and the task of economic revival will include addressing weak structural transformation, persistent informality and inadequate employment generation. The time is also right to correct the historical undervaluation of workers who have played a crucial frontline role in the response to the crisis. We propose a framework for a **National Employment Policy**, which includes the promotion of **public investment in social infrastructure** as well as the **facilitation of private investment**. These, together with a **comprehensive social security** infrastructure that includes rights-based entitlements, portable benefits, and empowered worker welfare boards, can tackle the persistent problems of low earnings, low productivity and precarity.

We hope that the findings in this report contribute to the difficult journey of economic revival that lies ahead for India.

1

Introduction

1

Introduction

This report documents the first year of Covid-19 in India. At the time of writing, the country is in the throes of a second wave of infections and renewed restrictions on mobility. The first cases of Covid-19 were detected in January 2020. On March 24 2020, a two week nationwide lockdown was announced, which was subsequently extended three times, lasting almost till the end of May. After June, mobility restrictions were slowly relaxed and economic activity resumed. Confirmed cases peaked in September 2020 at nearly 100,000 daily and subsequently declined. After reaching a low of around 10,000 per day in early February 2021, cases started increasing again. The pace at which the virus has spread in the second wave has taken most by surprise. When we started writing this Introduction in mid-April, the daily cases stood at 40,000. At the time of revision in late April, the number stands at 3,50,000 per day.¹

Our focus in this report is mainly on the first phase of the pandemic, in particular the period between March 2020 and December 2020. More recent data on employment and incomes are not yet available. We do not analyse the necessity of containment measures, nor do we enter into the debate over what works and what does not to control the spread of the virus. Our purpose is different. Given the state of infections and associated policy measures (such as lockdowns), we report on what happened to jobs, incomes, inequality, and poverty. We also examine the effectiveness of policy measures that were undertaken in 2020 to offer relief and support. Finally we offer some policy suggestions for the future to revive livelihoods and employment. The focus is primarily on the non-farm economy, though the impact on the farm sector is dealt with in a few places. The analysis as well

as the policy recommendations are mainly at the national level.

The nature of the shock delivered by the pandemic is complex and will unfold for years to come. The one-time severe supply and demand shock caused by the national lockdown in April-May 2020 was only the beginning. There were persistent repercussions on aggregate demand resulting from almost total loss of incomes during those two months as well as continued mobility restrictions and voluntary reductions in mobility due to fear of infection. There were also continued disruptions in supply resulting from firm bankruptcies, mobility restrictions, and reverse migration of workers. Several large employers such as non-essential retail, hotels and restaurants, education, personal services, entertainment, tourism and transport never really recovered before the second wave hit. Finally, one also needs to take into account the impact of the global recession caused by the pandemic on the domestic economy.

But even this is not all. Unfortunately, as we discuss in **Chapter Two**, the Covid-19 recession has come on top of the most serious economic slowdown since the economic reforms of 1991 and at a time when the pace of job creation has fallen far behind the rate of increase of the working age population. Further, the highly impacted sectors are also large employers and the dominant nature of employment is informal with little or no security. Hence the impact on workers and households has been immediate and severe.

The employment ratio or the workforce participation rate (WPR) took a sharp dive in April due to the lockdown but recovered to around 90

per cent of its pre-pandemic value by June. Between July and December it stagnated. In **Chapter Three** we examine the nature of this trajectory in more detail. We show that the WPR bounce-back hides significant churn in the labour market. Workers who lost employment in April did not return to work even till December while others who were out of the workforce earlier took their place. This effect was particularly pronounced for women.

In **Chapter Four**, we show that, in addition to increased joblessness, there was also a significant shift towards more informal work. Salaried workers returned to the labour market and had to be content with self-employment or temporary wage work. Further, self-employment in agriculture and retail emerged as the fallback options.

As a result of job losses and informalisation, the pandemic made a serious dent in household earnings and has significantly worsened their balance sheets. In **Chapter Five** we analyse the extent of decline in household incomes across the distribution and find that the cost of the crises has been borne disproportionately by the poorest households. There has been a huge increase in poverty as well as a rise in inequality as a result of this.

Low average earnings pre-pandemic and consequently low levels of savings meant that workers had to rely on assistance of either employers or the State. However, employer-provided social safety nets, at least at the formal level, are only available to around 10 per cent of the workforce. In addition the public social safety measures, such as subsidised food under the Public Distribution System, right to work under the Mahatma Gandhi National Rural Employment Guarantee Act, pension support under the National Social Assistance Programme, are rooted in domicile and not place of work. In **Chapter Six**, we review India's social protection system going into the pandemic and identify the points of strength

and weakness that are important to understand how the system has functioned so far during the pandemic.

Survey evidence, discussed in **Chapter Seven**, indicates that PDS as well as MGNREGA and to a lesser extent cash transfers helped in preventing widespread starvation. In addition many states enacted their own additional support measures and partnered with Civil Society Organisations (CSO) as well as the corporate sector.

Chapter Eight concludes the report by presenting a short, medium, and long-run policy road map.

The usual constraints of data availability are all the more binding for analysing the impact of the crisis on the vast majority of Indian households. The only source of household level nationally representative data is the **Consumer Pyramids Household Survey (CPHS)** of the Centre for Monitoring the Indian Economy (CMIE). The quarterly bulletin of the Periodic Labour Force Survey (PLFS) which covers the period April to June 2020 has recently been released, but the unit-level data are not yet available. The CMIE-CPHS forms the mainstay of our analysis in this report. Figure 1.1 shows the time periods used for the different analyses of CMIE-CPHS data.

In addition we use data from two surveys conducted by us during 2020, the **India Working Survey (IWS)** and the Azim Premji University **Covid-19 Livelihoods Phone Survey (CLIPS)**. We also draw upon several other purposive surveys carried out by diverse organisations to estimate employment, income, debt, and other impacts of the pandemic on poor and vulnerable households, as well as informal workers. Reports and dashboards for these surveys (as available) are being archived by us online.²

Figure 1.1a :
CMIE-CPHS
Employment and earnings analysis timeline

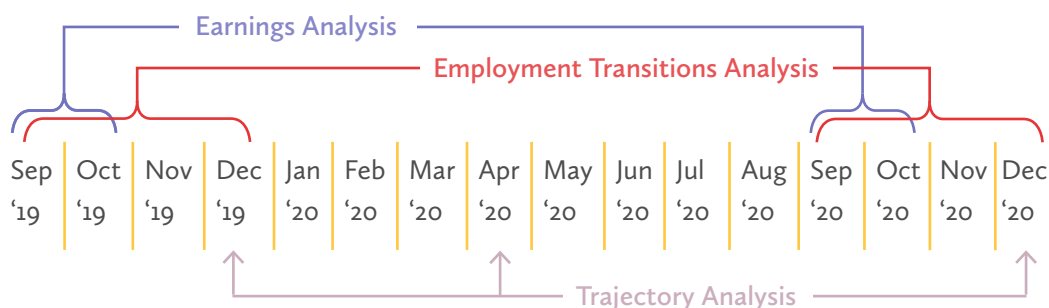
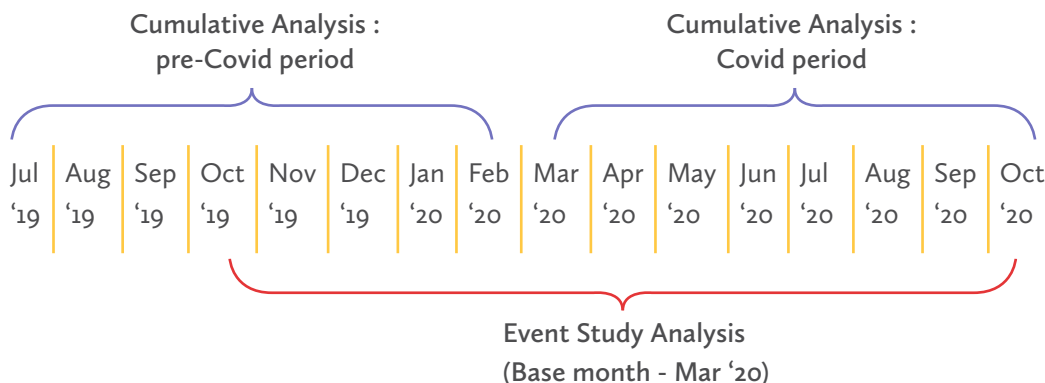


Figure 1.1b :
CMIE-CPHS
Income analysis timeline



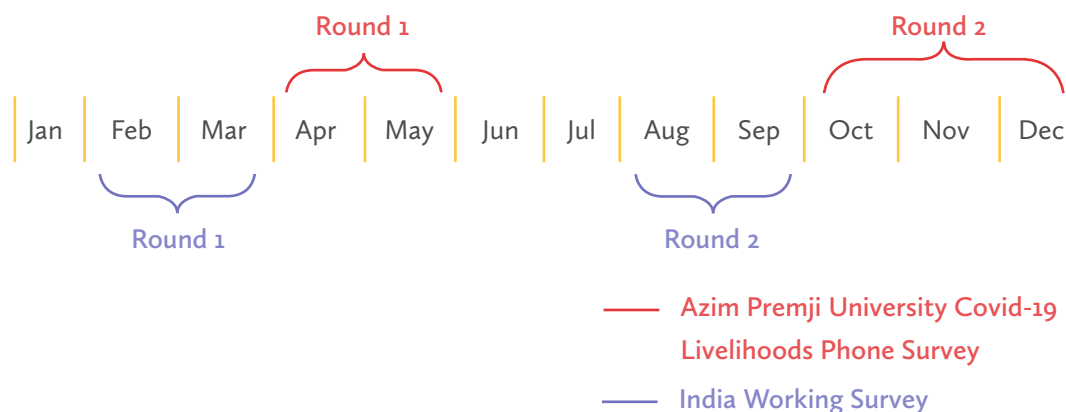
The India Working Survey (IWS) is a random sample survey of two states - Karnataka and Rajasthan. It is a collaborative project between researchers at Azim Premji University, the Indian Institute of Management, Bangalore (IIMB), and the University of Western Australia. It is supported by the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) along with IIMB and Azim Premji University. The field survey was conducted by IFMR-LEAD during February and March 2020. The survey stopped operations in mid-March due to the pandemic. In August and September 2020, the second round was conducted via phone by a team of supervisors and enumerators based at Azim Premji University. Respondents who had been interviewed during the field surveys in Rajasthan and Karnataka were revisited and asked details about their employment during the lockdown as well as about their employment in the week prior to the interview. The survey thus provides three time-points to measure employment: relatively normal months (February/March), the lockdown (April) and afterwards (August/September) (Figure 1.2).

The Azim Premji University CLIPS was conducted in collaboration with various civil society organisations to understand the economic impact of the lockdown on the livelihoods of informal workers. It was supported in part by the Azim Premji Philanthropic Initiatives as well as the Azim Premji Foundation. The CSOs for the first round of the survey were Aga Khan Rural Support Programme, Centre for Advocacy and Research (CFAR), Gauri Media Trust, Paschim Banga Khet Majoor Samiti, Pradan, Samalochana, Self Employed Women’s Association, Srijan and Vaagdhara. Six out of these nine organisations, namely, Centre for Advocacy and Research (CFAR), Gauri Media Trust, Paschim Banga Khet Majoor Samiti, Pradan, Samalochana and Self Employed Women’s Association were part of the second round of the survey. Respondents were contacted over phone via the networks of the collaborating civil society organisations in two separate rounds of the survey.

The first round of the survey was conducted between April 13 and May 23, 2020 interviewing 4,942 respondents across 12 states in India. The

Figure 1.2 :

**Timelines for
Azim Premji
University
Covid-19
Livelihoods
Phone Survey
and India
Working
Survey**



objective of the first round was to understand (and quantify) the extent of the lockdown's impact on the employment and earnings of these informal workers. The second round of the survey took place between October 7 and December 23, where we re-interviewed 2,778 of the 4,942 respondents from the first round. The objective of resurveying the same respondents, six months later, was to understand what had been the nature of recovery since the unlocking of the economy and how effective state intervention had been in mitigating the economic shock brought on by the crisis. In this second round of the survey, respondents were asked about their work and earnings in either September, October or November depending on the month of the interview. The data dashboards and other materials from both rounds are available online.³

The Appendix to this report gives more details about sampling, weighting, descriptive statistics, and construction of various datasets used in the analysis.

Since the pandemic is still raging, all findings presented here must be regarded as provisional. Neither the short-term impact nor the longer-term effects are fully clear. Our understanding will undoubtedly improve over time. But the reality of extreme economic hardship today compels us to analyse and act even on the basis of an incomplete understanding. It is to this end that we are bringing out this report.

Endnotes

¹ <https://www.covid19india.org/>

² https://cse.azimpremjiuniversity.edu.in/covid19-analysis-of-impact-and-relief-measures/#other_surveys

³ <https://cse.azimpremjiuniversity.edu.in/cse-surveys/covid19-livelihoods-phone-survey/>

2

The Indian economy prior to the pandemic

2

The Indian economy prior to the pandemic

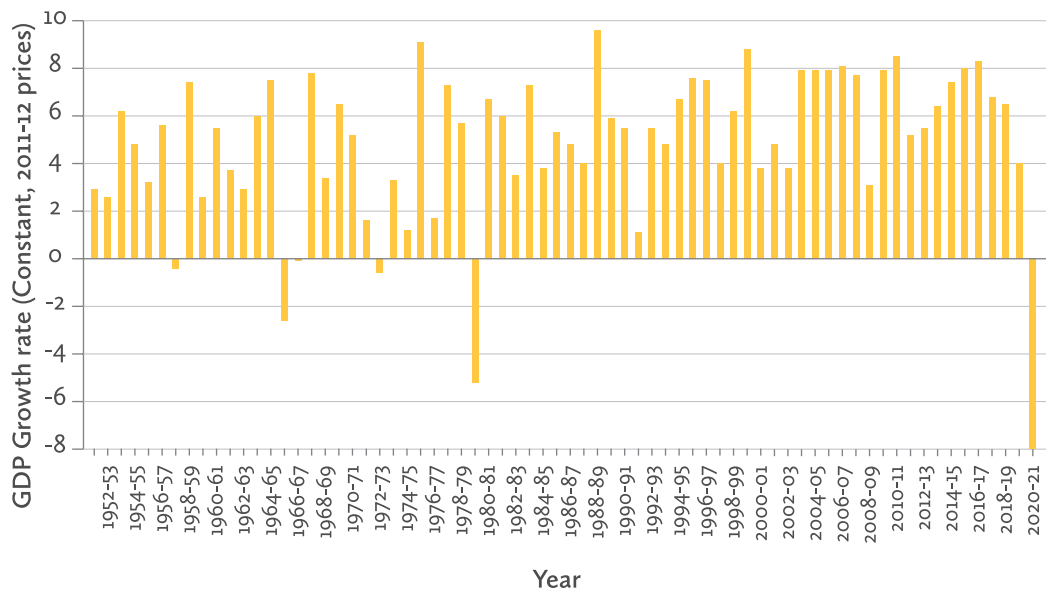
The magnitude of the Covid shock surpasses all previous episodes of recessions in independent India. But this impact needs to be understood in the context of the performance of the economy leading up to the pandemic. In this chapter, we analyse the decade prior to 2020 with an emphasis on employment, incomes, and structural change.

2.1 / The pre-Covid slowdown

The Indian economy had averaged GDP growth of around 8 per cent between 2014 and 2017, but this slowed significantly to 6.5 per cent in 2018-19

and further to 4 per cent in 2019-20, immediately prior to the pandemic year (Figure 2.1). Table 2.1 shows that when the pandemic hit, the economy was going through the most prolonged slowdown in the post-liberalisation period. A slowdown is a period when the GDP growth rate is lower than the previous period. Note the duration of the pre-Covid crisis, both in terms of total quarters of slowdown as well as number of consecutive quarters when the GDP growth rate was falling. The longevity of the slowdown (2017-18 to 2019-20) surpassed not only that of the 1990s or early 2000s, but even the Global Financial Crisis and the slowdown in 2011-12 and 2012-13.

Figure 2.1
Growth rate (%) of the Indian economy since Independence



Source and notes: EPWRFITS

Table 2.1 :

Timing, duration, and severity of economic slowdowns in India since 1991

Episodes of slowdown	Number of years of slowdown	Total number of quarters of slowdown	Number of quarters when growth slowed down for consecutive periods
1997-98	1	3	2
2000-01	1	2	1
2002-03	1	2	0
2008-09	1	4	4
2011-12 to 2012-13	2	6	5
2017-18 to 2019-20 (pre-Covid)	3	10	8

Sources and notes: Calculated from National Accounts Statistics, CSO, Government of India.

There were several domestic and global factors which triggered the slowdown. The causes identified in the literature include short-run shocks such as demonetisation and rollout of Goods and Services Tax (GST), medium-run factors including growing financial fragility, and long-run structural weaknesses such as insufficiently broad-based domestic demand as well as debt-financed consumption (Anand and Azad 2019; Chinoy and Jain 2021; Subramanian and Felman 2019). In addition, at the global level, there was a sharp reduction in exports due to fall in demand. World GDP growth rate slowed down from 2017-18 for three consecutive years, associated with increasing de-globalisation or a return to protectionist measures by the United States and retaliatory measures by its trading partners (IMF 2019). This led to a decline in the growth rate of the volume of world trade and industrial production, particularly from January 2018 onwards. Reflecting the trend of global demand, India's export growth rate registered a sharp decline (Dasgupta 2020). Such a fall in demand and profits adversely affected expectations regarding future sales and profitability and hence, pushed the producers to cut back investments leading to further reduction in demand.

Chinoy and Jain (2021) note that strong export growth (around 16 per cent a year) drove high investment growth (around 11 per cent a year) between 2002 and 2011. In contrast, growth post-2013 was driven by private as well as public consumption. The private consumption, in turn, was financed by debt and reduced household savings. As a result individual debt increased from 19 per cent to 28 per cent of GDP between 2015 and 2019. Subramanian and Felman (2019) emphasise deteriorating balance sheets of the financial and non-financial corporate firms and consequent feedback effects on aggregate demand as the main cause of the crisis. This was a legacy of the investment boom of the first decade of the century. Since 2010 there has been a sharp rise in leverage ratios and deterioration of interest coverage ratios of the non-financial corporate sector. If the financially stressed firms are defined as those whose profit income (Profit Before Depreciation, Interest, Tax and Amortisation) is less than the interest payments (interest coverage ratio less than one), then the share of such stressed firms in the corporate sector firms increased since 2010. At the high level of interest payments that firms inherited by 2017-18, decline in demand following export

slowdown led to greater incidence of insolvency among non-financial corporate firms as their profit income fell short of their inherited interest payments.

The consequent repayment crisis of the non-financial corporate sector adversely affected interest income and profitability of creditors, viz, banks and Non Banking Financial Corporations (NBFCs). The dwindling profitability of NBFCs in turn pushed many to default. Some big examples of this are the defaults of IL&FS in September 2018, Reliance Home Finance and Reliance Commercial Finance in April 2019, DHFL in June 2019 and Altico Capital in September 2019. The collapse of some of the biggest NBFCs initiated a contagion effect as lenders increasingly reduced their exposure to the NBFC sector in the midst of greater uncertainty and financial fragility. This process triggered a credit squeeze and led to further fall in output, investment, and demand.

When the pandemic hit, the economy was going through the most prolonged slowdown in the post-liberalisation period.

As these global and structural challenges were building up, the demonetisation of high-value currency notes in November 2016 and the introduction of the Goods and Services Tax (GST) in 2017 also contributed to a climate of investment uncertainty while depressing consumer demand. Demonetisation led to a contraction in output of around two percentage points in the fourth quarter of 2016 as well as decline in employment of around five million jobs (Basole et al. 2019; Chodorow-Reich et al. 2020; Ramakumar 2018).¹ It also severely disrupted the informal economy with some estimates of output contraction going up to 40 per cent.² In addition it impacted the arrival and prices of agricultural produce across India (Aggarwal and Narayanan 2017).

The introduction of the GST further impacted supply chains and existing contracts particularly in the micro, small and medium enterprises (MSME) sector, and coming on the heels of Demonetisation and the NBFC crisis, it compounded bankruptcies in this segment. Credit growth to this sector, which was already weakening, turned negative in this period (Behera and Wahi 2018). In their SWI 2021 background paper, Rathore and Khanna (2021) report qualitative findings from semi-structured interviews with owners of MSME units and office bearers of Industrial Associations. Interviews reveal that investment declined drastically post-Demonetisation. After Demonetisation a change in rules that allowed firms to borrow only from private limited companies stalled investment. Firms owners reported not being able to bring currency into circulation for larger expenses even if they had significant cash reserves.

One troubling indication with regard to the welfare impact of the slowdown comes from the leaked results from the NSSO Consumption Expenditure Survey which showed an unprecedented decline in real consumption expenditure of about 3.7 per cent between 2011 and 2018.³ However, since the data for this

survey round were not officially released, these results cannot be verified. Another measure of consumption in this period comes from a study by the National Council for Applied Economic Research (NCAER) and the University of Maryland. This suggests, not a decline, but a slowdown in consumption growth. In a panel of 4828 households across Rajasthan (2,706 households), Bihar (1,643 households) and Uttarakhand (479 households), the study finds that per capita incomes grew by 3.5 per cent per annum and per capita consumption expenditure grew by 2.7 per cent per annum. In contrast, the same households reported income growth of 7.2 per cent per annum and consumption growth of four per cent per annum between 2004-5 and 2011-12.⁴

In summary, when the pandemic hit, the Indian economy was in the midst of a serious slowdown triggered by global and domestic, short-run and long-run, incidental and structural factors. The fact that the slowdown turned out to be as prolonged as it did also indicated the structural and institutional constraints in undertaking effective counter-cyclical policies. Fiscal policy was rendered less effective than it could have been due to self-imposed institutional constraint of meeting deficit targets. Though the RBI responded to the slowdown by pursuing a loose monetary policy, it was ineffective in bringing about a recovery to any significant extent.

There were at least two reasons for the ineffectiveness of monetary policy. The first reason pertained to a weak transmission mechanism from the repo rate to long run interest rates (Anand and Azad, 2019).⁵ The second reason relates to the downward rigidity of interest rates in developing countries like India, as interest rates are kept higher than the ones prevailing in developed countries to avoid capital outflows. With sharp reduction in output growth rate and expectations at given interest rate and in the midst of downward rigidity of interest rates, the effectiveness of monetary policy remained limited.

In general, the constraints in undertaking demand-management policies does not become apparent in the midst of buoyant global demand. The period of global boom during the early years of this century is one such example where the Indian economy registered high growth rates despite sharp reduction in fiscal deficits. However, during a global slump, the possibility and the extent of recovery depends critically on the extent of fiscal support. The unprecedented shock delivered by Covid-19 has made fiscal intervention all the more urgent. We return to this theme in Chapter Six.

2.2 / Employment trends leading into the Covid crisis

The primary focus of this report is on employment, income, and welfare impacts of the Covid crisis. To set the stage for the subsequent analysis, we now look at how the Indian economy performed on job creation and quality of work, as well as how the process of structural change was occurring in the years prior to the pandemic. This section considers the medium-run employment scenario between 2011-12 and 2017-18 as well as job creation immediately prior to the Covid-19 crisis between 2017-18 and 2019-19. The main data sources here are the NSSO Employment-Unemployment Survey (2011-12) and the Periodic Labour Force Surveys (2017-18 and 2018-19). The next section deals with structural change.

2.2.1 / Absolute fall in the workforce: 2011-2017⁶

Nath and Basole (2020) report trends in working age population growth and employment growth for men and women in rural and urban areas in the period between 2011-12 and 2017-18. They define working age to be 25 years and above, instead of the usual definition of 15 years and above, to exclude those for whom enrollment in education institutions could be a reason for withdrawal from the labour force. By this measure, between 2011-12 and 2017-18 the working age population grew by 115.5 million. But the labour force grew only by 7.7 million and the workforce actually shrank by 11.3 million (Table 2.2). This resulted in a large fall in the labour force participation rate (LFPR) as well as workforce participation rate (WPR), and a dramatic increase in the unemployment rate (UR). There was an absolute increase of 19 million in the number of unemployed, and a rise in the rate of unemployment from 2.2 per cent to 6.1 per cent.

Further, the LFPR as well as the WPR fell for all demographic groups, men and women, urban and rural (Table 2.3).⁷ An absolute fall in the number of people employed as well as the sudden increase in

the UR were both unprecedented phenomena since the time labour statistics have been available in independent India.

Table 2.2 :
India's
labour
market since
2011-12

		2011-12	2017-18	2018-19
		(Millions)		
1	Working age population	853.4	968.9	986.3
2	Labour force	475	482.7	495.7
3	Employed	464.6	453.3	466.7
4	Unemployed [(2)-(3)]	10.4	29.4	29
5	Outside labour force [(1)-(2)]	378.4	486.2	490.7
		(Percent)		
1	Labour Force Participation Rate	55.7	49.8	50.3
2	Workforce Participation Rate	54.4	46.8	47.3
3	Unemployment Rate	2.2	6.1	5.8

Sources and notes: NSS 2011-12, PLFS 2017-18 and PLFS 2018-19. Numbers pertain to individuals aged 25 years and above (see text for explanation). UPSS definition of employment (see [Glossary](#)). Absolute numbers are calculated using population projections as described in Nath and Basole (2020).

Table 2.3 :
Key labour
market
indicators by
demographic
group
between
2011-12 and
2018-19

		(Rural)		(Urban)	
		Males	Females	Males	Females
Labour force participation rate	2011-12	81.3	35.8	76.4	20.5
	2017-18	76.4	24.6	74.5	20.4
	2018-19	76.4	26.4	73.7	20.4
Workforce participation rate	2011-12	80	35.2	74.1	19.5
	2017-18	72	23.7	69.3	18.2
	2018-19	72.2	25.5	68.6	18.4
Unemployment rate	2011-12	1.7	1.6	3	5.3
	2017-18	5.7	3.8	6.9	10.8
	2018-19	5.5	3.5	7	9.8

Sources and notes: NSS 2011-12, PLFS 2017-18 and 2018-19. Numbers pertain to individuals aged 25 years and above. UPSS definition of employment (see [Glossary](#)).

Even by the liberal NSSO UPSS definition (see [Glossary](#)), employment growth fell well short of working age population growth for men and women in rural and urban areas (Table 2.4). The rate of growth of population among those aged 25 years or above was around 2.5 per cent per year (compounded annual growth rate or CAGR), but the rate of employment growth (on a much lower base) was around 1.5 to 2 per cent. For rural women, it was negative. That is, the absolute fall in the workforce at the aggregate level was driven largely by rural women. The absolute number of women engaged in subsidiary activities (including those engaged in a principal activity alongside the subsidiary activity) fell by around 32 million between 2011-12 and 2017-18. More importantly, the total number of women engaged only in subsidiary activities fell by close to 23 million during this time. This fall is not due to women opting to move out of the labour force into education as much of the decline (around 62 per cent) took place in the age bracket of thirty years and above. This decline in employment could be due to factors such as a rising education levels as well as rise in family incomes resulting in withdrawal of women

from the workforce⁸ or a decline in availability of work (Deshpande and Kabeer 2019). Much of the decline in the number of female workers engaged in subsidiary activities was in the agricultural sector, followed by manufacturing and construction.

A more stringent definition of employment is the Usual Principal Status, which only considers a person as employed if they have worked for at least six months of the preceding year. As the difference between the two measures in Table 2.4 indicates, the decline in employment was confined to subsidiary activities. However, even if we do not see an absolute decline in employment by the UPS definition, the rate of employment growth still falls far short of the rate of population growth for all groups except urban women. For example, among urban men for employment to have kept pace with population growth, the former should have grown by 15 million over six years (Table 2.4, Hypothetical difference). Instead, it grew by 8.7 million (Table 2.4b, Actual Difference). The corresponding figures for rural men are 30 million and 17 million. Thus, the concerning fact to be emphasised is that even for men aged 25 and above, (in rural and urban

Table 2.4 :
Growth in working age population compared to growth in workforce between 2011 and 2017

	Compounded annual growth rate (%)			Change (millions)	
	Working age population growth	UPSS growth	UPS growth	Hypothetical difference (UPS)	Actual difference (UPS)
Rural men	2.51	1.46	1.47	30.25	16.90
Rural women	2.47	-3.17	0.34	12.73	-14.01
Urban men	2.52	1.53	1.54	14.99	8.73
Urban women	2.56	1.92	3.67	3.64	2.66

Sources and notes: NSS 2011-12 and PLFS 2017-18. Numbers pertain to individuals aged 25 years and above (see text for explanation). See [Glossary](#) for definitions of UPS (Usual Principal Status) and UPSS (Usual Principal and Subsidiary Status). Absolute numbers are calculated using population projections as described in Nath and Basole (2020). The Compounded Annual Growth Rate (CAGR) is calculated on absolute numbers. Hypothetical difference refers to the increase in employment that would have occurred if the workforce grew at the same rate as the working age population. Actual difference refers to the observed increase in employment.

areas), employment grew at 60 per cent the rate of population growth. The result was an increase in open unemployment as well as a fall in the labour force participation rate.



Between 2011 and 2017, employment grew only at 60 per cent the rate of population growth.



To sum up, two points are worth emphasizing with respect to the employment trends between 2011-12 and 2017-18. First, for men as well as women, the pace of employment creation fell far short of what was required given the rise in working age population. Second, there was an absolute decline in the number of women engaged in subsidiary economic activities in agriculture. We investigate the implications of this for India's structural transformation later in this chapter.

2.2.2 / An employment recovery cut short?

Nath and Menon (2020) take advantage of the regular availability of annual PLFS data to look more closely at the situation just prior to the pandemic between 2017-18 and 2018-19. The main conclusion here is that the employment situation had started improving in the period just before the intensification of the pre-Covid slowdown.

Between the two PLFS rounds, the total workforce grew by 13 million, making up for employment lost between 2011-12 and 2017-18 (Table 2.2). While the working age population grew by 1.8 per cent, the labour force grew by 2.7 per cent and the workforce by 2.95 per cent. As a result, the LFPR as well as the WPR rose and the unemployment rate fell.

The improvement in LFPR and WPR was largely concentrated among rural women (just short of two percentage points), the same group that had seen the largest declines in the previous period. For urban women and for rural men, the increase in WPR was much smaller, to the extent of 0.2 percentage points (Table 2.3).

These numbers are somewhat encouraging, but the intensification of the slowdown in 2019 and then Covid-19 shock have radically altered the economic situation going forward.

2.2.3 / Youth unemployment

One of the most hotly debated economic issues during the 2019 general election was the unprecedented rise in the unemployment rate from 2.2 per cent in NSS-EUS 2011-12 to 6.1 per cent in PLFS 2017-18.⁹ Going beyond the headline rate, it is worth keeping in mind that unemployment remains largely confined to educated youth as it has always been. However, what has changed is the proportion of educated youth in the labour force, and the capacity to wait for a more preferred job.

Figure 2.2 breaks the overall UR down into a youth UR (ages 15 to 30 years) and a UR for older workers who are more than 30 years of age. Three time points, 2011-12, 2017-18 and 2018-19, are shown. During 2011-12 to 2017-18, youth UR increased sharply for every level of education, going past 35 per cent for higher educated youth. That is, more than one-third of educated youth who were in the labour force were unemployed in 2017-18. Encouragingly, the small improvement in the employment situation between 2017-18 and 2018-19 was reflected at every level of education. However, there is clearly a long way to go since the unemployment rate for young graduates and postgraduates was still a very high 33 per cent. The problem was even worse for educated young women for whom the UR rose to an astounding 42 per cent. Given these large rates of unemployment even prior to the pandemic, the

differential negative impact of the pandemic on younger workers, that we report in Chapter Three, becomes even more worrying.

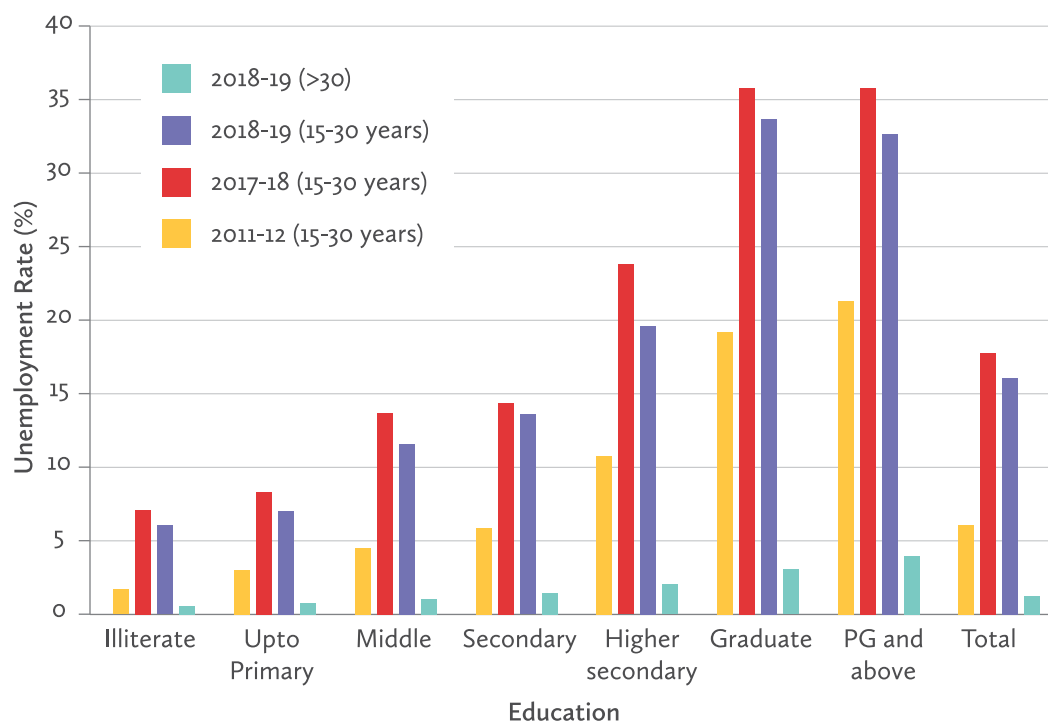
For older workers (more than 30 years of age), unemployment rates fell to three percent: four percent for those with graduate or postgraduate, and to less than two percent for older workers with lesser education (Figure 2.2). Thus, open unemployment was practically absent for less educated and for older workers going into the pandemic.

Two important implications can be drawn from this fact. First, despite formal educational qualifications, the educated labour force either does not have the necessary skills that are required in the job market or the economy is not generating jobs for this category in required numbers. Second, after searching for work for a few years in their twenties, eventually most workers do find employment, even if it does not match their skills or their aspirations.

2.3 / Weak structural transformation prior to the pandemic¹⁰

In addition to the pandemic's impacts on employment, incomes and welfare in the short-run, it is also important to consider longer-term effects on structural transformation of the economy. Recall, that structural transformation in the context of a developing country involves two distinct processes - a decline in the share of agriculture in employment (and a rise in non-farm work) and a decline in the share of the informal sector (and a rise in the scale of production). In State of Working India 2018, we referred to these two as the Kuznets Process and the Lewis Process respectively. In order to understand the impact that Covid may have on India's structural transformation, it is necessary to first take stock of the current extent of these two processes.

Figure 2.2:
Unemployment in India is concentrated among educated youth



Source and notes: NSS 2011-12, PLFS 2017-18 and PLFS 2018-19. See [Glossary](#) for definition of Unemployment rate.

“ Pre-pandemic unemployment rate for young graduates was very high at 33 per cent. For educated young women it rose to an astounding 42 per cent. ”

2.3.1 / Kuznets process

The fall in female agricultural employment between 2011-12 and 2017-18 described earlier is part of an overall decline in farm employment, from 232 million (49 per cent of the workforce) to 205 million (44 per cent of the workforce). Thus, the process of an absolute reduction in the number of people engaged in agriculture which started in 2004-05 has continued apace. While a decline in agricultural employment is to be expected, more worrying is the fact that manufacturing employment also fell in the period after 2011-12, by 3.5 million, reducing an already low share in total workforce from 12.6 to 12.1 per cent (Mehrotra and Parida 2019). Interestingly, even though overall employment did not grow in manufacturing, the organised segment consisting of firms that are registered under the Factories Act posted an increase of two million jobs in this period as per Annual Survey of Industries (ASI) data. Organised industries such as knitwear, plastics, leather and footwear have delivered well in terms of job creation as well as wage growth in this period (Basole and Narayan 2020).

In addition to the weak performance of manufacturing as a whole, another important reason for weak aggregate employment growth was the slowdown in the construction sector which was a large destination for workers leaving agriculture in the first decade of the century. This sector registered an increase of 3.6 million jobs between 2011-12 and 2017-18, a weak performance compared to the previous period (2004-05 to 2011-12) when employment doubled from 25 to 50 million.

In contrast to manufacturing and construction, the services sector showed relatively stronger growth of jobs (three million per year) between 2011-12 and 2017-18. Further, Mehrotra and Parida (2019)

show that the modern services sector drove much of this growth in employment.¹¹ As the authors note, this is good news for the share of formal youth employment in this sector, which has shown a consistent increase from 21 per cent (2004-05) to 25.4 per cent (2011-12) to 31 per cent (2017-18).

In sum, however, the movement of workers from farm to non-farm work has been considerably dampened by workers withdrawing from the labour force entirely, especially women workers. Instead of enabling women to leave agricultural work and move towards relatively more productive labour-intensive manufacturing jobs (as has occurred in East Asian and Southeast Asian economies as well as in Bangladesh), the Indian economy has instead pushed them out of the labour force altogether. As we will see in [Chapter Three](#), the Covid impact has further worsened the situation with respect to participation of women in the workforce.

2.3.2 / Lewis process

The second dimension of structural transformation, closely related to the first, is the movement of workers from micro, family firms (or farms) to larger and more productive enterprises. This involves an increase in the overall scale of production as well as an increase in labour productivity, a decrease in own-account work and a rise in wage employment. Correlated with this movement, a rise in job security and an improvement in working conditions may be seen. However, the latter may or may not occur depending on the commitment of the State to ensuring labour rights. For example, recent trends indicate that there has been greater hiring of workers on fixed-term contracts in large firms, which has informalised the workforce and worsened conditions within the organised sector even as it has increased the aggregate proportion of regular wage workers in the economy (Kapoor and Krishnapriya 2017; Kumar and Kumar 2021).

There are two related ways that NSSO data allow us to estimate the pace of the Lewis process. The first is to calculate the proportion of the workforce that is employed in enterprises having at least 10 workers (the organised sector).¹² The second is to measure the proportion of workers who are self-employed in own-account work (that is, work on their own with no paid workers). These are different ways of estimating scale in production. NSSO-PLFS data also allow us to estimate the proportion of the workforce with access to some forms of job or social security via their employment. This can include a written contract, paid leave, provident fund, gratuity, maternity leave and so on.

“ Instead of enabling women to leave agricultural work and move towards more productive jobs the Indian economy has pushed them out of the labour force altogether. ”

In 2018-19, around 81 per cent of the workforce continued to be employed in enterprises with less than 10 workers, down from 83.5 per cent in 2011.¹³ Correspondingly, despite a steady increase in the share of regular wage workers, the proportion of workers who either work on own-account or as unpaid family workers stood at 50 per cent, barely reduced from 50.5 per cent in 2011-12. Thus, between 2011-12 and 2018-19, in percentage terms, the rate of decline in the proportion of workers engaged in agriculture (around five percentage points) was far higher than the increase in the scale of production (2.5 percentage points on a higher base) or a decline in self-employment (0.5 percentage points).

Tables 2.5 gives the proportions and absolute numbers of workers engaged in various employment arrangements in 2018-19 for men and women in urban and rural areas. Formal workers are those who have a written job contract or access to

at least one social security benefit (provident fund / pension, gratuity, health care, maternity benefits). As expected, the urban workforce is far more formalised (22 per cent) compared to the rural (5 per cent). Overall formal employment accounts for just under 10 per cent of total employment. Also at an all-India level, regular wage workers accounted for 24 per cent of total employment in 2018-19. Around 41 per cent of these workers fall into the category of formal regular wage workers.

Thus, whether we look at scale of production or type of employment contracts, 80 to 90 per cent of the workforce worked in microenterprises or in informal arrangements just before the onset of the pandemic. A slow pace of structural transformation and lack of political commitment to improving working conditions thus trapped a large section of the workforce without access to any employment security or social protection. As we will see, this was a major cause of the extreme hardship imposed by the Covid crisis.

2.3.3 / Labour earnings prior to the pandemic

In addition to the security of employment, the ability to weather a crisis such as the one unleashed by Covid-19 depends greatly on the average income of an individual or a household. An important negative consequence of the slow pace of structural transformation described above is that labour productivity as well as earnings remain low in absolute terms.

Table 2.5a :
Shares of
informal
workers in
2018–19 (%)

Employment type (UPSS)	Rural			Urban			Overall		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1 Formal regular wage worker	5.0	3.7	4.7	21.5	22.6	21.7	10.1	8.4	9.7
2 Informal regular wage worker	9.3	7.4	8.8	25.7	32.2	27.0	14.3	13.5	14.1
3 Regular wage worker (1+2)	14.3	11.0	13.4	47.2	54.7	48.7	24.4	21.9	23.8
4 Own account worker	46.3	21.3	39.8	30.1	23.7	28.8	41.3	21.9	36.6
5 Employer	2.0	0.5	1.6	4.5	1.1	3.8	2.8	0.7	2.3
6 Unpaid family worker	9.1	37.8	16.5	4.1	9.6	5.2	7.6	30.8	13.2
7 Self-employed (4+5+6)	57.4	59.6	58.0	38.7	34.5	37.8	51.6	53.3	52.0
8 Casual/daily wage worker	28.3	29.4	28.6	14.2	10.8	13.5	24.0	24.7	24.2
9 Total (3+7)	100	100	100	100	100	100	100	100	100
10 Share of informal workers in total	95.0	96.3	95.3	78.5	77.4	78.3	89.9	91.6	90.3

A slow pace of structural transformation and lack of political commitment to improving working conditions trapped a large section of the workforce without access to any employment security or social protection.

Even though India does not have a publicly available data source on household incomes, some data on labour earnings at the national level are available from the PLFS. In addition, regular income data are available from the CMIE-CPHS since 2014.¹⁴ Though absolute levels of income are different in the two surveys on average by 20 per cent, with CMIE-CPHS reporting higher incomes, both datasets reveal a clear hierarchy of employment type or arrangement by income. Wage or salaried workers with formal jobs are the best-off with the highest average earnings (₹23,300 per month in

Table 2.5b :
Absolute
numbers
of informal
workers in
2018-19 (in
millions)

Employment groups	Rural			Urban			Overall		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1 Formal regular wage worker	11.6	2.9	14.5	26	6.9	33	37.6	9.9	47.5
2 Informal regular wage worker	21.5	5.8	27.3	31.1	9.9	41.1	52.6	15.8	68.4
3 Regular wage worker (1+2)	33.1	8.7	41.8	57.2	16.9	74.1	90.3	25.7	115.9
4 Self-employed	133.1	47.1	180.2	46.9	10.7	57.6	179.9	57.8	237.7
5 Casual/daily wage worker	65.7	23.2	88.9	17.2	3.3	20.5	82.9	26.6	109.4
6 Total employment (3+4+5)	231.9	79.1	310.9	121.2	30.9	152.2	353.1	110.1	463.1
7 Total informal employment (2+4+5)	220.3	76.2	296.5	95.2	23.9	119.1	315.4	100.1	415.6

Sources and notes: PLFS 2018-19. Formal regular wage workers are those who have a written job contract or access to at least one social security benefit (provident fund / pension, gratuity, health care, maternity benefits). See [Glossary](#) for definition of UPSS (Usual Principal Subsidiary Status). Note that total workforce numbers may differ slightly due to rounding errors and differences in projected population.

PLFS and ₹28,900 in CMIE-CPHS). Their relatively high earnings coupled with the fact that they draw a salary on a regular basis and receive at least some social protection from employers places them at the top of the employment structure. However, as we saw earlier, they account for only around 10 per cent of the workforce. Regular wage informal workers (referred to in CMIE-CPHS as temporary salaried workers) and the self-employed earn considerably less followed by casual or daily wage workers. The average earnings of all four types of workers along with their proportions in the workforce in both surveys, are given in Table 2.6.

That a very small proportion of workers is engaged in what is described as the best form of employment, that is, regular formal employment, is not just reflective of the overall conditions of the quality of employment but also the fact that these would have been the only category of workers who would have the financial wherewithal to cope with an income shock. The other categories of workers are likely to have been particularly vulnerable, albeit to differing extents, to the Covid-19 shock.

One indicator of the vulnerability of the workforce to the pandemic shock comes from seeing what

proportion falls below the national floor minimum wage of ₹375 per day (or ₹9,750 per month).¹⁵ As per PLFS data, approximately 58.5 per cent of self-employed workers reported monthly earnings below this threshold. For casual workers, the share was even higher at 88.5 per cent. For CMIE-CPHS, which reports has higher average incomes in general, the corresponding numbers are 43.4 per cent and 65.7 per cent. Thus even by the more optimistic numbers, half the workforce continues to earn less than the amount needed for a basic standard of living, let alone an aspirational income.

2.3.4 / Intersection of sectoral structure and informality

A final dimension of vulnerability to the Covid-19 shock comes from the sectoral structure of India's non-farm workforce. Table 2.7 gives the absolute number of workers by employment type in various

major sectors of the economy. Also shown is the ILO's risk classification of being affected due to Covid-19 (ILO 2020). Note that Informal (self-employed and casual) workers in the medium to high-risk sectors such as manufacturing, construction, trade, transport, and hospitality constitute the most vulnerable section of the workforce. In 2018-19 these accounted for over 125 million workers.

In urban areas, this high risk group constituted almost 45 per cent of total employment based on PLFS data. The share of urban workers who were least likely to lose employment (regular wage workers in less impacted sectors) was 12 per cent. That such a high proportion of the urban workforce is classified as being highly vulnerable gives us an idea of the immensity of the crisis that ensued during and after the lockdown.

Table 2.6: A comparative look at PLFS and CMIE data for workforce structure and earnings

	PLFS		CMIE- CPHS	
	Share in workforce (%)	Monthly earnings (₹)	Share in workforce (%)	Monthly earnings (₹)
Formal regular/ Permanent salaried	12.9	23,300	11.4	28,900
Informal regular/ Temporary salaried	11.6	9,300	10.5	10,700
Self-employed	51.0	11,000	48.3	15,600
Casual/daily wage worker	24.4	6,000	29.9	8,700

Sources and notes: PLFS 2018-19, CMIE-CPHS 2018-19. See [Appendix](#) for details on CMIE-CPHS and PLFS comparison. Formal wage workers in PLFS are defined as wage workers having a written contract or receiving a social security benefit. Monthly earnings for casual workers in PLFS are calculated by multiplying daily earnings by 26.

2.4 / Conclusion

To summarize the points made in this chapter, we have seen that the Indian economy was in a significant slowdown in the year leading up to the pandemic. This was on top of a persistent problem of weak structural transformation that left the majority of the workforce in informal and poorly paid work arrangements. As we shall see in [Chapter Six](#), the existing social protection architecture also had large lacunae, which became all too obvious during the nationwide lockdown in April and May 2020.

Informal workers in medium to high Covid risk sectors accounted for 45% of the urban workforce.

In the next two chapters we closely analyse the employment and income impacts of the pandemic, drawing largely on CMIE-CPHS data supplemented by two primary field surveys - the Azim Premji University Covid-19 Livelihoods Phone Survey and the India Working Survey (IWS).

Table 2.7 :
Distribution of workers (millions) by employment type and sectors with corresponding Covid-19 risk classification

ILO classification of risk to output	NIC 2008	Industry	Casual/ daily wage labour	Self-employed	Salaried	Total
Low to medium	01-03	Agriculture	46.8	141	2.3	190.2
Medium	05-09	Mining	0.7	0.2	1.1	2
High	10-33	Manufacturing	7.6	24.8	26	58.4
Low	35-39	Electricity, Gas & Water Supply	0.1	0.5	2.1	2.7
Medium	41-43	Construction	46.7	6.3	3.2	56.2
High	45-47	Trade	1.9	36.3	13.9	52.1
Medium-high	49-53	Transport	3.1	10.3	10.3	23.7
High	55-56	Hospitality	0.9	4.7	3.4	9
	58-99	Others	2.4	15.8	54.2	72.4
		All	110.4	239.9	116.4	466.7

Sources and notes: PLFS 2018-19 and ILO (2020) Covid-19 Risk Classification.

Endnotes

¹ Also see Nagaraj, R. 2020. The India Forum. October 26. Accessed December 9, 2020. <https://www.theindiaforum.in/article/understanding-india-s-economic-slowdown>.

² <https://www.firstpost.com/business/gdp-data-without-demonetisation-impact-on-informal-sector-lacks-credibility-3310764.html>

³ <https://www.thehindu.com/opinion/op-ed/in-variance-with-the-official-growth-story/article30030000.ece>

⁴ <https://www.livemint.com/news/india/consumption-spending-may-not-have-fallen-in-india-new-survey-11580102985802.html>

⁵ If the long term market interest rate is perceived to be a sum of short term market interest rate and the risk premium, with the short term market interest rate being determined by the repo rate, then the trend in long term interest rate in India in the recent period can be explained by the changes in factors (such as oil prices) which affect the risk premium (Dilip 2019).

⁶ This section draws on Nath and Basole (2020).

⁷ Note that “Employment” is defined here as per the NSSO Usual Principal and Subsidiary Status or UPSS, where a person is considered employed if they worked in any form of market activity (such as self-employment, salaried work or casual labour) for at least 30 days in the preceding year. The Glossary offers more details on these labour market indicators.

⁸ <https://www.ideasforindia.in/topics/social-identity/declining-female-labour-force-participation-in-rural-india-the-supply-side.html>

⁹ <https://www.thehindu.com/business/Economy/unemployment-rate-at-45-year-high-confirms-labour-ministry-data/article27379174.ece> and <https://www.theindiaforum.in/article/employment-question-india>

¹⁰ This section is based partly on a policy paper on Covid-19 and Social Protection written for the Asian Development Bank by Radhicka Kapoor and Amit Basole.

¹¹ The authors include the following in this category: education, hotel and restaurant, and other food service activities, health and community social services, telecommunication, business support service activities, sale, maintenance and repair of motor vehicles, financial intermediation, computer related activities, research and development, modern auxiliary transport, real estate services, and insurance and pension funding.

¹² As per the National Commission for Enterprises in the Unorganised Sector the unorganized sector (or informal sector) “consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers” (Sengupta et al. 2007).

¹³ The share of employment in the unorganized sector is smaller in urban areas (64 per cent) compared to rural areas (88.5 per cent). Strikingly, there is not much difference in the distribution of employment across organized and unorganized sectors for men and women.

¹⁴ Since we use the CMIE-CPHS data extensively in this report for analysis of Covid-19 impact on employment and incomes, we have given detailed comparisons of these data with PLFS numbers in later chapters (see [Appendix to Chapter Three](#) for employment statistics and Box 4.2 for incomes in these two surveys).

¹⁵ In 2017, the Government of India appointed an Expert Committee to recommend a national minimum wage to provide a decent standard of living and meet basic needs, including education, food and healthcare. The Committee set the single value of the National Minimum Wage (NMW) for India at ₹375 per day as of July 2018, irrespective of sectors, skills, occupations and rural-urban locations (GOI 2019).

3

Employment loss and recovery

3

Employment loss and recovery

This chapter as well as the next two constitute the core of our analysis of how the Covid pandemic impacted employment, incomes, and welfare in India. It should be emphasised that the pandemic is still raging at the time of writing. Hence the analysis is necessarily provisional and the effects are still ongoing. The aim is to bring together evidence from various sources on the nature of the impact thus far and to provide an empirical basis for policy action.

We draw on nationally representative household survey data from the Consumer Pyramids Household Survey conducted by the Centre for Monitoring Indian Economy (CMIE-CPHS) as well as several smaller surveys that were carried out to understand the impact of the pandemic. The latter are often focused surveys, targeting a specific demographic of workers, and although not representative of the entire country, they provide valuable insight on the nature of the impact across different kinds of workers. Although official employment statistics for urban areas, from the Periodic Labour Force Survey (PLFS) have recently become available with the release of the Quarterly Bulletin for the period April 2020 to June 2020, for the period from July onwards, the CMIE-CPHS remains the main source of employment and income information, along with smaller surveys done across the country.

Since several different sources are used in this analysis, periods of comparison often vary. Therefore, some broad periodic classifications are worth keeping in mind. ‘Lockdown’ refers to the months of April and May. Pre-pandemic comparisons have been made either with the months immediately prior (January and February)

or with comparable months of 2019 depending on data availability and the nature of the question asked. ‘Post-lockdown’ refers to the entire period after June 2020 and differs from survey to survey.

3.1 / Massive job losses during the lockdown were followed by a rapid recovery – and then a stagnation

In April 2020, according to CMIE-CPHS estimates, the workforce participation rate (WPR) for men, or the share of working-age men who were employed, fell from 66 per cent in February just before the pandemic, to 46 per cent. Using population projections for 2020 (see [Chapter Two](#) for method), we estimate that this corresponds to a fall in total employment of 100 million. The corresponding fall for women was from 8.8 per cent in February to 5.3 per cent in April, a fall of approximately 17 million. The WPR for the lockdown month (April) was around 65 to 70 per cent of the level immediately prior (February 2020) for both men and women in rural and urban areas. Readers familiar with NSSO-PLFS estimates of female workforce participation rates will note that the CMIE-CPHS estimate is only half of the former during normal times. The Chapter Appendix elaborates on this difference and the broader question of measurement of women’s employment and comparability across different databases.

For that part of the workforce which relies entirely on labour earnings for day-to-day survival, the

lockdown proved to be catastrophic. Multiple 'lockdown surveys' reveal the plights of workers in the months of April and May (Box 3.1). The complete stoppage of economic activities meant they did not even have the option of working to meet their daily basic needs.

We might be poor people without a lot of knowledge but we are not beggars. We don't have anything but we have our bodies. That was enough. We always knew that if we work hard, we will have food in our bellies, come what may. But the lockdown broke our faith. How can they make working illegal?

These were the words of Jahanara, a domestic worker in New Delhi, as recounted by Chanchani and Garimella (2021) in their SWI 2021 background paper. Jahanara had moved to Delhi from a small village in North Bengal. During the lockdown, she lost her job and savings. In another SWI 2021 Background paper, Yadav (2021) shares the experience of a scrap collector based in Delhi.

Because of the pandemic, doors and windows were shut on scrap dealers like me. When I began work

in May, when some movement on the streets was allowed by the police, I struggled a lot to earn. I would make rounds of colonies in Delhi, call out 'Kabaadi', to collect scrap from houses but no one heard me, no one called out back to me like earlier to stop and sell scrap – glass bottles, newspapers, tin cans – to recycle. They were terrified that a pandemic was going on. It impacted my work very severely for months.

Earlier, they would call out, someone or two would even offer water or tea or a slice of bread once in a while. But now, they kept their doors shut for weeks terrified of the disease.

The Resident Welfare Associations crack down on any scrap buyer like me who enters without a pass, and now they have become even stricter in the pandemic. And because of COVID-19 fears, the mansion owners are stricter, they say: 'Hey, please stay away, stay far, maintain distance!'

These immediate effects were expected and, for the most part, temporary. However, the extent and kind of support that was made available via public policy fell well short of what was necessary. We discuss this in more detail in Chapter Seven.

Box 3.1 : Findings from purposive lockdown surveys

During April and May 2020 a large number of independent surveys were carried out by civil society organisations, academic researchers and others. Many of these were conducted during the course of administering relief and were based on purposive sampling of relatively more vulnerable sections of the population (such as informal sector workers, migrant workers, slum dwellers, etc.). Hence statements made on the basis of the surveys only apply to the sample. The sample sizes vary from a few hundred to 10,000 or more. We have compiled a database of such surveys online and as of April 2021, it contained 76 surveys.¹

Most surveys covered three broad areas: effect of the pandemic (primarily the lockdown) on employment and livelihoods, household level impacts on financial and food security, and access to relief measures. Taken together, these surveys constitute a valuable resource for analysing the immediate impact of the lockdown as well as the reach and efficacy of state and central government relief and support measures. The table below shows the headline loss of employment in three surveys. Across the surveys, nearly 80 per cent of urban informal workers lost their livelihoods during the lockdown months.

Employment loss in first round of three Covid impact surveys (%)

	Overall	Rural	Urban
Azim Premji University CLIPS	66	56	80
Dalberg	72	68	80
Action Aid	75	58	78

Sources and notes: Details on surveys and associated reports are available at https://cse.azimpremjiuniversity.edu.in/covid19-analysis-of-impact-and-relief-measures/#other_surveys

A few surveys were also conducted in multiple rounds, giving a picture of recovery from lockdown, e.g. Azim Premji University Covid-19 Livelihoods Phone Survey (CLIPS) and surveys by Dalberg, Dvara Research, ActionAid, Rural Communities Response to Covid (conducted by a large coalition of rural CSOs) and the Delhi NCR Coronavirus Telephone Survey (DCTVS, conducted by NCAER). Action Aid Round Two (August) surveyed around 17,000 individuals (of which 4,800 respondents were from Round 1) and found that the proportion of jobless workers dropped from 78 per cent during lockdown to 48 per cent in August. However, around 42 per cent of the workers who resumed employment post the lockdown reported being only partially employed (Action Aid 2020). Similarly, Dvara Research conducted three rounds of surveys of low income households between April to June 2020. Around 80 per cent reported not having any income generating activity during the lockdown in April, and post the lockdown in June the proportion was still 40 per cent (Agrawal and Ashraf 2020).

NCAER-DCTVS undertook four rounds of surveys of citizens of Delhi NCR between April 2020 and January 2021. In round 4 of the survey, the proportion of men working rose from 62 per cent in Round 2 (23-26 Apr) of 2020 to 84 per cent in Round 4 (23 Dec - 4 Jan). For women, the recovery was much more tepid, rising from 27 per cent in Round 2 to 36 per cent in Round 4.²

As is well known, the effects of the lockdown were particularly severe on migrant workers. We discuss this issue in detail in Chapter Seven. Here we briefly summarise the findings from various surveys, with regard to migrant workers. In CLIPS, three-fourths

of all migrants had been working in non-native districts for more than a year. Intra-state migrants were far more likely to have returned to their native place as compared to interstate migrants (55 per cent versus 21 per cent). A third of inter-state migrants were unable to return home due to the lockdown at the time of the interview (April-May 2020) while about 30 per cent of the migrants who had reached home had no plans to return to the place of work after the lockdown was lifted either immediately or after a few months. In the Dalberg survey this number is 43 per cent while in the RCRC survey it is 34 per cent (RCRC 2021; Dalberg 2020). In the Action Aid survey, out of 5,800 migrant workers, 18 per cent were stranded for more than 50 days. An additional 20 per cent were stranded between 40 to 50 days, and 27 per cent between 20 to 40 days. Loss of employment was also more severe for migrant workers at 81 per cent compared to 71 per cent for non-migrant workers (Action Aid 2020). It should be emphasised that these numbers continued to change over the lockdown period and afterwards, as government relief measures started taking effect and special trains were organised to transport migrant workers back to their homes. The efforts of a coalition of volunteers under the name Stranded Workers Action Network (SWAN) deserve to be particularly singled out here. SWAN organised relief and transport for thousands of workers across the country. More details are available in their three reports at www.strandedworkers.in/.

¹ https://cse.azimpremjiuniversity.edu.in/covid19-analysis-of-impact-and-relief-measures/#other_surveys

² https://www.ncaer.org/image/userfiles/file/DCVTS4/DCVTS4_Presentation.pdf

By July most of the loss in employment had been recovered. However, subsequently, there has been a stagnation with the total workforce staying on average around 15 million below its February 2020 level.

By May, as economic activities recovered, the male and female WPR had recovered to around 80 per cent of its pre-pandemic value and was up to 90 per cent by June. However, subsequently, there has been a stagnation with the WPR hovering around 95 to 98 per cent of its pre-pandemic value. As of the most recent data available (December 2020), it was yet to recover fully (Figure 3.1). This means that the total workforce stayed on average around 15 million below its size in February 2020 until December 2020.

With the coming of the second wave in April 2021 and with renewed restrictions on mobility, it remains to be seen how the recovery progresses and also whether there are likely to be more permanent changes in labour demand over the longer term.

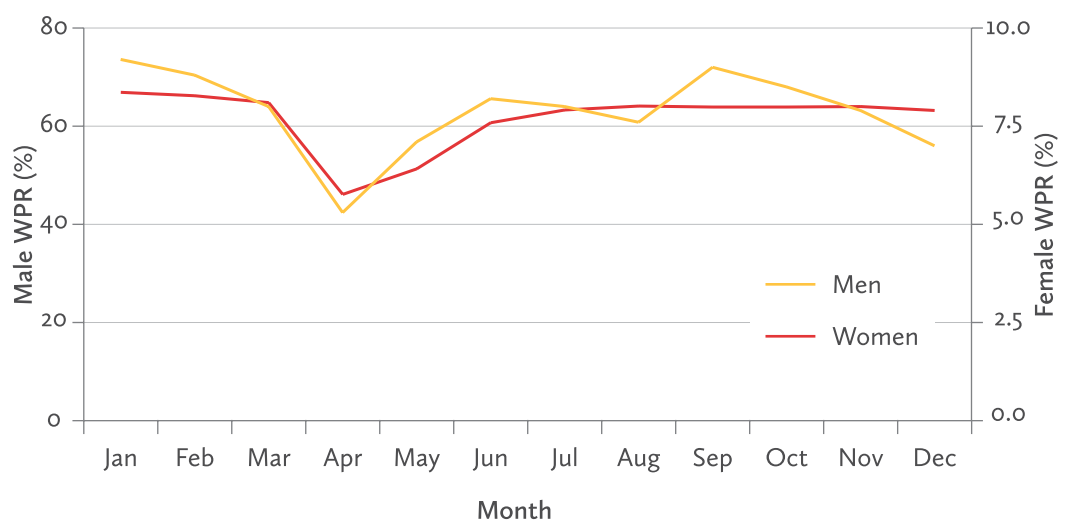
Another estimate of aggregate loss of employment over the previous year comes from Parida and Suri

(2021) who calculate that 18.5 million fewer people will be employed in 2020-21 compared to 2019-20. The authors base this estimate on employment elasticities reported in Mishra and Suresh (2014) for the period 2004-05 to 2011-12. Reserve Bank of India (RBI) and MoSPI

(Ministry of Statistics and Plan Implementation) forecasts of GDP growth for 2020-21 are then used along with total labour force estimates for 2019-20 and 2020-21 (based on CAGR between 2011-12 and 2018-19) to estimate the absolute loss in employment. They find that the workforce may be expected to decline to an estimated 456.9 million in 2020-21 instead of reaching 475.7 million as estimated under the pre-COVID scenario, i.e. 18.5 million jobs lost.

This indirect method based on employment elasticities is used because, until recently, there was no publicly available data on the employment impact of the pandemic (CMIE-CPHS is a private database). With the release of the quarterly bulletin of the PLFS for Q1 of 2020-2021 (April-June 2020), we have some estimates of job loss, albeit only for urban areas (Box 3.2).

**Figure 3.1 :
Fall and recovery of workforce participation rate in 2020**



Sources and notes: Authors' calculations using CMIE-CPHS.

Box 3.2 : What do official statistics say about the impact of the lockdown on the labour market?

Statistics from the PLFS for the first quarter of 2020-21 (April, May, June 2020) have recently become available, allowing us another estimate of the impact of the lockdown on employment for urban areas.¹

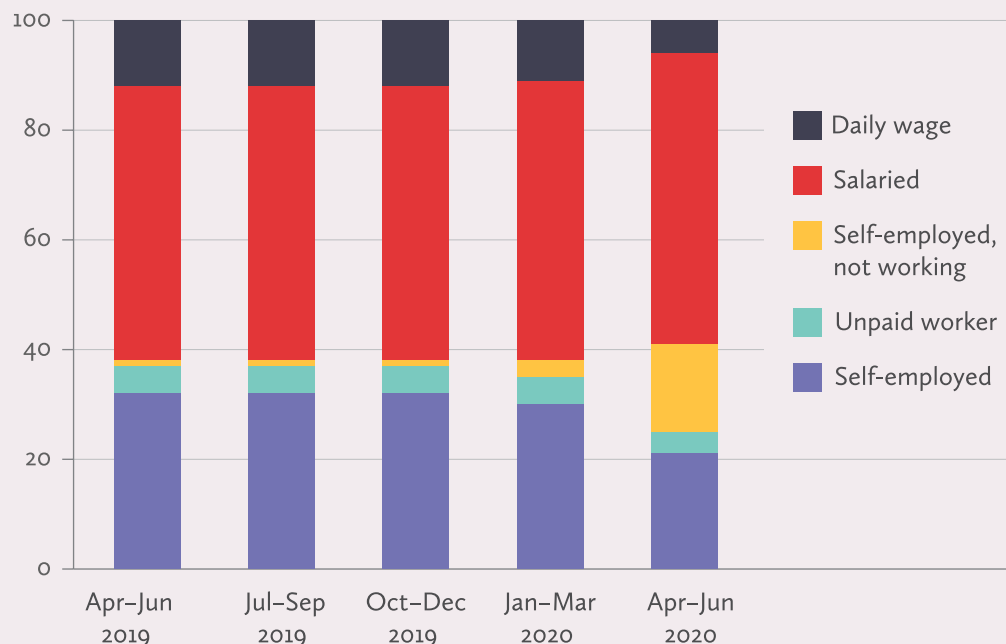
In the first quarter of 2019-20 the urban WPR for men was 67.3 per cent and for women it was 16.9 per cent. During the lockdown quarter, male WPR fell by 10 percentage points to 56.9 per cent, and for women by 1.4 percentage points to 15.5 per cent. By comparison, according to CMIE-CPHS, the fall in WPR for men and women is about 20 percentage points and 3.5 percentage points respectively in urban areas.

At first glance, it would seem that the PLFS estimates suggest a much smaller fall in the WPRs for men and women compared to CMIE-CPHS. However, we believe that this mismatch arises from inclusion within the workforce of those self-employed workers who could not work due to the lockdown. The PLFS quarterly estimates use the

Current Weekly Status (CWS) approach to measure employment where a person is identified as employed if they worked for at least an hour in the last week. CWS allows workers in self-employment or casual wage work to identify themselves as generally working although they did not work due to sickness or other reasons. The rationale behind this exercise is to include those people whose absence from work during the reference period is temporary.² During normal times, such people constitute less than 1 per cent of the workforce.

The figure shows that the share of those identifying as self-employed but not working was around 1 per cent for the three quarters prior to the lockdown quarters. It rose to 3 per cent during January-March 2020 (possibly driven by the last week of March, 2020 when the lockdown had been put in place) and to an unprecedented 16 per cent in April-June, 2020. This category termed 'SE-not working' constituted 18 per cent of all male workers and 11 per cent of all female workers.

Distribution of reported employment status across PLFS quarterly surveys



Sources and notes: PLFS Quarterly Bulletin, April-June 2020.

These individuals who fall under the category of ‘SE-not working’ are counted as workers when estimating WPRs. However, such categorisation of employment status that relies on self-identified status may not be applicable in the case of exceptional circumstances where the economic activity itself was completely stopped (Abraham 2020). If we estimate WPRs after excluding these individuals, the male WPR in April-June 2020 becomes 47 per cent and female WPR was 14 per cent.³ For men, this WPR from PLFS is almost exactly the same as that estimated by CMIE-CPHS. For women, a difference of ten percentage points remains but this is a difference that has persisted across the years between these two surveys (See [Chapter Appendix](#)). More importantly, the extent of fall in WPR for men and women, across CMIE-CPHS and PLFS, i.e. a fall of about 20 and 3.5 percentage points for men and women respectively, are similar when we use this modified definition of WPR in PLFS.

¹ Quarterly reports are released only for urban areas. The fieldwork for PLFS was terminated in mid-March and resumed on 1st June 2020. 61 per cent of the schedules for this quarter were collected over telephone. There was a delay in the collection of information for this period as respondents were approached later than they would normally have been but information was collected with respect to the actual reference period that would have been adopted had there been no pandemic. Furthermore, the sample size of this round is around 96 per cent that of the previous year’s April-June quarterly sample.

² <https://www.theindiaforum.in/article/are-conventional-metrics-employment-accurate-during-economic-lockdown>

³ We calculated the size of the urban workforce by applying the WPRs given in the quarterly reports to the working-age population projections. We then excluded from this worker population, the number of ‘self-employed not working’. This was divided by the overall working-age population to arrive at ‘modified WPRs’ comparable with CMIE-CPHS.

3.2 / Beyond the aggregate employment numbers: Variation and flux in the labour market

The aggregate WPR numbers suggest a 90 per cent recovery in employment. However, these numbers hide substantial variation and flux in the workforce in terms of entry and exit of workers, their movement across different types of employment arrangements, as well as across sectors and industries. First, the lockdown may have rendered many workers jobless and in the months after, while many have returned to work, it is also likely that many who

were previously not working (either unemployed or out of the workforce) may have entered the labour market. Second, workers may also find employment of a different nature, moving, say, from self-employment to casual wage work, and/or across sectors, say from manufacturing to agriculture. And third, recovery in employment may not necessarily imply a recovery in earnings. Furthermore, all of the above can vary with the social and demographic characteristics of the worker. For example, several Covid-19 impact surveys suggest that the impact of employment loss appears to be much harsher for low income and vulnerable workers.



90 per cent of men who were employed in late 2019 were employed in late 2020. For women the corresponding number is only 50 per cent.



Here we analyse entry and exit and how it has varied across states and demographic groups. In the next chapter we analyse transitions to informal employment arrangements and the resulting impact on labour incomes. The periods of analysis are the months of September to December 2019 compared to September to December 2020 (CMIE-CPHS Wave 3 for both years).¹

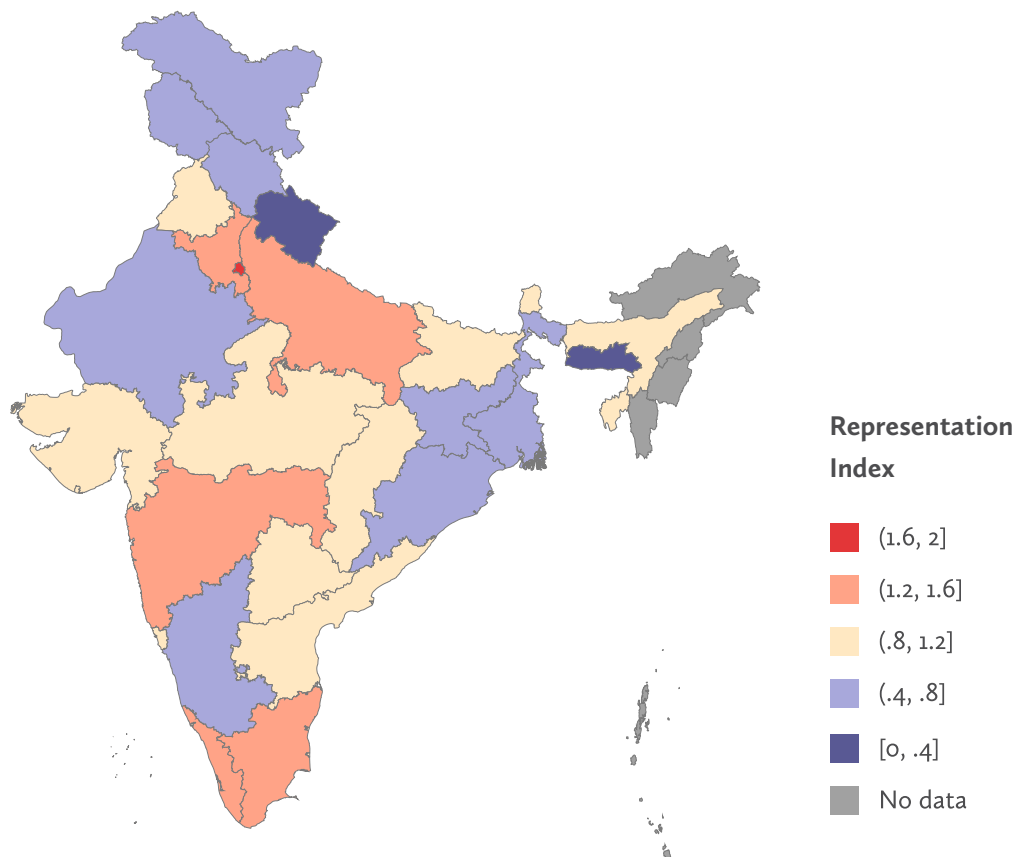
There is substantial variation across states, as might be expected, since different states have been affected to different degrees by the pandemic and state-level responses have also varied. We investigate state-level policy approaches to the pandemic in Chapter Six. Here we only note that some states such as Maharashtra, Kerala, Tamil Nadu, Uttar Pradesh, and Delhi, have contributed disproportionately to job losses observed in the CMIE-CPHS data i.e., their share in job losses was

Across states, a higher average Covid case load is associated with a higher job loss representation index.

higher than their share in the pre-Covid workforce. (Figure 3.2). Many others, such as Andhra Pradesh, Telangana, Gujarat, Madhya Pradesh and Bihar have roughly equal shares in job losses as their share in the entire Indian workforce. On the other hand, Karnataka, West Bengal, Odisha and Jharkhand are under-represented in the job loss numbers compared to their share in the total workforce.

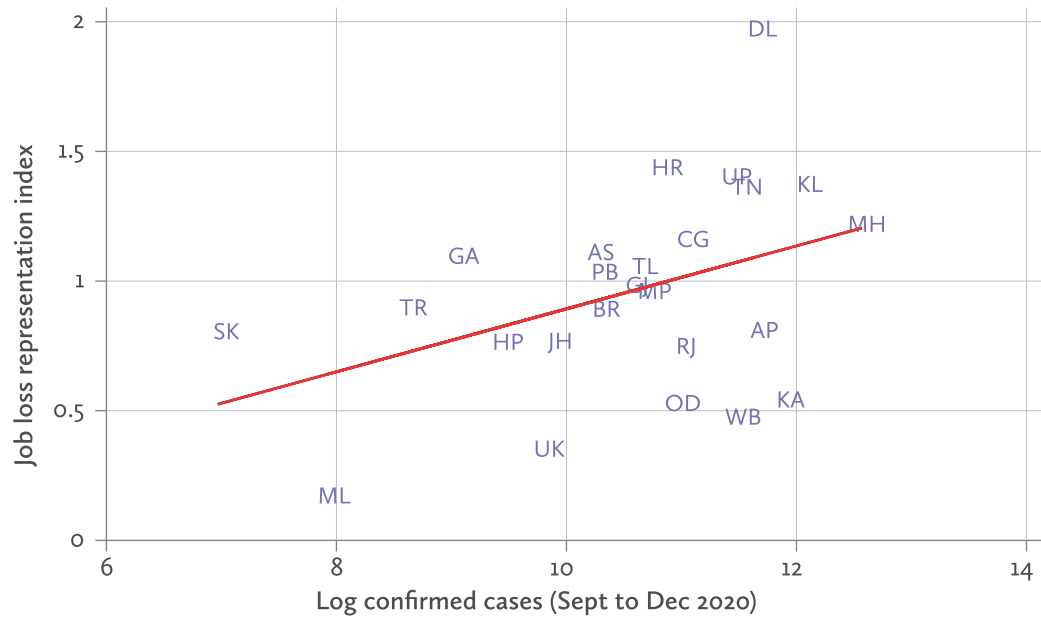
As might be expected, a higher average Covid case load (confirmed cases per month over the four month period being analysed) is associated with a higher job loss representation index (Figure 3.3).² Interestingly, some states which have a representation index greater than one (such as Maharashtra) lie close to the regression

Figure 3.2 :
States' share of job loss as a proportion of share in workforce



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December of 2019 and 2020. See [Appendix Section 2](#) for details. The representation index is a ratio of the state's share in employment loss to its share in the pre-Covid total workforce.

Figure 3.3 :
Extent of
employment
loss varies
directly with
case load



Sources and notes: CMIE-CPHS data for Sept-Dec 2019 and Sept-Dec 2020. See the previous figure for explanation of the job loss representation index. Data on confirmed Covid cases per month for the same period are obtained from PRS Legislative Research (<https://prsindia.org/covid-19/cases>).

line, suggesting that extent of job loss is well predicted by the Covid load, while others such as UP, Tamil Nadu, and Kerala are farther away, suggesting the influence of other factors in accounting for job loss. Delhi is a clear outlier but even when it is removed from the analysis confirmed case load remains significantly correlated with the job loss index.

Returning to the national-level analysis, around 85 per cent of those who were employed between September to December 2019 were also employed during the same months, a year later. The remaining 15 per cent were either unemployed or out of the workforce. The net result was a stable WPR.³ However, the extent of entry and exit varies substantially between men and women. For men, 90 per cent of those who were employed in late 2019 were employed in late 2020, in alignment with the overall recovery in WPR seen earlier. For women, on the other hand, the corresponding number is only 50 per cent (Table 3.1). That is,

The near complete restoration of WPR to pre-Covid levels occurred because the exit of women from the workforce was accompanied by entry of those who were not employed in the comparable period the previous year.

50 per cent of previously employed women were not employed any longer after the lockdown. Yet, as for men, the WPR for women had returned more or less close to pre-lockdown levels.

The explanation lies in the fact that a large share of women who were previously out of the workforce or unemployed, entered the workforce. The near-complete restoration of WPR to pre-Covid levels for women occurred because the exit of women from the workforce was accompanied by entry of women who were not employed in the comparable period the previous year.

Table 3.1 :
Employment
status
in 2020
conditional
on
employment
status in
2019

		Employment status in 2020		Out of	Total
		Employed	Unemployed	Workforce	
Employment status in 2019	Overall				
	Employed	85.4	2.7	12.0	100
	Unemployed	19.4	29.5	51.2	100
	Out of Workforce	6.7	4.4	88.9	100
	Total	39.3	4.7	56.0	100
Employment status in 2019	Men				
	Employed	89.5	2.6	7.8	100
	Unemployed	25.6	31.7	42.7	100
	Out of Workforce	13.9	7.6	78.5	100
	Total	66.1	5.5	28.4	100
Employment status in 2019	Women				
	Employed	50.0	2.8	47.2	100
	Unemployed	5.8	24.5	69.6	100
	Out of Workforce	4.3	3.3	92.5	100
	Total	8.5	3.8	87.7	100

Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020

A second source of information for this flux is the India Working Survey (IWS) conducted in two states (Karnataka and Rajasthan).⁴ Though the two surveys are not comparable, it is worth noting that IWS finds a similar influx of previously out-of-workforce women into employment after the lockdown. Prior to the pandemic, the rural employment rate for the IWS sample in Rajasthan and Karnataka was 63 per cent for men and 44 per cent for women.⁵ With the imposition of the lockdown, the employment rate fell by around 10 percentage points for women, in both states. By August-September WPR had recovered for

both men and women. But as in CMIE-CPHS data, the recovery of aggregate WPR numbers hides a lot of flux within the workforce. Of all the women employed in September, 42 per cent were not employed in February-March. The corresponding number for men in IWS was 33 per cent.⁶ This points to the precarity of employment arrangements, which is higher for women than for men.

Box 3.3 : Exploring the reasons behind labour market entry and exit

During the IWS phone survey, respondents who were working previously (in February or March) but were not working in August and September, were asked the reasons for their withdrawal from work. The primary reason given by women was that suitable work was not available, followed by illness. The ‘new’ female entrants into the workforce were asked the reasons behind their entry into paid work. For more than half the respondents across both the states, the responses indicate distress-driven entry. Joining paid work was imperative as household incomes had fallen or the husband/primary earner had lost their jobs or could not operate their business. The figure below provides further evidence of distress driven employment.

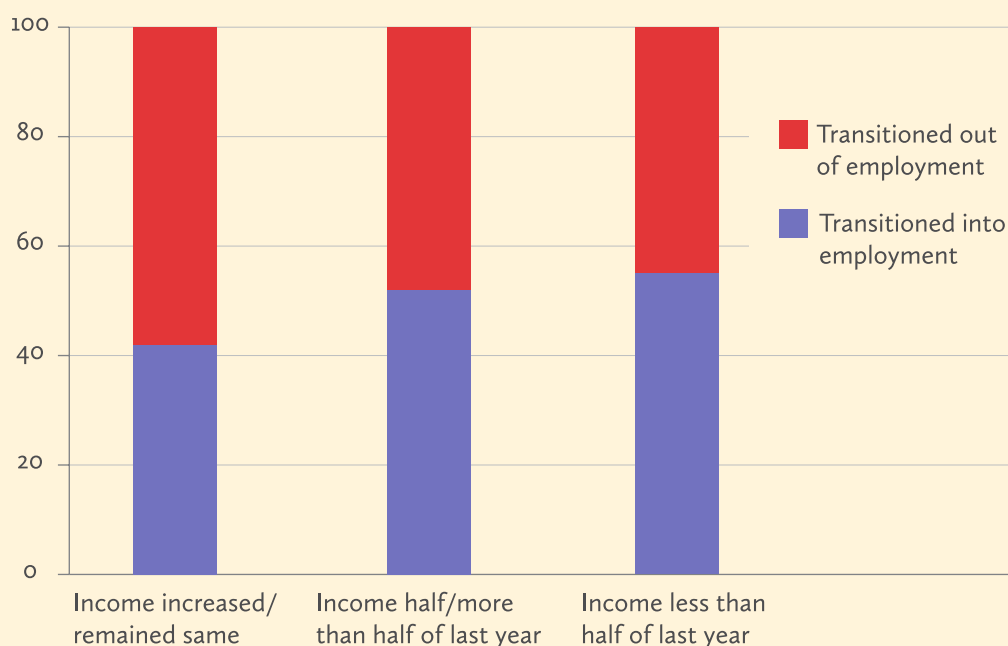
We asked respondents how their household income for the period April to August 2020 compared to their incomes during the same time last year. First, we find that about 90 per cent of women reported that their household income had reduced since the previous year (not shown in Figure). We also see

a clear pattern of more women transitioning into work when the household income has decreased, whereas where household incomes have improved we see that women are more likely to leave the workforce.

The distress driven entry of women into the workforce is further buttressed when we look at the caste composition and its changes pre and post-lockdown. The proportion of Scheduled Caste (SC) women in the workforce increased between February-March and August-September, along with a reduction in the proportion of general category women. For men, the caste composition remained largely the same.

The overall picture of women’s employment seems to be of distress driven transitions into employment, resulting in crowding out of some of the work opportunities of previously employed women who lost employment during the lockdown period.

Women from households that were more impacted by the lockdown were more likely to enter the workforce



Sources and notes: India Working Survey 2020

3.3 / Trajectories of employment

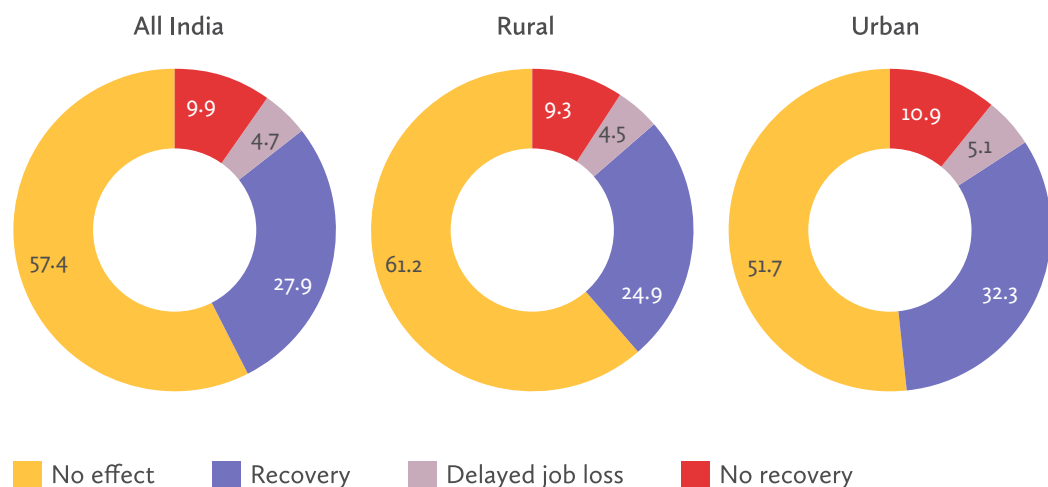
To understand the patterns of entry and exit from the labour market better, we now look at those individuals who were in the workforce prior to the lockdown and follow them through the lockdown and afterwards. To do this, we use the fact that the CMIE-CPHS survey is a panel dataset where each household is interviewed three times a year. Those who were interviewed in April (the lockdown month) were earlier interviewed in December 2019 and then again in December 2020. (see [Figure 1.1](#) in Chapter 1).⁷

Four outcomes are possible as depicted in Table 3.2. More than half (57 per cent) of the workforce continued to stay in employment during the lockdown and post the lockdown (Figure 3.4, *no effect*). Additionally, around 28 per cent of the workforce followed a recovery trajectory. In total, about 85 per cent of those who were working in December 2019 were in employment by December 2020. 10 per cent had not returned to work even after a year (*no recovery*). Finally, 5 per cent experienced a *delayed job loss*, losing work not during the lockdown but in the months afterwards.

Table 3.2 :
Trajectories of Employment

	Pre lockdown (December 2019)	During Lockdown (April 2020)	Post Lockdown December 2020	Trajectory
Employed	Employed	Unemployed/Out of Labour Force	Unemployed/Out of Labour Force	No recovery
Employed	Employed	Employed	Unemployed/Out of Labour Force	Delayed job loss
Employed	Employed	Unemployed/Out of Labour Force	Employed	Recovery
Employed	Employed	Employed	Employed	No effect

Figure 3.4:
Urban workforce more heavily impacted



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the December 2019-April 2020-December 2020 panel. See [Appendix section 2](#) for details.

“ **61 per cent of men followed the no effect trajectory. The corresponding figure for women was only 19 per cent. Further, only 7 per cent of men followed a no-recovery trajectory, while the figure for women was 47 per cent.** ”

The proportions differ between rural and urban areas. While 61 per cent of the rural workforce remained employed throughout, the corresponding figure for urban areas was 52 per cent, indicating a relatively lower impact in rural areas in terms of employment loss. But, in urban areas, a larger share, 32 per cent, were able to return to work after having lost employment, compared to 25 per cent in rural areas (Figure 3.4).

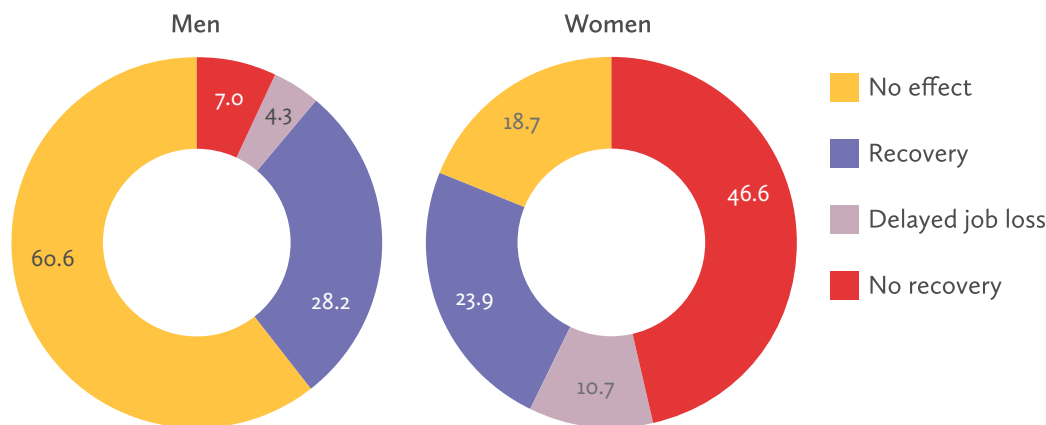
Overall, while the immediate impact of the lockdown in terms of job loss was harsher in the urban areas, it also experienced a sharper recovery post the lockdown. As a result, the long term persistence of the impact - either in terms of a no recovery or a delayed job loss trajectory - was not very different between the two regions, with around 14 per cent of the rural workforce and 16 per cent of the urban December 2019 workforce losing employment and continuing to be unemployed in December 2020.

These aggregate numbers hide substantial variation across social and demographic groups. It is well known that the employment status in India is strongly correlated with gender, caste, religion, and age, and it is likely that the lockdown had differential impacts on workers based on their social identity. We now turn to an analysis of the employment experiences of these groups.

3.3.1 / Women were much more likely to lose jobs and much less likely to recover

In terms of employment trajectories, the contrast in employment experiences between men and women is stark with losses being much higher (in proportionate terms) and the recovery much slower for women compared to men. While 61 per cent of men followed the no effect trajectory over this period, the corresponding figure for women was only 19 per cent. Further, while only 7 per cent of men followed a no-recovery trajectory, the figure for women was 47 per cent. Women were also much more likely to also experience a delayed job loss even after the lockdown relative to men (Figure 3.5).

Figure 3.5 :
Women more likely to lose employment and not return to work



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the December 2019-April 2020-December 2020 panel. See [Appendix section 2](#) for details.

Corroboration of this differential impact on women workers also comes from the India Working Survey. Recall, that this two-state survey was carried out with the purpose of measuring women's employment better than is done in standard surveys. Figure 3.6 shows IWS data for the same trajectories that we have analysed for CMIE-CPHS data. The time points here are February-March, April, and August-September. As is evident, in general, about one-third of women (26 per cent in Rajasthan and 35 per cent in Karnataka) lost employment and did not get it back - this number is between 10 to 14 per cent for men. In addition only 28-29 per cent of women in the sample were able to retain employment through the lockdown, while the proportion of men who could do so was much higher (43-50 per cent).

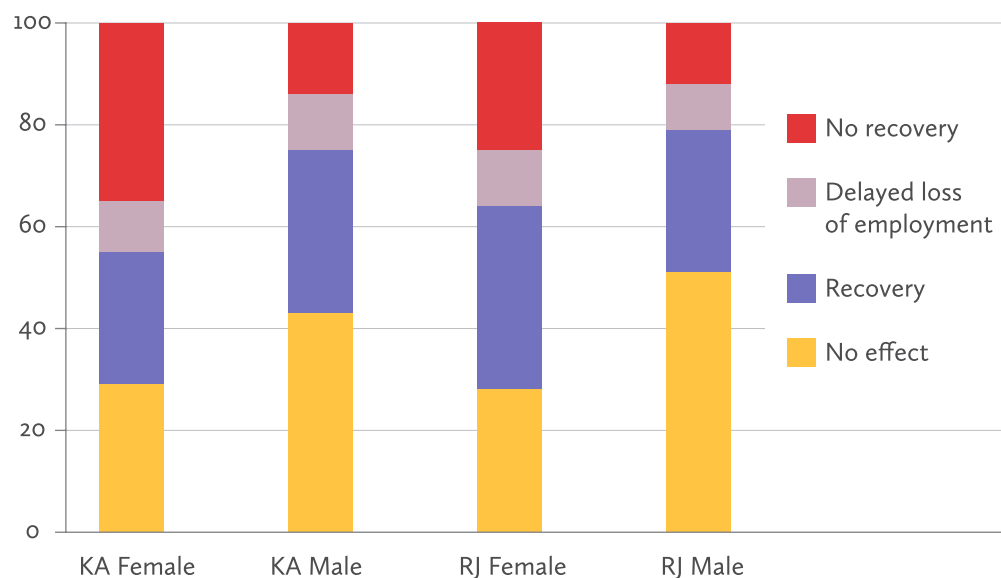
CMIE-CPHS data also reveal another important dimension of the crisis faced by women workers. Even though the proportion of those who followed the recovery trajectory only varied by 4 per cent points between men (28 per cent) and women (24 per cent) (Figure 3.5), this hides the fact that, having lost employment during the lockdown, men were

eight times more likely to return to work compared to women.

One question that arises is, do these gendered differences remain if we account for the differences in the industry and the kind of work that men and women do? Oxfam (2021), for instance, in their report find that the occupation and industrial segregation exposed women, far more than men, to the economic impacts of the pandemic. Abraham, Basole and Kesar (2021) find that, even after controlling for various social and demographic attributes (including age, education, caste, religion, presence of children in household, and marital status) and labour market factors (such as experience, work arrangement, sector of work) women were seven times more likely to lose employment during the lockdown relative to men and, upon having lost employment, eleven times more likely to not return to work post lockdown.

The authors also find employment arrangements and industry of work had similar impacts on the likelihood of employment loss and recovery for both men and women. Workers in younger age

Figure 3.6 :
Employment trajectories for men and women for Karnataka and Rajasthan



Sources and notes: India Working Survey, 2020

groups and those working as daily wage workers were more susceptible to job loss, among both men and women. But, the relation of other, non-employment specific attributes with employment loss and recovery differed between men and women. While married women were less likely to return to work, married men were more likely to return to work, indicating the gendered nature of work responsibilities (male breadwinner and female household care worker). Religion and gender intersected to exacerbate the disproportionate impact. Muslim women were more likely to not return to work upon having lost employment, while there was no such significant impact for Muslim men. While education shielded male workers from job loss, with higher educated men being less likely to lose jobs, higher educated women were more likely to lose jobs.

The phenomenon of women being hit harder during the pandemic is not unique to India, but it is particularly worrying for an economy where women's participation in the workforce has been low and even falling over the last two and a half decades.⁸ When there is a shortage of work available, women generally are the first to face the consequences of this. For instance, a study of waste-pickers by WIEGO (2020b) found that even as lockdown restrictions eased, the volume of waste collected reduced and recyclers were reluctant to hire as many workers as before, and women, who are primarily engaged in sorting activities, were particularly affected. Increased patrolling, lack of mobility and increased household responsibilities further constrained women's return to employment (Deshpande 2020; ISST 2020; WIEGO 2020b; 2020a).

Box 3.4 : A look at the informal workforce - Findings from Azim Premji University CLIPS

Azim Premji University CLIPS was conducted across 12 states of India, interviewing workers mainly in the informal economy and from vulnerable households (see [Figure 1.2](#) for the time period of the survey). Of the 2,778 respondents interviewed in February 2020, 69 per cent lost work during the lockdown (in April or May 2020). After the lockdown, in the months of September, October and November, 19 per cent of these workers continued to be out of work (see figure below). This estimation is based on defining individuals as employed if they reported working for even a single day during the reference period of the past thirty days. If the definitional bar for employment is raised to 15 days of work in a month, the percentage of the February workforce that were unemployed post lockdown becomes 35 per cent.

Furthermore, an examination of the employment trajectories for this sample of workforce suggest that 26 per cent of the February workforce followed a no effect trajectory as they continued to remain employed both during and post the lockdown, 55 per cent followed a recovery trajectory having lost jobs during the lockdown but recovered them after the lockdown, another 15 per cent followed a no recovery trajectory and 5 per cent followed a lagged job loss trajectory. The lower proportion of the no effect trajectory in these data can be attributed to the higher proportion of informal workers in the sample compared to CMIE-CPHS.

Nearly 20% of the informal workforce was unemployed in Oct-Nov 2020



Sources and notes: Azim Premji University CLIPS. See Appendix section 3 for survey details.

A differential pattern of recovery between women and men is also observed in this survey. Out of every 100 female workers in February, 25 remained unaffected and 53 managed to recover their lost jobs. In effect, 78 were back or continued at work. Out of every 100 male workers, 28 were unaffected and 57 managed to recover employment, and so, 85 were back at work. About 17 per cent of female workers were not able to return to work having lost employment, while the corresponding number for men was 11 per cent. It is possible that higher impact on women workers, observed in random sample surveys like CMIE-CPHS and IWS is because women tend to be over-represented in informal

activities. On the other hand, CLIPS was mainly an informal worker survey, so both men and women are likely to be similarly impacted.

A logistic regression estimating determinants of recovery finds that female workers, urban workers, and older workers were significantly less likely to recover from a loss, after controlling for the industry of employment, education levels, household income and state where they worked. In particular, for women workers, being Muslim, married and from urban areas further exacerbated the likelihood of not recovering from employment loss (Nath, Mandela, and Gawali 2021).

3.3.2 / Lower caste workers were more vulnerable to job loss but also more likely to return to work

For this analysis, workers are broadly categorised into four caste groups - scheduled caste (SC), scheduled tribe (ST), other backward classes (OBC) and general category (GC). General category workers were much less likely to be impacted as a result of the lockdown relative to the socially marginalised castes. While 69 per cent of GC workers followed a no effect trajectory, the corresponding figures for SCs were 49 per cent, 55 per cent for OBCs and 63 per cent for STs. The relatively less drastic impact for STs (out of

all non-GC groups) could be partly explained by higher dependence on agriculture, which was least impacted in terms of employment loss.

Interestingly, having lost jobs, lower caste groups were more likely to recover relative to general category workers. While 17 per cent of GC workers followed a recovery trajectory, the corresponding percentage for SCs and OBCs was 27 and 30 per cent, respectively. The higher likelihood of job loss as well as recovery for these caste groups can potentially be explained by their involvement in relatively more informal and flexible work, characterised by ease of entry and exit.

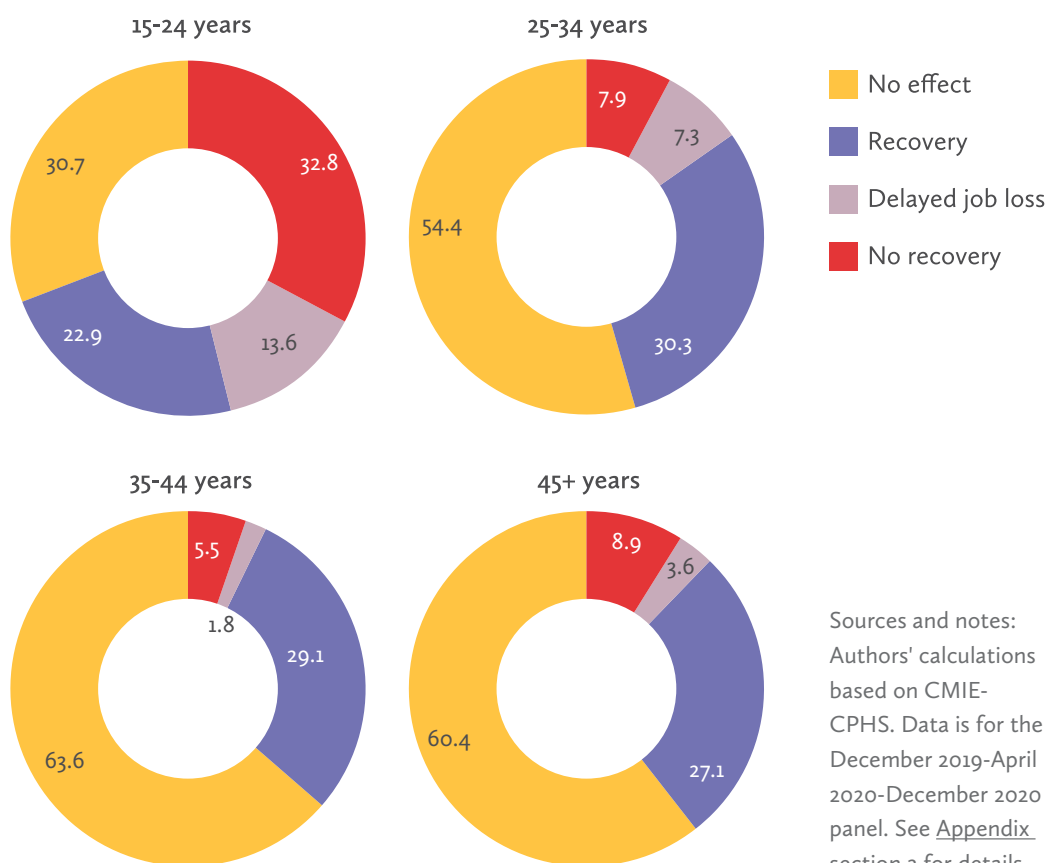
Across religious groups, Muslim workers tend to be relatively worse off, in terms of employment trajectories, although the difference is not substantial. Fifty-eight per cent of Hindu workers were unaffected during the lockdown, while the corresponding percentage for Muslims was 54 per cent. Furthermore, Muslims were more likely to experience a delayed job loss, with 8 per cent Muslims experiencing a delayed job loss, relative to 5 per cent Hindus. There was, however, no significant difference between Hindus and Muslims in terms of the recovery and no-recovery trajectories.

It is likely that individual attributes intersect to exacerbate some of these effects. For instance, among women, being married or being Muslim further increased the likelihood of not recovering from job loss (Abraham, Basole, and Kesar 2021). Similarly, in Azim Premji University CLIPS women, in general, were less likely to return to work, but Muslim women were even less likely to do so (see Box 3.4).

3.3.3 / Young workers were more likely to lose employment. More educated workers were less affected

The extent of impact and subsequent recovery varied significantly by age groups. Older age groups were more likely to remain employed during and after the lockdown, that is, follow the ‘no effect’ trajectory compared to younger age groups. For example, six out of ten workers in the 35-44 age group followed the no effect trajectory, compared to only three out of ten workers in the 15-24 age group (Figure 3.7). This indicates that younger workers may be more likely to be in employment that is relatively less secure. Further, firms faced with a contraction in demand and an economic downturn fire young workers first as they are ‘cheaper’ to lose, given their lower experience and lesser firm investment in their skills and knowledge (ILO 2020).

Figure 3.7 :
Young workers most vulnerable to job loss with no recovery



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the December 2019-April 2020-December 2020 panel. See [Appendix section 2](#) for details.

Younger workers were more impacted not just in terms of higher job loss, but also in terms of returning to work. Thirty three per cent of those in the 15-24 age group followed the no recovery trajectory, relative to 6 per cent in the 25-44 years group. At the same time, only 23 per cent of those in the 15-24 age group are following a recovery trajectory compared to 29 per cent in the 35-44 years age group. Together, this indicates that job losses among the younger workers were more permanent in nature. By the end of the year, only 54 per cent of the younger age group workers were back at work. In contrast, among the older workers, between 85 to 93 per cent were back in employment by December 2020. Young workers are constrained in terms of their job search abilities, access to networks and in skills which hinder their return to work (Verick 2009).

“ Younger workers were more impacted with higher job loss, but also weak recovery. Thirty three per cent of those in the 15-24 age group followed the ‘no recovery’ trajectory, relative to 6 per cent in the 25-44 years group. ”

As we saw in Chapter Two, unemployment rates among the youth, particularly, educated youth were already a matter of concern prior to the pandemic. In 2019, as per CMIE-CPHS, 44 per cent of 15-24- year old youth in the labour force were unemployed.⁹ The disproportionate impact of the economic shock on young workers implies that unemployment rates are going to rise even further. Indeed, in 2020, the unemployment rate among the 15-24 year old labour force rose to 53 per cent, with a large share of this increase coming from those reporting as unemployed but not looking for work, indicating the rise in the number of discouraged workers in the labour force. The exit is particularly high among graduate youth, and unemployment rates for this group of workers rose from 65 per cent to 77 per cent in 2020.

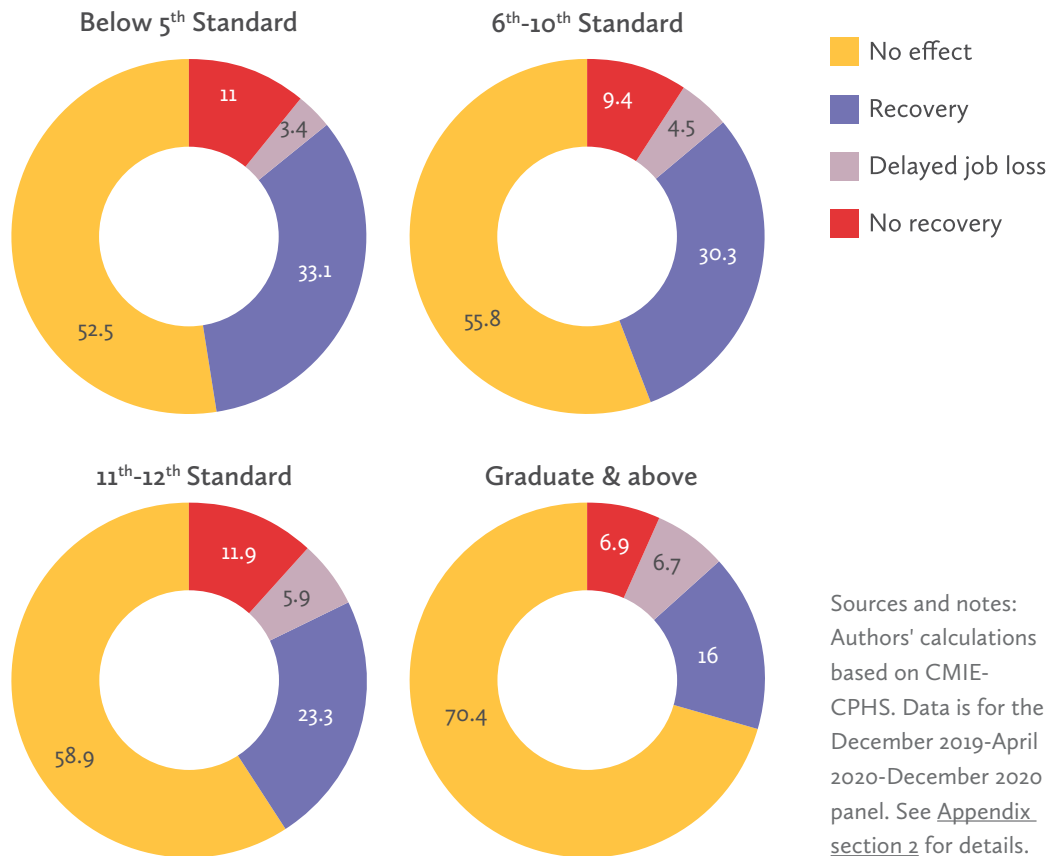
The large exodus of young workers is manifested in a change in the overall age structure of the workforce. In 2019, the young 15-24 year old workers comprised 10 per cent of the workforce. By the end of 2020, their share in the workforce had fallen to 8 per cent. For a young nation, the massive job losses coming on the back of an ongoing economic slowdown are likely to have scarring effects for the youth (Kahn 2010).

Education, expectedly, appears to be a crucial factor determining the extent of job loss. Those with higher levels of education, particularly graduates and above, were significantly less likely to lose employment as a result of the lockdown, as is evident in Figure 3.8 where the share of workers unaffected in terms of job loss increases as the education level increases. Among graduates, 70

per cent of workers followed the no effect trajectory. The corresponding share for those with education below the 5th Standard was 53 per cent. While job loss is high among the less educated, it is also the case that these workers also experienced higher rates of recovery. Thirty three per cent of the least educated

workers returned to work, having lost employment, compared to only 16 per cent of graduates. In fact, having lost employment, the least educated workers were three times more likely to return to work, than not. For graduates, on the other hand, the likelihood of returning to work was only twice that of not returning. Less-educated workers are more likely to be employed in sectors and arrangements that are more flexible. The increased precarity of this kind of work also implies more ease of entry, enabling a quicker return to employment. More educated workers, in relatively more secure employment, may not be as susceptible to job loss, but find it harder to return to work, if they lose employment.

Figure 3.8 :
Less educated workers more likely to lose work as well as return



3.3.4 / Workers from poorer households were more likely to lose work and more likely to recover

A dimension of vulnerability to employment loss that is related to, but distinct from caste and education, is household income. CMIE-CPHS collects information on households' income from various sources, including wages, rent, business income and transfers. Workers can be classified into groups based on their household income, pre-lockdown, that is, in December 2019. The first quintile comprises the poorest households, i.e. the bottom 20 per cent, and the fifth quintile, the richest (top 20 per cent).

There is a strong negative correlation between the income quintile of a worker and the likelihood of their employment being impacted by the lockdown. Workers in the top quintile were least affected in terms of employment loss. 75 per cent of workers

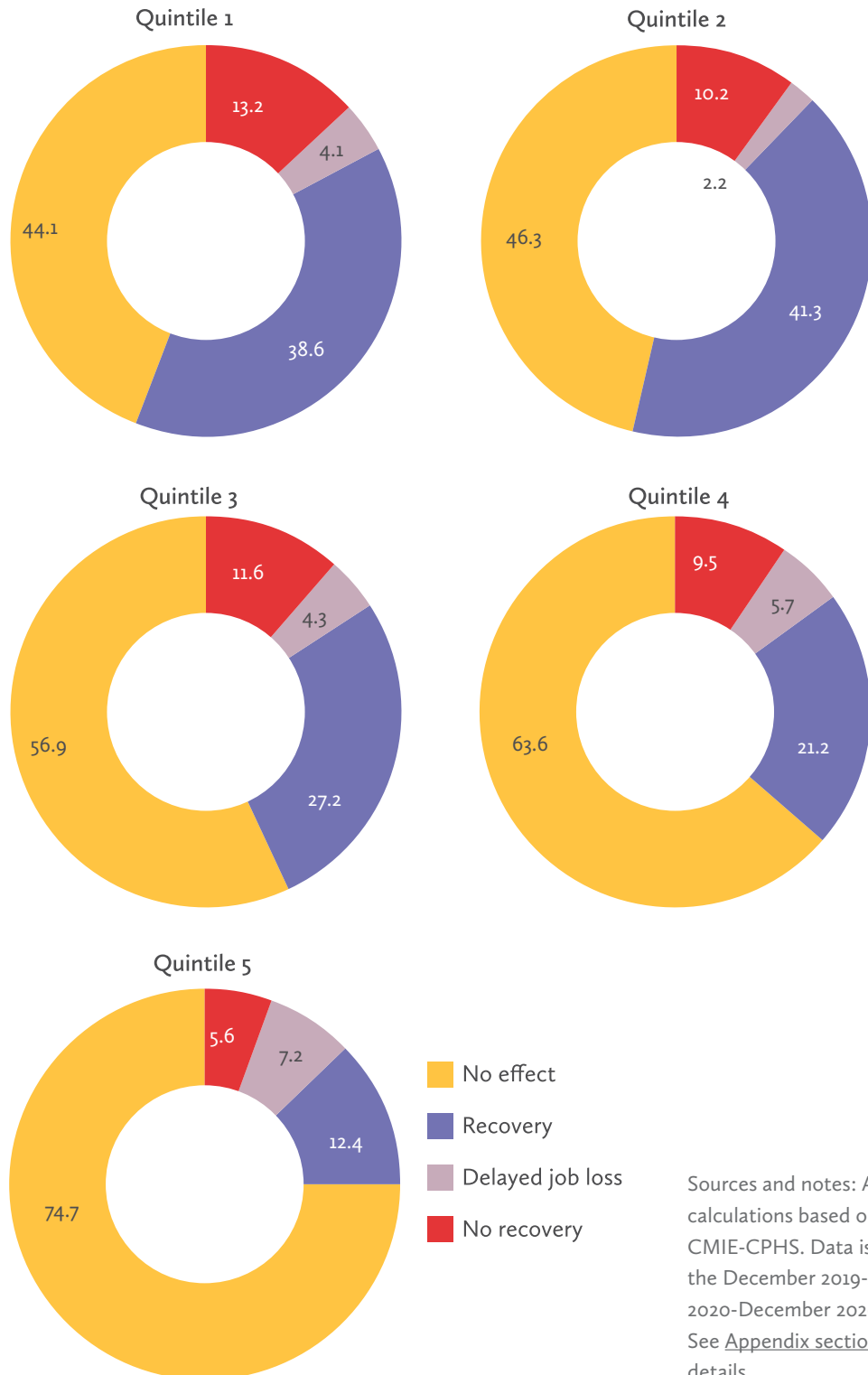
in the top quintile followed a no effect trajectory, and this share steadily declines as we move to lower quintiles from 64 per cent for those in the 4th quintile to 44 per cent in the lowest quintile (Figure 3.9). This can partly be attributed to the fact that the high paying jobs are usually also the most secure. This indicates that different forms of precarity - both in terms of job security as well as income levels - often exist together, making a certain section of the population more vulnerable to losses on multiple fronts.

Similar to what we see in the case of caste and education, where disadvantaged workers (marginalised communities or less educated) were more likely to return to work compared to their more privileged (higher educated, general category caste) counterparts, here too, we see a similar relation. Workers in the lower quintiles were more likely to return to employment having lost work during the lockdown.

Thirty-eight per cent of workers from the lowest quintiles returned to work compared to only 12 per cent in the highest quintile. The nature of employment for low-income workers is likely to be characterised by easier exit and entry. The relatively higher impact on low-income workers but their higher return to employment has meant that, in

effect, the share of workers out of employment at the end of the year (that is, the no recovery trajectory and the delayed job loss trajectory), across income quintiles, is more or less similar. About 17 per cent of workers in the lower quintiles and a similar share of 15 per cent from the higher quintiles were out of work in December 2020.¹⁰

Figure 3.9 :
Employment trajectories across household income quintiles



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the December 2019-April 2020-December 2020 panel. See [Appendix section 2](#) for details.

3.4 / MSMEs distress and employment

At the end of our analysis of the employment effects of the pandemic, we return to the nationwide lockdown and its impact on the Micro, Small, and Medium Enterprises (MSME) sector. As we have seen in [Chapter Two](#), the overall scale of production in the India economy remains small, with nearly 80 per cent workers employed in enterprises with less than 10 employees. Even if agriculture is removed from consideration, the MSME sector accounts for nearly 110 million workers, a substantial fraction of India's non-farm workforce. The bulk of this employment (75 per cent) is generated at the micro end of the spectrum, in firms that employ up to three workers (Basole and Chandy 2019). Low cash reserves and resulting dependence on day-to-day transactions, as well as dominance in trade and other services, make these firms very vulnerable to containment measures as well as supply-chain disruptions. In turn, firm closures in this segment have immediate welfare implications because the workforce is either self-employed or in precarious forms of wage work without access to social protection through employers.

The largest lockdown survey of MSMEs was conducted by the All India Manufacturers' Organisation (AIMO) in association with nine other industry associations (24–30 May 2020). In a sample of over 42,000 self-employed and micro-entrepreneurs, it found that a third were on the verge of closing down and more than 70 per cent reported having fired workers (see Unni (2020) and references therein).¹¹ Rathore and Khanna (2021), in their SWI 2021 Background paper, present results from a detailed survey of 400 firms conducted in May-June 2020 across 20 States and Union Territories. In addition they report findings

from qualitative interviews with entrepreneurs, representatives of business associations and administrators. The study finds that by the end of May 2020 capacity utilisation fell from about 75 per cent before the crisis to 11 per cent. Loss of sales amounted to about 17 per cent of past year's revenues on average but the impact was more severe on smaller firms. Microenterprises lost 20 per cent of annual sales, medium and large enterprises lost about 11 per cent. There was a massive 55 per cent decline in the pre-Covid workforce and here again, the smaller firms were worse off. Microenterprises could retain only 37 per cent of their workforce, while for large enterprises this number was 57 per cent (see Figure 3 in the paper). Using regression analysis the authors show that higher distress levels for microenterprises relative to larger firms persist even after controlling for firm and owner characteristics as well as geographic location.

Firm closures in the MSME segment have immediate welfare implications because the workforce is either self-employed or in precarious forms of wage work without access to social protection through employers.

Job losses in the MSME sector manifested as an 'infantilization' or shrinking of already small firms. For example, in a four-wave panel survey of 1,461 microenterprises, conducted between May 2020 and January 2021 by the Global Alliance for Mass Entrepreneurship (GAME) and LEAD at Krea University, Buteau (2021) finds that over the course of the year, the share of 'solopreneurs' (one person firms) in the sample increased from 24 per cent to 30 per cent, while share of larger firms (more than 5 workers) shrank from 26 per cent to 20 per cent (see Figure 1 in the paper).¹² Immediate impact on women-owned microenterprises in particular, is also studied in another survey conducted by

researchers at LEAD at in collaboration with IWWAGE. This survey covers 2000 women-led non-farm microenterprises across four states (Bihar, Odisha, Madhya Pradesh and Chhattisgarh) interviewed in the months of June-July 2020. It finds an average drop of 72.5 per cent in incomes during the lockdown, consistent in magnitude with many other lockdown surveys. Further 1 in 3 firms were temporarily or permanently closed. Just over 10 per cent were permanently closed. However, the survey also found that 62 per cent of entrepreneurs of temporarily closed businesses and 64 per cent of operational ones were confident of recovery. However, knowledge of policy support measures and inclination to avail of such support were weak. In this context, we point readers to an online dashboard on Covid-19 impact on microenterprises hosted by GAME.¹³

CPC analytics in an online survey of business owners and employees in the state of Maharashtra found that of all sectors, manufacturing firms were the worst hit by the lockdown.¹⁴ Around 60 per cent of manufacturing firms with less than 50 employees could retain labour without additional income for one month. While the concerns of the smaller manufacturing firms mainly revolved around immediate cash and credit needs, those of the larger firms revolved around a fall in demand and disrupted supply-chains.

FICCI-IAN surveyed 250 start-ups and 27 investors during the lockdown month of April 2020 and found that 12 per cent of start-ups could not operate during lockdown, while an additional 60 per cent reported disrupted operations.¹⁵ Manufacturing firms were the hardest hit by the lockdown, with 46 per cent reporting a complete shut down in their operations. Further, nearly one-fifth had only one month's worth of cash reserves in order to cover the fixed costs and only 14 per cent reported not having to undertake cost-reduction measures during the pandemic. Another 29 per cent of respondents reported that they would have to

lay-off employees if the lockdown continued till May 2020 (which it did). Moreover, 65 per cent of pre-lockdown pitches had been either put on hold or the investors had not got back to the startups. Furthermore, 10 per cent of deals were canceled and only 8 per cent signed the agreement and received the funds.

NCAER-DCVTS in the 3rd round of the survey found that 63 per cent of businesses either totally closed or suspended operations during the lockdown months of April-May, 2020.¹⁶ Moreover, only 22 per cent could retain all their workers while 39 per cent could not pay any salaries. Post the lockdown by June, about 38 per cent of the closed businesses had reopened. The recovery, however, was partial, with 70 per cent reporting large income losses and 43 per cent reported indebtedness.

Even though the bulk of the workforce in the microenterprise sector is informal and lacks formal access to social protection, it is worth noting some anecdotal evidence on how micro-employers tried to retain workers during this time of stress or how they negotiated the situation when they could not do so (see Box 3.5).

Box 3.5 : Informal safety nets in the MSME sector

Buteau (2021) recounts the following stories from their survey of 1,431 firms.

Case 1:

Vengadesh is a small business owner who employs close to seven people in his welding workshop in the small town of Tirunelveli in Tamil Nadu. All of them have worked with him for over a decade and four of these are migrants. On being asked how COVID has impacted his business, he said, “Despite this situation, I did not consider laying off my workers. Instead, I had a conversation with my workers about their preferences. Based on that discussion, I continue to pay two of my staff members who were willing to come in for work and retained the others without salary.”

Case 2:

Satish owns a small paint workshop in Trichy, Tamil Nadu. Despite the downturn in business caused by the COVID-19 pandemic, he still continues to pay

his four employees on a weekly basis. He goes on to state that “My staff has been working with me for close to four years. How could I suddenly abandon them in tough times? I dipped into my savings to pay their dues and asked them to come to work once the business resumes operations.”

Case 3:

Nashim runs an electrical repair shop in New Delhi. He had employed four staff and had to lay off everyone. Was it difficult? “For two years we have been eating together - just like friends. With the lockdown, my business was out of any work and had zero cash inflow. How would I pay them a total of ₹20,000 for their work? It was impossible. All of them understood my situation and migrated back to Bihar.” If the demand goes up, we enquired, won't he face a workforce shortage? “My workers went with a plan to come back post Diwali for work, hoping business restarts by then. But I can not say anything for certain”.

3.5 / Conclusion

The immediate impact of the nationwide lockdown in April and May 2020 was, as expected, devastating for the labour market and for informal workers in particular. More disturbingly, the recovery from the lockdown shock while being quick, was incomplete. As late as December 2020, a substantial proportion of the pre-pandemic workforce was out of work. Since then, the resurgence of infections and the

return of containment measures may have only worsened the situation, though data are not available at time of writing. The impact on the labour market, however, went far beyond just a loss of employment. In the next chapter we show that there was increased informalisation during this period accompanied by a significant loss of earnings, for both, those who lost their jobs and those who retained employment.

Chapter Appendix : On the question of measuring women's paid work

According to the CMIE-CPHS, the female workforce participation rate in 2017-18 was 10.5 per cent. For the same period, the PLFS estimate was 22 per cent. For men, in contrast, the estimates were similar, 71 per cent in PLFS, and 69 per cent as per the CMIE-CPHS. The differences are similar in other years. Therefore, the CMIE-CPHS consistently estimates the female WPR at 50 per cent of PLFS. Given the differences in the levels of WPR for women, cross-survey comparisons, at least in level terms, are not possible. But it is still useful to analyse the changes in the levels within each of these surveys to understand the extent and nature of the impact of the economic shock on women.

Assuming representative samples and appropriate weighting, the differences could be explained by variations in enumerator training, extent of probing, identity of the respondent, and type of questions asked. Several studies have investigated the issue

of measuring women's paid work either through a critical examination of existing secondary data, or highlighting the need for sensitising enumerators, changing the kind of questions asked, or who they are asked to (Deshmukh et al. 2019; Deshpande and Kabeer 2019; Mondal et al. 2018; Sudarshan 2014). The type of work that women do may also be inherently more difficult to capture, for example by being part-time, irregular, interspersed with household work, or unpaid (in family enterprises). The table compares the distribution of individuals in the working-age population in CMIE-CPHS (2017) against the PLFS (2017-18) by nature of activity. For men, the two distributions are similar. According to PLFS, about 37 per cent of the working-age population of men are in self-employment, compared to 33 per cent in CMIE-CPHS, a difference of about 4 percentage points. The share of salaried workforce is also similar across the two surveys for men.

Distribution of working age population across activity statuses, CMIE-CPHS and PLFS	PLFS (2017-18)		CMIE-CPHS (2017-18)	
	Males	Females	Males	Females
Own account worker	29.7	3.67		
Employer	1.7	0.1		
Unpaid Worker	5.5	5.84		
(Total SE)	(36.8)	(9.6)	Self-employed	33.0
Salaried	16.6	4.59	Salaried	14.8
Casual wage worker	17.2	5.51	Casual wage worker	21.5
Unemployed	4.8	1.36	Unemployed	3.7
Student	14.9	11.18		
Domestic work	0.9	60.36		
Other	8.8	7.4		
(Total out of labourforce)	(24.5)	(78.9)	Out of labourforce	27
				87.01

Sources and notes: CMIE-CPHS, PLFS 2017-18. CMIE-CPHS data corresponds with the PLFS survey period of July 2017 to June 2018. Refer to Abraham and Shrivastava (2019) for details. Salaried workers in CMIE-CPHS includes temporary and permanent salaried.

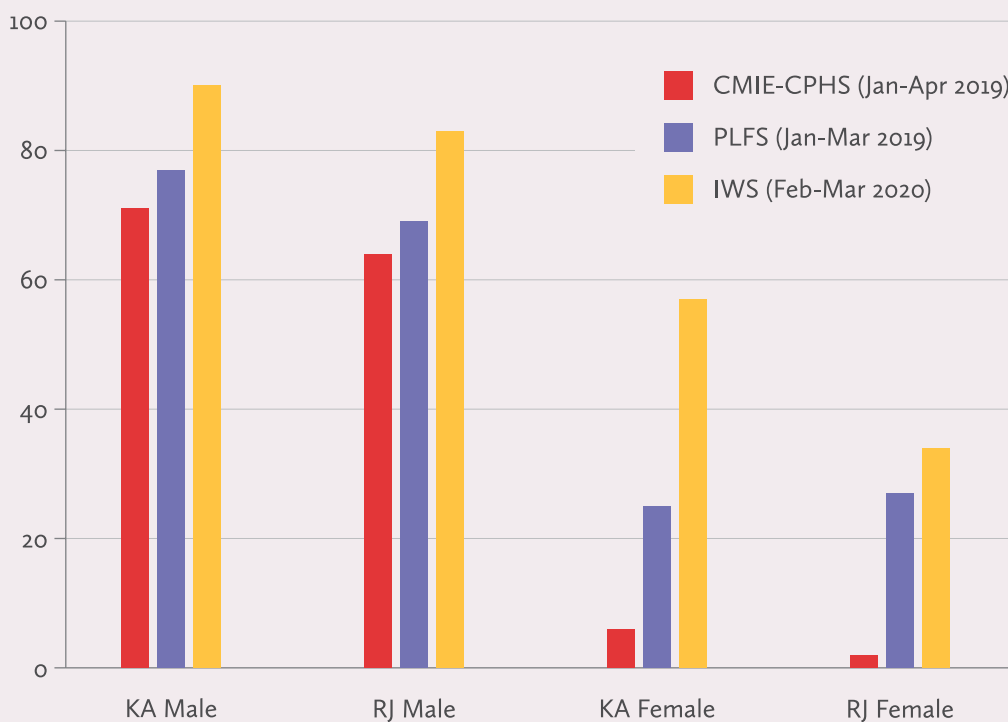
However, for women, we see large divergences in the distribution. According to PLFS, self-employed workers (comprising unpaid workers, employers and own-account workers) account for nearly 10 per cent of working-age women. The CMIE-CPHS puts the number at 3 per cent. CMIE-CPHS does not distinguish between unpaid workers, own account workers and employers within the category of self-employed. But it is possible that failure to capture unpaid work in family enterprises (which is the predominant activity for self-employed women, as per PLFS) explains at least part of the underestimation. However this cannot explain the entire difference because the proportion of women in salaried work are also lower in the CMIE-CPHS data.

What are the implications of all this when we try to measure the impact of the pandemic on women workers? To the extent that women who are more affected by the economic shock are also those that the CMIE-CPHS does not capture as

being employed, it is possible that our numbers of job loss among women may be under-estimates. The reverse may also apply, that is, if women that CMIE-CPHS does not capture are those who are least affected by job loss, then job loss numbers may be over-estimates. If recovery of work among women occurs into those activities that CMIE-CPHS does not capture, then recovery will be underestimated. Despite these caveats, however, we believe that estimating the impact of the shock on women workers identified in the data, and their employment trajectories remains a useful exercise.

One recent survey that tries to capture women’s paid work more accurately is the India Working Survey (IWS) conducted by researchers at Azim Premji University, Indian Institute of Management, Bangalore, and the University of Western Australia with support from the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE).

Comparing employment rate across surveys



Sources and notes: CMIE-CPHS (wave 1 of 2019), PLFS (2018-19, first quarter), India Working Survey, round 1. We construct comparable definitions of employment for all three surveys. See [Appendix Section 2](#). Data pertains to individuals aged 15 years and above.

This is a random survey carried out in Karnataka and Rajasthan. IWS uses a number of approaches to address standard oversights in measuring women's paid work. Female respondents are interviewed by female enumerators. Men and women are asked detailed questions about their activity status in the week preceding the interview. These questions specifically ask whether an individual is engaged in each type of employment (own account work, unpaid work, salaried work, daily wage work) rather than leaving it to the person to list their activities. It also allows individuals to list multiple activities that they engage in, for example, domestic chores alongside unpaid work in the family enterprise, or wage work.

For instance, the respondent is asked whether in the last week, they did "any kind of business, farming or other self-employed activity to generate income, even if only for one hour?". Irrespective of their answer to this question, they are then asked, if in the last week, they "assisted without pay in a business/farm/livestock of a household or family member even if only for one hour"? In a similar vein, the respondent is asked whether they engaged in salaried work or casual wage work in the last week. The intention of this detailed step by step questioning of the kinds of work individuals engaged in over a week is to make sure that all kinds of employment activities are captured.

Although the three surveys (PLFS, CMIE-CPHS and IWS) do not use the same questions to arrive at employment status, we have tried to approximate

the employment definitions across surveys as closely as possible. See [Appendix Section 4](#) for more details. Here we show estimates of the WPR based on a definition that considers an individual employed if they reported working for eight hours a day on average in market activities, i.e. a strict definition of being employed.

The estimates for the male WPR vary by 10-20 percentage points across the three surveys with PLFS reporting a rate 5-6 percentage points over CMIE-CPHS and IWS being 13-14 percentage points higher than PLFS. These differences are worth investigating further. However, much larger differences emerge when comparing female WPR across the three surveys. For Karnataka, the PLFS estimate is 20 percentage points larger than the CMIE-CPHS and the IWS estimate is 30 percentage points over PLFS. For Rajasthan the divergence between PLFS and IWS is less striking (7 percentage points) but that between CMIE-CPHS and PLFS is even larger than for Karnataka (25 percentage points). Thus the CMIE-CPHS and PLFS divergence that we saw at the national level manifests even more sharply within states.

The female WPR for Karnataka as reported in IWS is 57 per cent, a far cry from the numbers we are used to seeing for women's participation in paid employment in India. The detailed questioning alongside self-reporting of statuses (rather than a proxy) may explain the higher levels of WPR for women and men compared to other surveys.

Endnotes

¹ See [Appendix Section 2](#) for details of this sample.

² Google Mobility Data reports changes in movement over time across six different categories of places - retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential. Changes for each day are reported vis à vis the corresponding day in the baseline week, where the baseline is the median value for the weeks from January 3rd 2020 to February 6th 2020. The Mobility Index is calculated as a simple average of the daily reported numbers for retail and recreation, groceries and pharmacies, parks, transit stations and workplaces for every day for every state for each month.

³ As compared to the corresponding non-pandemic period or what we refer to as the baseline period (i.e., between Sept-Dec, 2018 and Sept-Dec 2019) this movement in and out of the workforce is relatively higher. See [Appendix Table 1](#) for baseline estimates.

⁴ See [Chapter One](#) and [Appendix Section 4](#) for details of this survey and the sample.

⁵ An individual is identified as employed, if in the reference week of the survey, they worked for at least 20 hours in the week collectively across all kinds of activities.

⁶ The corresponding numbers in CMIE-CPHS, quoted earlier, were 46 per cent for women and 7.6 per cent for men. However, the two surveys are not comparable due to differences in sample size and questions asked.

⁷ See [Appendix Section 2](#) for details on the creation of this panel.

⁸ As mentioned earlier, CMIE-CPHS estimates of women's WPR is lower compared to PLFS estimates. Given this, it is possible that certain kinds of work, particularly ones that women engage in and are included in PLFS estimates, are not captured by CMIE-CPHS estimates. If employment loss particularly impacts this category of work, it is

likely, then that CMIE-CPHS underestimates the extent of employment loss among women.

On the other hand, if recovery from loss is into this kind of work, then, it is likely that CMIE-CPHS will not capture these women workers who have experienced an employment recovery, thereby overestimating the employment loss among women.

⁹ CMIE-CPHS categorises an individual into 'Unemployed, willing and looking for a job' and 'Unemployed, willing but not looking for a job'. The unemployment rate including both of these categories is referred to as the 'greater unemployment rate'. The unemployment rates here include both categories unless otherwise specified.

¹⁰ We construct the same trajectories of employment for the same period in the previous year. [Appendix Table 2](#) shows the distribution of trajectories by each of the above dimensions- gender, age, caste, religion and region. The extent of job loss and no recovery for the same period in the last year is well below that seen now.

¹¹ "Nearly 35% MSMEs close to winding up: AIMO", CMIE: Economic Outlook, 2 June, 2020, <https://www.cmie.com/kommon/bin/sr.php?kall=warticle&dt=2020-06-02%2015:40:07&msec=706>

¹² This is a stratified, convenience sample representing industries in manufacturing, services and trade. Bulk of the microenterprises in the sample are situated in tier-3 cities or rural areas.

¹³ <https://dashboard.massentrepreneurship.org/>

¹⁴ <https://www.financialexpress.com/economy/cpc-survey-paints-bleak-economic-outlook-for-maharashtra/1928464/>

¹⁵ <http://ficci.in/spdocument/23280/FICCI-IAN-Survey-Covid-19-Start-ups.pdf>

¹⁶ https://www.ncaer.org/uploads/photo-gallery/files/1593691078NCAER_Press_Release_July_4_2020.pdf

4 Informalisation and earnings losses

4

Informalisation and earnings losses

Loss of employment, described in the previous chapter, is only one of three distinct impacts that the pandemic has had on workers. In addition, those who returned to work have often had to make do with more precarious employment arrangements (increase in informality). And, for many of those who remained employed or returned to work, earnings have fallen. In this chapter we investigate these two dimensions of impact. Once again, we rely primarily on CMIE-CPHS data supported by IWS, Azim Premji University CLIPS, and other smaller surveys.

Before proceeding further, it is worth noting what the pandemic has done at the macroeconomic level to the labour share of income in the economy. Data on labour earnings are available from CMIE-CPHS for the second quarter of 2020-2021 (July-August-September). We find that aggregate GDP in nominal terms fell from 49.2 lakh crores in Q2 of 2019-20 to 47.2 lakh crores in Q2 of 2020-21. Since the workforce also fell between these two periods, GDP per worker remained more or less unchanged (₹41,126 versus ₹41,115 per month). Average monthly nominal earnings however fell sharply from ₹13,385 to ₹11,085. As a result the labour share of GDP (i.e. average monthly earnings divided by GDP per worker) fell by over 5 percentage points from 32.5 per cent in Q2 of 2019-20 to 27 per cent in Q2 of 2020-21. This is a very large and rapid, if temporary, change. To keep this in perspective, note that the previous steepest drop was by 6 percentage points (38 per cent to 32 per cent) over eight years between 2000 and 2008) (ILO 2018).¹

4.1 / Decomposing aggregate income loss

Earnings data are available from CMIE-CPHS till the month of October 2020. For the rest of the analysis presented in this chapter, we have taken average earnings over a two month period for September and October.² The reason for excluding the earlier months (April-August) is that we wish to focus on the medium term impact rather than the immediate impact of the lockdown. Further, selecting the September-October period also allows us to align the analysis with Wave 3 of the CMIE-CPHS employment data that we use for the employment numbers.

We start by asking how much of the aggregate loss of earnings between 2019 and 2020 is accounted for by loss of employment and how much by a reduction in incomes for the employed. The overall WPR changed from 40 per cent prior to the pandemic (September-October 2019) to 39 per cent as of most recent data available (September-October 2020). The average earnings of workers fell from ₹15,500 to ₹12,500 in the same period.³ Since WPR had almost completely returned to pre-pandemic levels while earnings per worker remained suppressed, not surprisingly, a decomposition analysis reveals that 90 per cent of the decline in aggregate incomes between was due to reduction in earnings of workers who were employed and only 13 per cent due to the loss of employment.⁴ That is, even as most workers were back in employment over the course of twelve months, for many this was accompanied by a reduction in earnings.

Figure 4.1 :
Decomposing
the aggregate
loss in
earnings
during the
pandemic



Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September and October of 2019 and 2020. Earnings includes individual's income from wages and salaries, and income from business for the self-employed. See [Appendix Section 2](#) for details.

But the story is very different across different types of workers. CMIE-CPHS broadly categorises workers into permanent salaried, temporary salaried, self-employed and daily wage workers. As we saw in Chapter Two, these categories correspond well to the PLFS-NSSO categories of formal regular salaried, informal regular salaried, self-employed and casual wage. For daily wage workers the experience has been similar to the overall picture - a broad recovery of employment but a large fall in average earnings with the latter accounting for about 85 per cent of the loss in earnings for this category of workers (Figure 4.1).

For the self-employed, the employment loss term in the decomposition is positive indicating that the share of such workers increased post-pandemic (which we confirm in subsequent analysis). However, earnings declined substantially for such workers. For the temporary salaried, decline in average earnings and the loss of jobs contributed more or less equally to the overall decline in incomes, indicating that these types of workers are vulnerable on both fronts. Finally, for permanent salaried workers, the majority of earnings loss was

The labour share of GDP fell by over 5 percentage points from 32.5 per cent in Q2 of 2019-20 to 27 per cent in Q2 of 2020-21.

due to loss of jobs. Decline in wages accounted for only 18 per cent of the aggregate earnings loss among this group. This suggests that rather than decreasing wage rates, employers may choose to fire certain employees (such as younger workers). Further, having lost a job, permanent salaried workers have a lower chance of returning to employment unlike other kinds of workers. This resonates with the findings from Chapter Three where temporary salaried and self-employed workers who lost work were more likely to return to employment, unlike their permanent salaried counterparts.

Having addressed the issue of employment loss in Chapter Three, we now investigate the fall in labour earnings for workers who are employed. These losses can occur because of falling wages rates and self-employment incomes or because workers are transitioning into less productive sectors and occupations or both. We look at each in turn.

4.2 / Increased informality during the pandemic

Did workers who lost work during the lockdown months return to the workforce under more precarious circumstances, for example, accepting casual wage work instead of salaried employment, or falling back on self-employment due to a lack of salaried jobs? Did they also crowd into fallback sectors such as agriculture or petty retail which usually absorb surplus labour that is not employed elsewhere? In this section we address whether informalisation in terms of employment arrangements has taken place in the labour market. Section 4.4 addresses the informalisation by sector of employment.

One indication, at the aggregate level, that such transitions did occur is provided by the change in the overall composition of the workforce. Compared to the pre-pandemic period there was a reduction in the proportion employed in salaried employment, with a corresponding rise in self-employment of about 3 percentage points (from 50 to 53 per cent). However, simply studying the overall structure conceals the nature of underlying transitions, making it important to study individual level transitions during the pandemic (Kesar 2020). This is possible with panel data from the CMIE-CPHS.

To do this, we map the transitions in the employment arrangements for those workers who were employed in both periods, i.e. September to December 2019 and September to December 2020 (wave three of CMIE-CPHS, see [Figure 1.1](#)). Additionally, we also follow new entrants into the workforce, that is, those who were not employed prior to the pandemic, to see which type of employment they entered. By comparing the same months in different years, we account for any seasonal variations. Further, we compare these

transitions over the same months in the previous two years (employment in 2019 against employment in 2018) to understand to what extent patterns observed during the pandemic year differ from previous years.⁵

4.2.1 / Transitions in employment arrangements

The transitions are presented as matrices or tables, where each row represents the pre-pandemic employment arrangement and each column represents the post lockdown employment arrangement as well (Table 4.1). The cells can therefore be interpreted as follows: for every 100 workers who were in a particular employment arrangement prior to the pandemic, how many ended up in another kind of employment arrangement, and how many remained in the same kind. The diagonal represents the percentage of workers who continued in the same employment arrangement, while the off-diagonal elements indicate the proportion that transitioned to another employment arrangement. Since some transitions are expected even during normal times, we compare these numbers to the transitions in a baseline period, that is, from September-December 2018 to September-December 2019.

First, we look at the diagonal shares in the transition matrix, that is the share of workers in each employment arrangement who remain in that arrangement between two time periods. Note that, even in normal times, a significant share of workers transition across arrangements, indicating a general volatility in the labour market. However, here we wish to emphasise that across all arrangements, compared to baseline we see fewer workers able to remain in the same kind of employment during the pandemic (Table 4.1). Self-employed work saw the most 'stickiness' with nearly 75 per cent of self-employed workers remaining self-employed in both periods. But this was still below what is seen during baseline (82 per cent). During normal times,


Table 4.1 :
Transitions in
employment
arrangements,
2019 to 2020
and 2018 to
2019

Employment arrangement in 2020

Employment arrangement in 2019	Employment arrangement in 2020				
	Casual/daily wage worker	Self employed	Temporary salaried	Permanent salaried	Overall (2019)
Casual/daily wage worker	57.9	33.1	5.6	3.4	27
Self-employed	15.0	75.5	4.1	5.5	53
Temporary salaried	22.5	31.3	35.6	10.7	9
Permanent salaried	9.8	34.1	8.5	47.6	11
Overall (2020)	27	55	8	10	100

Employment arrangement in 2019

Employment arrangement in 2018	Employment arrangement in 2019				
	Casual/daily wage worker	Self-employed	Temporary salaried	Permanent salaried	Overall (2018)
Casual/daily wage worker	70.8	23.3	4.9	1.0	29
Self-employed	11.5	81.8	3.5	3.2	50
Temporary salaried	12.9	23.0	54.2	9.9	9
Permanent salaried	2.3	15.9	5.3	76.5	12
Overall (2019)	29	50	10	11	100

Legend : 
High Medium Low

Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2018, 2019 and 2020. See [Appendix Section 2](#) for details of the sample. The 2018-2019 panel is different from the 2019-2020 panel. Hence overall distribution of the workforce in 2019 will be slightly different between the two panels.

temporary salaried workers see among the highest levels of transition into other arrangements. During the Covid period, this was further exacerbated. Only 36 per cent of temporary salaried workers in 2019 remained in that employment arrangement into 2020 (compared to 54 per cent during baseline). 31 per cent of temporary salaried workers moved into self-employment, and 23 per cent became casual wage workers. To gain some more insights into the working life of a temporary salaried worker, we provide a first person account in Box 4.1 of

a worker in an automobile factory interviewed by Yadav (2021).

Notably, in the most secure of employment arrangements, permanent salaried, which typically does not have much flux (77 per cent remain in the same status during baseline), nearly half moved to other kinds of employment between 2019 and 2020. The massive exit of workers from permanent salaried work is indicative of the impact of the shock.

Box 4.1 : Hearing from a 'temporary salaried' worker

The CMIE-CPHS divides salaried employment into permanent salaried and temporary salaried. Pre-Covid, the temporary salaried accounted for 10 per cent of the workforce with the predominant occupations being support staff, industrial workers and non-industrial technical employees. The experience of these temporary workers, both during the lockdown and afterwards indicates that this kind of work is particularly insecure since not only did a large share lose work during the lockdown, they were also unable to return to work in the months after, unlike daily wage workers, and self-employed who lost work but were able to return. In her background paper, Yadav (2021) shares her interview with a temporary worker in a multinational automobile factory throwing valuable insight on the nature of this employment and the challenges these workers face.

I am 25 years old. I work as a contract worker in Haryana. The factory where I work – one of India's largest automobile factories – terms contract workers like me as a 'Temporary Worker -TW 1, TW 2' and so on till TW 3, based on how many times it has employed us earlier in the previous two to three years.

Earlier, I had worked as 'Temporary Worker TW 1' in the same factory four years back, in 2016. Then, after a seven month term, the company removed me, and the whole batch of recruits who had joined along with me, saying it may recruit us again later as 'Temporary Worker 2', after a gap of a few months. The company refers to us as 'Temporary workers', but we do all the assembly and main work. At one time, it hires for a seven month contract, then it lays us off for a gap, and it may call us again a second or third time with gaps in the middle.

This factory (belonging to a multinational corporation) in this industrial township, pays ₹21,000 a month. This is nearly twice what other firms pay in the area, though it is less than one-third of permanent workers' pay. But the tenure is so short. When one applies for jobs in this area after this seven month TW stint, the new employer will usually pay around ₹8,000-10,000. Then, this drastic drop in wage feels odd, uncomfortable. Also, one wonders, what is the point if one earns one lakh in seven months and spends it in the next 4-5 months without a job? It would be better to keep looking for a job where at least one can find employment for a year, rather than remain stuck in this seven month system.

This is because in our monthly pay of ₹10,300, a component of ₹2,000 is given only if we stayed present and worked the whole month, it is shown as an 'extra'. If we take two days' leave in a month, we lose ₹3,000, which is about a third of the monthly pay. So, there is no scope to fall ill, or if anyone in your family falls ill. When my husband was in the hospital, I was away from work almost 12-13 days, and that month, I earned only ₹2,000 or so. After the lockdown, the contract has stopped even providing a pay-slip, citing the pandemic.

In-depth interviews such as the one above reveal that temporary salaried workers often have to negotiate the responsibilities and workload of a permanent salaried worker, while at the same time having an insecure job with unpredictable earnings. See Nayanjyoti and Amit (2018) for more on this system. During the pandemic, these vulnerabilities increased.

Nearly half the permanent salaried workers who usually have the most secure jobs moved to informal work during the pandemic.

Flows of workers between employment arrangements can be depicted using ‘alluvial graphs’ shown in Figure 4.2. As can be seen, during the Covid period, self-employment saw a large influx of workers from other employment arrangements. For instance, about 34 per cent of permanent salaried workers were now in self-employment. This is twice what is normally seen in the baseline. A similar share, about 30 per cent, of temporary salaried and daily wage workers moved into self-employment into 2020. Again, during the same time in our baseline period (2018 to 2019), only about 20 per cent of such workers had moved to

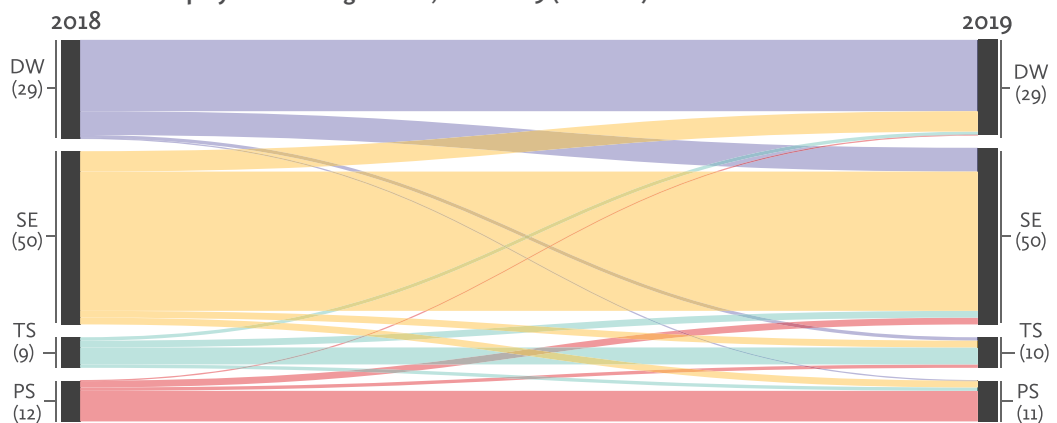
self-employment. Clearly, self-employment emerged as fallback employment in the face of massive job losses during and after the lockdown.

Thus, it is evident that employment recovery is characterised to a significant extent by increased levels of informality. This indicates a paucity of labour demand since both self-employment and casual labour markets typically expand to accommodate an excess supply of labour, via income and work-sharing norms (Ghose 2016). Other analyses also confirm an unabated transition to informal work post-lockdown (Kumar and Kumar 2021; World Bank 2020).

Figure 4.2 :
Informal employment arrangements saw a larger influx of workers in the pandemic period

Key
DW : Casual/
Daily-wage
worker;
SE : Self-
employed;
TS :
Temporary
salaried;
PS :
Permanent
salaried

Transitions in employment arrangements, 2018-2019 (baseline)



Transitions in employment arrangements, 2019 to 2020



Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September-December (wave 3) of 2018, 2019 and 2020. See [Appendix Section 2](#) for details. Numbers in brackets indicate the percentage share of that employment arrangement in total workforce in that year. The 2018-2019 panel is different from the 2019-2020 panel. Hence overall distribution of the workforce in 2019 will be slightly different between the two panels.

Finally, there also seems to be a clear ordering in terms of who moves into what. Among permanent salaried workers, the predominant transition is into self-employment, whereas, for temporary salaried workers, the larger share moves into daily wage work. Given that daily wage work is the least paid occupation, this suggests that even in transitions, initial hierarchies matter in determining the kind of transition.

Notably, the degree of stability and transition also varies by region, that is, rural and urban (data not shown). While the percentage of those who continued in self-employment was 80 per cent in rural areas, the percentage was 65 per cent in urban areas. These percentages in the non-pandemic baseline period were 83 and 72 per cent. In other words, not only is urban self-employment relatively more unstable, this instability (and the difference between rural and urban areas) increased during the pandemic period - from a difference of 8 percentage points between rural and urban areas in the non-pandemic period to 15 percentage point. It is likely that agriculture absorbed much of the transitioning workforce, and the absence of such a fallback sector is reflected in the higher volatility in urban areas. We examine this more closely when looking at sectoral transitions.

Salaried work, unlike self-employment, saw more flux in rural areas than in urban areas. While salaried work was equally stable in rural and urban areas in the baseline period, during the pandemic period, only 41 per cent of rural permanent salaried (compared to 51 per cent of urban permanent salaried) were able to retain their employment arrangement. Furthermore, the proportion transitioning into casual wage employment from salaried employment is also higher in rural areas than in urban areas.

Further, as we saw in Chapter Three the flux is not just limited to within the workforce. Instead, there was considerable entry and exit of workers from the

workforce. In terms of exit, temporary salaried work saw the highest share of workers exiting with 21 per cent exiting the workforce. Thirteen per cent of permanent salaried workers and about 16 per cent of daily wage workers exited. Self-employment saw the least share of workers exiting (11 per cent). For all employment types, the share exiting during this period was higher than in the baseline.

In sum, on one hand, several of those who were employed prior to the lockdown have moved to more precarious forms of employment and towards sink sectors. There was also an exodus of workers, particularly from salaried wage work. On the other hand, many individuals who were not employed in the period prior to the lockdown entered into the workforce - suggesting a replacement of the worker who was earlier employed. This indicates a high degree of churning both across employment arrangements and towards and out of the workforce. In the next section, we see to what extent these transitions varied by gender, caste and religious identity of the worker.

4.2.2 / Social identities and employment transitions

We now compare the nature of transitions before and after the lockdown between the last four months of 2019 and the same months in 2020 along the lines of gender, caste, and religion. Here, instead of looking at transition only within the workforce (across types of employment) we widen the analysis to include 'out of workforce' as a transition category. This is because women tended to exit altogether rather than move between employment types.

Gender

First, we compare the share of workers in each employment arrangement who exit the workforce. Irrespective of their employment arrangement, a startlingly high share of women, nearly half, withdrew from work over this one year, compared

to only 11 per cent of men. This is seen clearly in the 'alluvial graphs' shown in Figure 4.3 (men and women). Notice the difference between the 'out of workforce' category. Women from all employment categories exited the workforce in far higher proportions than men.

Worryingly, in proportionate terms, the exit was highest in the case of salaried women workers (56 per cent). For men, the level of exit was much lower with the highest exit being seen among temporary salaried workers (16 per cent). In other employment arrangements too, women exited in larger shares compared to men. Forty four per cent of self-employed women had left the workforce, compared to 10 per cent of men (Table 4.2). In general, the share of women exiting from any arrangement is

at least twice their share in that arrangement in the pre-pandemic period. In fact, in the case of permanent salaried and self-employed work, the share of women exiting was between three to four times their share in those categories. In contrast for men, there is no such over-representation in the share exiting any arrangement. The garment sector for instance, one of the major sources of regular salaried employment for women, saw a massive contraction. According to a survey by the Garment and Textiles Workers' Union (GATWU) and Alternative Law Forum (ALF), even in factories that have opened, workers were asked to resign and often coerced to resign with threats of non-settlement of dues. Factories have also used other tactics such as transferring workers to distant units without providing transport facilities.⁶

Figure 4.3 :
Men moved into informal employment while women moved out of the workforce during the pandemic

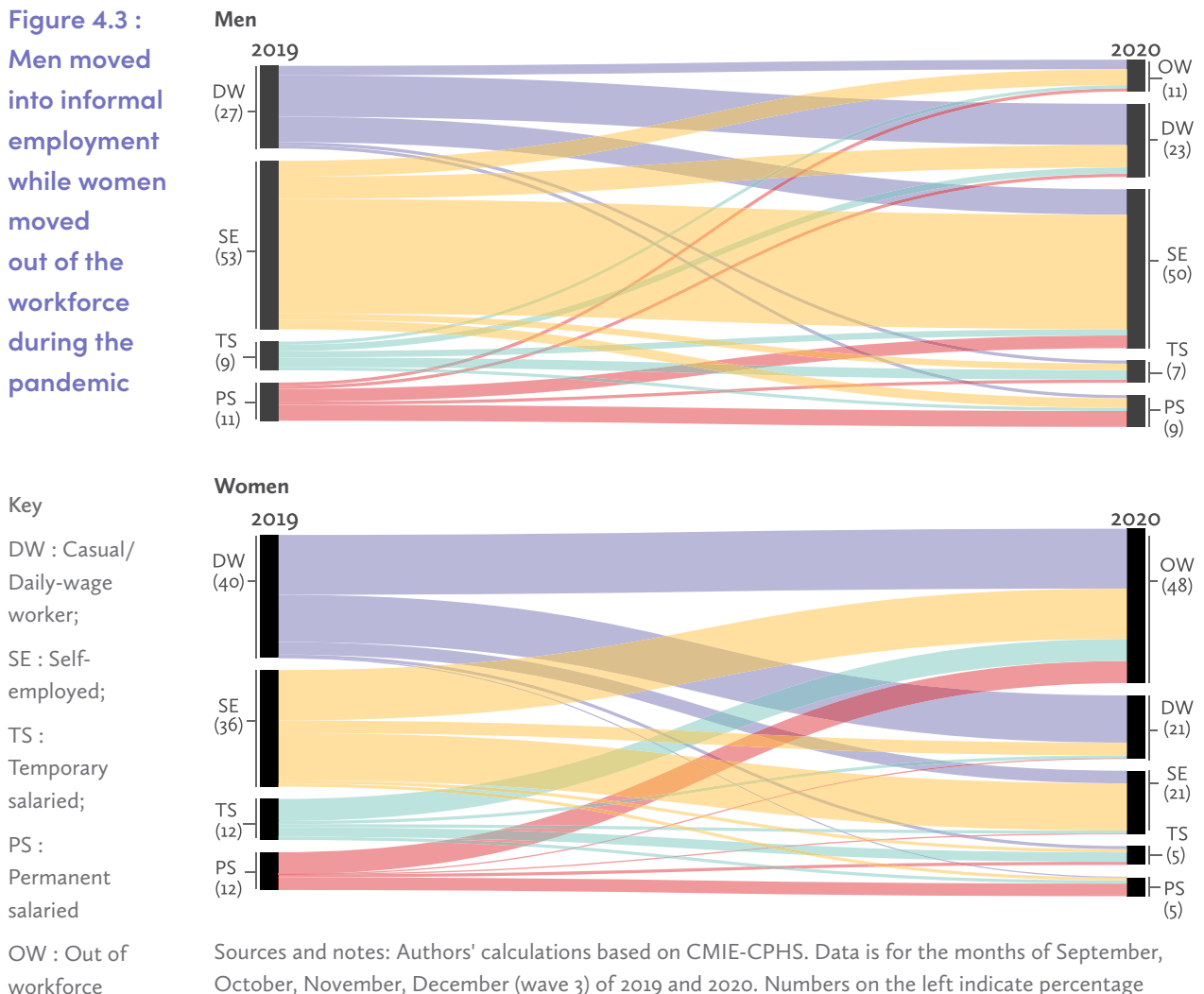


Table 4.2 :
Transitions in
employment
arrangements
for men and
women,
2019-2020

Employment arrangement in 2020

Men	Employment arrangement in 2019					
	Out of Workforce	Casual/daily wage worker	Self-employed	Temporary salaried	Permanent salaried	Overall (2019)
Casual/daily wage worker	11.6	49.9	30.3	5.0	3.1	27
Self-employed	9.5	13.3	68.4	3.7	5.1	53
Temporary salaried	16.3	18.9	27.3	28.6	8.9	9
Permanent salaried	8.2	9.1	32.5	7.6	42.6	11
Overall (2020)	11	23	50	7	9	100.0

Employment arrangement in 2020

Women	Employment arrangement in 2019					
	Out of Workforce	Casual/daily wage worker	Self-employed	Temporary salaried	Permanent salaried	Overall (2019)
Casual/daily wage worker	46.9	38.2	11.0	2.9	1.0	40
Self-employed	44.1	11.9	41.0	1.6	1.5	36
Temporary salaried	56.4	9.2	5.6	23.9	5.0	12
Permanent salaried	57.0	2.7	4.1	5.1	31.2	12
Overall (2020)	48	21	21	5	5	100.0

Legend :  High Medium Low

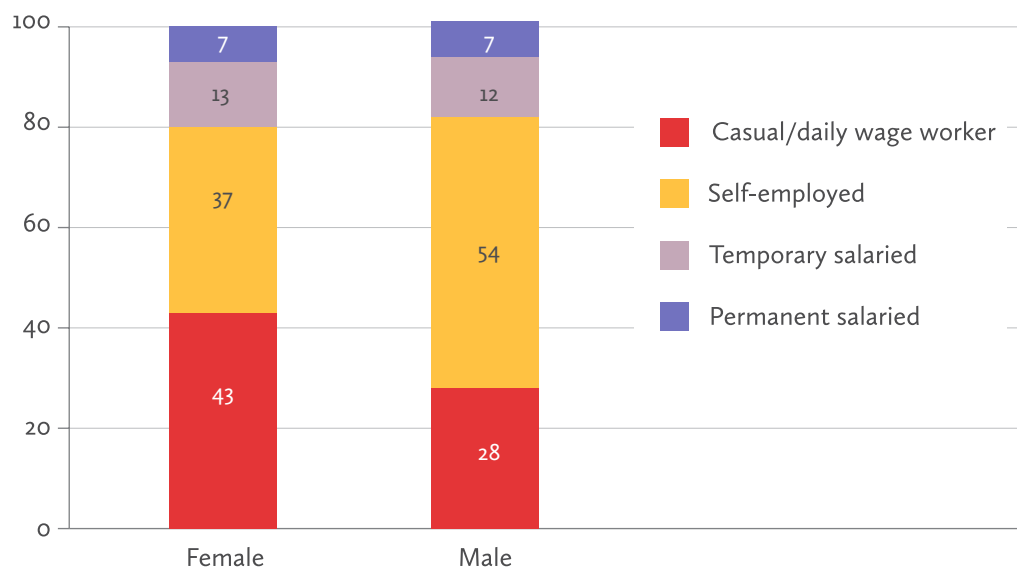
Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020. See [Appendix Section 2](#) for details.

Second, the extent and the nature of entry differed substantially between men and women. As we saw in Chapter Three, the female workforce saw far more churn with nearly half of the 2020 workforce being women who were not previously employed in 2019. Not only did the female workforce see a higher level of entry, the kinds of work women were entering into were different in comparison to men. Half of the men entered into self employment (Figure 4.4). A smaller share, 28 per cent, entered as daily wage workers. For women, on the other hand, more entered as daily wage workers (43 per cent) and a relatively smaller share as self-employed (37 per cent).

The third, and final observation is about the men and women who stayed employed between the two periods. The diagonal elements in Table 4.3 indicate that women, in general, have higher ‘stickiness’, remaining in the same employment arrangement over the year. Except for the self-employed, where the share who remain are similar between men and women, for all other employment arrangements, women are more likely to stay as is, compared

to men. At first glance this would suggest that women are more ‘secure’ in their given employment arrangement. But, when we place this in context of the larger exit of women from the workforce seen earlier, it is apparent that the stickiness we see for women comes from them not having other fallback options for employment, and instead leaving the workforce entirely. So, when we restrict our analysis to just women in the workforce, the higher diagonal elements are indicative not of women being unaffected in terms of transitions, but rather that when women are forced to transition, it is more likely to be a transition out of work, rather than into fallback employment options. When women do transition across employment arrangements, they have fewer and worse fallback options. For example, 21 per cent of self-employed women moved to more precarious daily wage work. The corresponding number for men was only 15 per cent. Similarly, among temporary salaried work which was another employment category that saw a lot of flux, for men, the movement was towards self employment, whereas for women, this movement was into daily wage work.

Figure 4.4 :
Women more likely to enter as casual workers, men as self-employed



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020. See Appendix Section 2 for details.

Table 4.3 :
When women remained in employment, they tended to experience less transitions than men

		Employment arrangement in 2020			
Employment arrangement in 2019	Male	Casual/daily wage worker	Self-employed	Temporary salaried	Permanent salaried
	Casual/daily wage worker	56.5	34.3	5.6	3.5
	Self-employed	14.7	75.6	4.1	5.6
	Temporary salaried	22.6	32.7	34.1	10.6
	Permanent salaried	10.0	35.4	8.3	46.4
		Employment arrangement in 2020			
Employment arrangement in 2019	Female	Casual/daily wage worker	Self-employed	Temporary salaried	Permanent salaried
	Casual/daily wage worker	71.9	20.7	5.5	1.9
	Self-employed	21.3	73.2	2.9	2.6
	Temporary salaried	21	12.8	54.8	11.4
	Permanent salaried	6.4	9.4	11.8	72.5

Legend : High Medium Low

Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020. See [Appendix Section 2](#) for details.

It should be noted that men tend to have better fallback options even during a normal year and women tend to transition out of employment more frequently than men even during normal times ([Appendix 1 Table 3](#)). But the gender differential has been particularly pronounced during the pandemic.

Religion & Caste

We now come to the differences in the kind of transitions observed among Hindu and Muslim workers. During the pandemic year, far fewer Muslims were able to maintain their permanent salaried status. Forty-eight per cent of Hindus who were permanent salaried remained so compared to only 33 per cent Muslims ([Appendix 1 Table 4](#)). About 43 per cent of permanent salaried Muslim workers moved into self-employment and 15 per cent in daily wage work. Among permanent salaried Hindus, the corresponding shares were lower at

34 per cent and 9 per cent respectively. Neither of these — higher transition out of permanent salaried work and higher influx into daily wage work among Muslims compared to Hindus — is observed in the baseline year ([Appendix 1 Table 4](#)).

With respect to caste, a significant difference is observed in the kind of fallback sectors that are accessible to different caste groups. Casual wage work is much more likely to act as fallback for less privileged caste groups than for the general category groups. Only between 3 to 15 per cent of general category groups transitioned to daily wage work from various other categories. On the other hand, anywhere between 18 to 30 per cent of SCs or STs moved into daily wage work from other forms of employment ([Appendix 1 Table 5](#)). For example, only 3 per cent of permanent salaried general category workers moved to daily

wage work. In contrast, about 18 per cent of SC or ST workers had moved to daily wage work.

Self-employment, which is relatively better than daily wage work in terms of the associated earnings, is more likely to act as fallback for general category workers. For example, 43, 38, and 36 per cent of upper caste workers from daily-wage, permanent salaried and temporary salaried work arrangements transitioned to self-employment, the corresponding percentages for SC workers was 23, 23, and 21 per cent, respectively. While 82 per cent of general category self-employed workers before the pandemic continued to be in this arrangement post the pandemic, the arrangement was much less stable for SCs and STs, with only 60 and 75 per cent continuing to be in this arrangement. We also see that the differences with other castes are less pronounced during the baseline period ([Appendix 1 Table 5](#)). In other words, the pandemic widened the gulf in quality of work between caste groups.

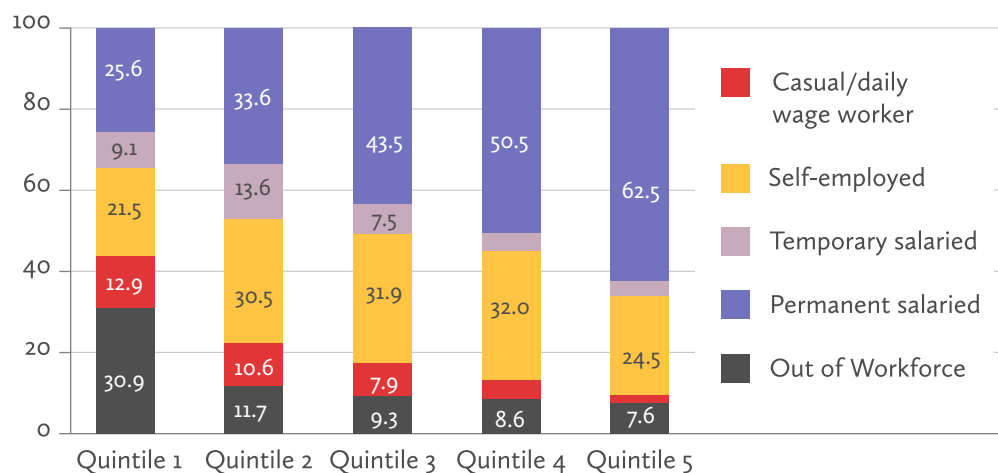
4.2.3 / How secure were permanent salaried workers?

Permanent salaried work is generally viewed as the most secure form of employment in the economy. However, the pandemic has exposed

the vulnerabilities even in this relatively privileged type of work. Of all the workers who were in permanent salaried employment before the lockdown (September-December 2019), only 42 per cent continued to be in permanent salaried arrangements in the same period in 2020. 8 per cent transitioned to temporary salaried employment, 8 per cent transitioned to casual wage work, 29 per cent moved to self-employment and another 13 per cent to unemployment and out of the labour force. These percentages are much higher than the baseline period (2018 to 2019), where 71 per cent remained in salaried employment.

If we group permanent salaried workers into quintiles based on their pre-Covid earnings, the percentage of permanent salaried workers that continued in this employment arrangement post-lockdown increases as one progresses to higher income quintiles (Figure 4.5). For example, 26 per cent of permanent salaried workers in the 1st quintile (poorest 20 per cent), 34 per cent of those in the 2nd quintile, 43 per cent of 3rd quintile and 51 per cent of 4th quintile and 63 per cent of the 5th quintile (richest 20 per cent) were able to maintain their position as permanent salaried workers.

Figure 4.5 :
Lower paid permanent salaried workers more likely to move to informal employment



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September - December (wave 3) of 2019 and 2020. Quintiles are calculated based on individual's wage earnings in wave 3 of 2019. See [Appendix Section 2](#) for details.

Furthermore, those in lower quintiles were more likely to transition to daily wage work and self-employment than those in the upper quintiles. For example, 13 per cent of permanent salaried workers in the 1st income quintile transitioned to daily wage work, while only 2 per cent of those in the 4th quintile transitioned to daily wage work. Moreover, those at the lower end of the income distribution are more likely to move to unemployment and out of the workforce, relative to those in the upper end, thereby suggesting a more stability in higher income permanent salaried jobs.⁷ Therefore, there is a diversity of work within permanent salaried and accompanying variations in the security of work.

“ **Between September-October 2019 and September-October 2020, real average earnings per worker fell by 17 per cent.** ”

Interestingly, similar occupations are found across income quintiles. For example, teachers, industrial workers, and clerks are present in every quintile, but clearly they are part of very different kinds of labour markets. As expected, wages and precarity are inversely related, with some markets characterised by lower wages and higher precarity and others by the inverse. But similar professions or occupations are found in both markets (e.g. private school teachers versus government school teachers).

Even for those permanent salaried workers who remain employed, the conditions of work could have become harder and more tenuous. Yadav (2021) in an SWI background paper, shares the words of a metal fabricator worker in Delhi, describing the situation of his permanent salaried colleagues from an earlier workplace.

I am in regular touch with my permanent worker colleagues in my old workplace from eight years ago. They are having the hardest time right now. The company is treating them like deadweight, or

debris, making every effort to oust them from their jobs after it has re-opened after the lockdown. I joke with them – ‘Hum log theek ho gaye, nikaal diya, baahar kar diya, sukoon hai’ (We are okay now, we have been removed, fired and now we have no tension) – that we got redeemed, removed earlier from our so-called permanent jobs. As we have already been thrown out, that is its own kind of peace.

Finally, there is a great deal of state-level variation in the extent of informalisation, that must be acknowledged. The map shown in Figure 4.6 shows that even states hard-hit in terms of overall job loss like Maharashtra and Tamil Nadu (see [Chapter](#)

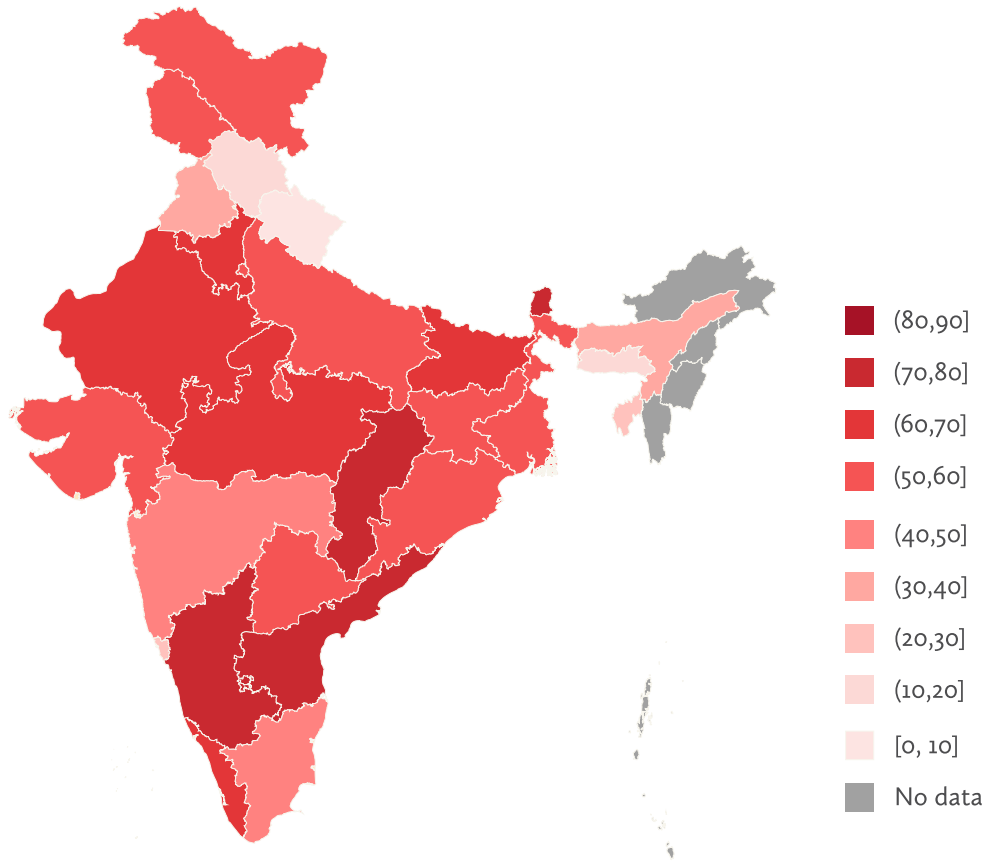
[Three](#)) saw a lesser proportion of permanent salaried workers becoming informal, compared to Rajasthan and Madhya Pradesh. The extent of variation, ranging from 40-50 per cent to 70-80 per cent, for

the major states, needs to be carefully examined. It is possible that both the nature of occupation and industry as well as state policy affect employment security leading to divergent outcomes.

4.3 / Increased informality was accompanied by earnings losses

When he closed down the fabricator due to lockdown, the owner paid us only ₹1500, about one tenth of our pay, for the three weeks we had worked in March. He paid us nothing in April. When he re-opened the workshop on May 11, that month he paid us nothing, then, at the end of June he paid us one month’s pay for 50 days’ work.
- A metal polisher, as reported in Yadav (2021)

Figure 4.6 :
Proportion
of
permanent
salaried
workers who
moved into
informal
employment



Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September - December (wave 3) of 2019 and 2020. See [Appendix Section 2](#) for details.

As the economy recovered, and workers returned to work, for many the return meant a fall in earnings. Large losses in employment followed by a recovery characterised, in part, by transitions to more precarious types of work were accompanied by significant drops in earnings. At the same time the overall fall in labour demand further eroded bargaining power, forcing workers to accept work despite lower wages.

4.3.1 / Evidence from CMIE-CPHS data

This section looks at the fall in earnings between September-October 2019, and September-October 2020 for workers in different employment arrangements, as well as the fall in earnings that accompanies transition across employment types. For salaried and wage workers, earnings are an individual's monthly income from wages and salaries, while for self-employed workers, both

labour income and business income are considered.⁸ The other months of the wave, i.e. November and December are not included since income data for these months are not available at time of writing.⁹ Note that earnings per worker observed in CMIE-CPHS data are higher than those observed in PLFS by around 20 per cent on average. We discuss this issue further in Box 4.2.

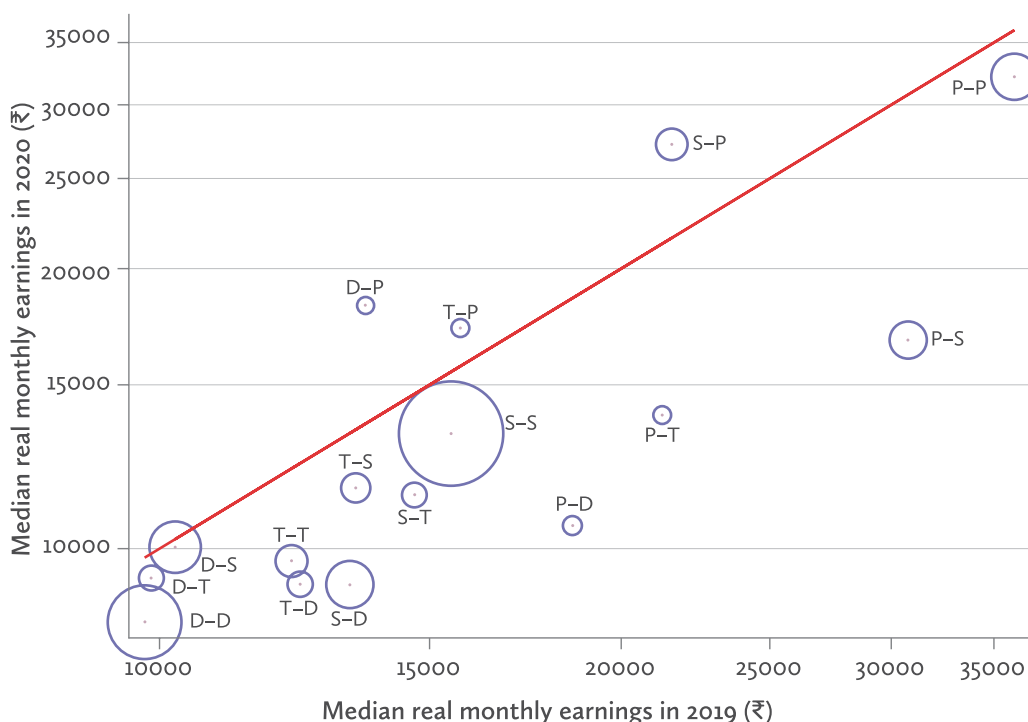
Between September-October 2019 and September-October 2020, real average earnings per worker fell by 17 per cent. This drop in earnings is seen across all employment arrangements (Table 4.4). Self-employed workers saw the highest fall, with earnings declining by nearly 18 per cent from approximately ₹15,000 in 2019 to ₹13,000 in 2020. Mean earnings of daily wage workers also saw a fall of about 13 per cent. Given that a large share of the workforce is in self-employment and daily wage work, this sharp fall in earnings has significant welfare implications.

Table 4.4 :
Monthly earnings fell for all employment categories during the pandemic

Employment	2019	2020	Change in earnings (%)
Casual/Daily wage worker	₹9,135	₹7,965	-13
Self-employed	₹15,831	₹12,955	-18
Temporary salaried	₹11,422	₹9,441	-17
Permanent salaried	₹29,226	₹27,697	-5

Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September-October of 2019 and 2020. Earnings includes income from wages and salaries and income from business for the self employed. Earnings refer to real average earnings. See [Appendix Section 2](#) for details.

Figure 4.7 :
Transition across employment types accompanied by a fall in earnings



D- daily wage, S- self employed, T- temporary salaried and P- permanent salaried. The size of the bubble indicates share of that transition in total workforce.

Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October of 2019 and 2020. Earnings includes individual's income from wages and salaries and income from business. See [Appendix Section 2](#) for details.

The aggregate impact on labour incomes is further exacerbated by the fact that there were frequent movements into informal work arrangements as described in the previous section. We overlay the different kinds of employment transitions that we saw earlier with their accompanying median earnings, pre-Covid and during the pandemic.

Figure 4.7 shows the median earnings pre and post Covid on the axes. The size of the bubble represents the share experiencing the transition. Any point below the 45 degree line indicates that that transition was accompanied by a fall in earnings.

Box 4.2 : Labour earnings prior to the pandemic - A comparison of CMIE-CPHS and PLFS data

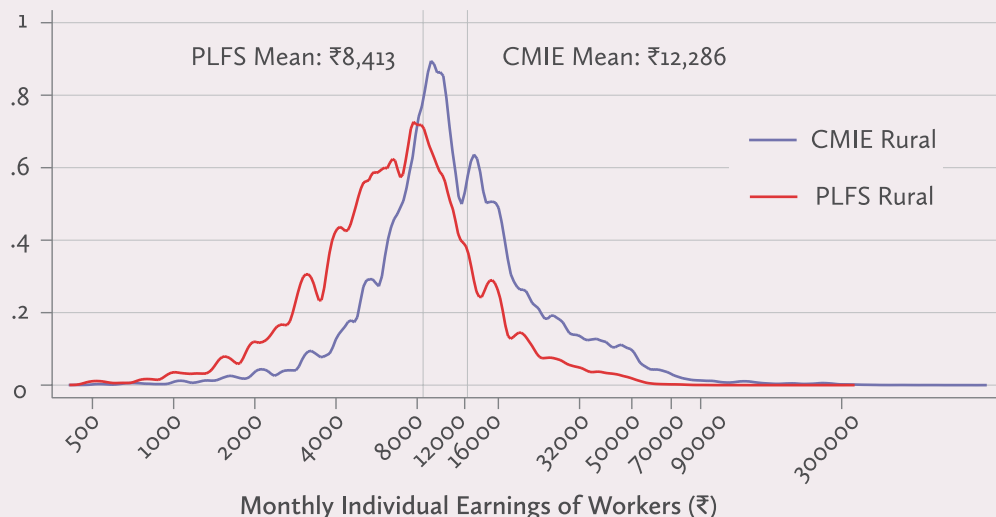
Historically, nationally representative, large-scale surveys in India such as those carried out by the NSSO have collected data on consumption rather than income. The reason is that consumption data can be collected at a disaggregated level and are therefore more reliable. Collecting earnings of household members and total household incomes is difficult due to variability of incomes, difficulty in recall and time required to ask detailed questions to ascertain incomes. Survey respondents (typically one per household) may also have much more imperfect knowledge of other members' income than they do of household consumption. Finally, in a highly informal economy like India, collecting information on incomes is even more difficult as most micro and small businesses lack proper accounting and are wary of disclosing information to surveyors.

The NSSO Employment-Unemployment surveys (conducted till 2011-12) did collect data on salaries and wages, but not on earnings from self-employment. This left out more than half of the workforce. In addition non-labour incomes were not collected at all. Until the 2004-05 and 2011-12 India Human Development Survey (IHDS) rounds,

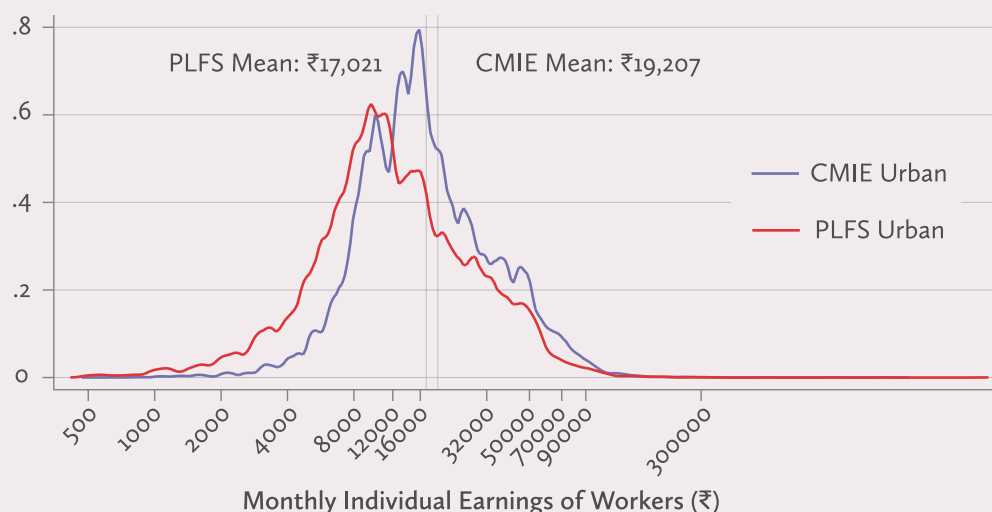
individual and household incomes from labour and non-labour sources were not available at the national level. Since 2011-12 (the last IHDS round) labour earnings for salaried and wage workers as well as for the self-employed are available from the two PLFS Employment Unemployment surveys (2017-18 and 2018-19). In the interim (2015-2016), the Labour Bureau Employment-Unemployment survey reported incomes in categories (Azim Premji University 2018) for an analysis of these data. Lastly, the CMIE-CPHS has been reporting income data at the household and individual level since 2014.

Here we compare incomes as captured in CMIE-CPHS and PLFS 2018-19 to provide context to our income data analysis reported in Chapter Four and Chapter Five.¹² On average, we find that CMIE earnings levels are substantially higher than those collected by PLFS for the 2018-19 period for the individuals who are employed. As we saw in Table 2.6, CMIE-CPHS data also show higher earnings for all four employment arrangements. The distribution of CMIE labor earnings in rural and urban areas is shown in the Figures below.

Frequency distribution of labour earnings in PLFS and CMIE-CPHS compared (Rural)



Frequency distribution of labour earnings in PLFS and CMIE-CPHS compared (Urban)



Sources and notes: PLFS 2018-19 and CMIE-CPHS Wave 3 of 2018, Waves 1 and 2 of 2019. X axis scale is on log base 2. See [Appendix Section 2](#) for details.

Average monthly earnings across all employment types in rural India in 2018-19, were ₹12,286 as reported by CMIE-CPHS and Rs. 8,413 as reported by PLFS. In urban India, average monthly labour earnings were ₹19,207 in CMIE-CPHS and ₹17,021 in PLFS. The corresponding median values are shown in table below. More details on the distribution as well as the Gini are given in [Appendix Table 13](#).

CMIE-CPHS also reports a significant number of zero incomes within the employed sample.

Consequently, we do the analysis both including zeroes, as well as excluding them. These data are available in [Appendix Table 13](#) and [14](#).

One reason for greater disagreement in measuring rural incomes (46 per cent) compared to urban (13 per cent) could be that agricultural incomes are more difficult to ascertain. Indeed, farm incomes estimated by CMIE are 75 per cent higher than those estimated by PLFS, while the divergence between non-farm incomes is only 20 per cent.

A comparison of monthly earnings in PLFS and CMIE-CPHS for rural and urban areas

Rural	Mean income	Median income	Gini	% Share of Zero Incomes
CMIE-CPHS	12,286	8,971	0.53	16.37
PLFS	8,413	6,986	0.38	0.84
Difference between CMIE-CPHS and PLFS (%)	46%	28%	39%	
Urban	Mean income	Median income	Gini	% Share of Zero Incomes
CMIE-CPHS	19,207	14,562	0.45	9.59
PLFS	17,021	11,237	0.45	0.49
Difference between CMIE-CPHS and PLFS (%)	13%	30%	0%	

A comparison of monthly farm and non-farm earnings in PLFS and CMIE-CPHS

Non-Farm earnings	Mean income	Median income	Gini	% Share of Zero Incomes
CMIE-CPHS	14,464	10,593	0.46	10.23
PLFS	12,099	8,383	0.46	0.73
Difference between CMIE-CPHS and PLFS (%)	20%	26%	0%	
Farm earnings	Mean income	Median income	Gini	% Share of Zero Incomes
CMIE-CPHS	14,711	8,673	0.64	24.93
PLFS	8,384	7,033	0.35	0.71
Difference between CMIE-CPHS and PLFS (%)	75%	23%	83%	

Sources and notes: PLFS 2018-19 and CMIE-CPHS Wave 3 of 2018, Waves 1 and 2 of 2019. See [Appendix Section 2](#) for details.

Other reasons for the divergence include differences in sample composition, method of asking questions, under-representation of women workers (who are usually paid less) in CMIE-CPHS, and selective attrition in the CMIE-CPHS panel. Without further analysis it is difficult to say more on which estimate might be closer to the actual values. Further, as noted at the beginning of this box, incomes are intrinsically harder to measure, particularly when the majority of the workforce is informal and incomes fluctuate on a daily basis.

Hence, we believe that the two estimates (PLFS and CMIE-CPHS) should be used to define a range within which actual incomes likely lie wherever possible. Secondly, and importantly for our present purposes, the impact of Covid is mostly measured by changes in levels and not in levels themselves. Thus, even if CMIE-CPHS level estimates are higher than actual incomes, we may still be able to get a good idea of the extent of fall in incomes due to the pandemic.

The highest fall in earnings is experienced, not surprisingly, by individuals moving from permanent salaried work into self-employment.¹⁰ Earnings for this group of workers fell by 40 per cent from ₹30,000 in 2019 to ₹16,000 in 2020. They accounted for 4.5 per cent of the workforce. Transitions from permanent salaried work into daily wage work or temporary work was also accompanied by a similar fall in income by 40 per cent, although the share of such workers is smaller, together accounting for 2 per cent. In fact,

any movement into daily wage work, as would be expected, is accompanied by large loss in earnings. Self-employed and temporary workers moving into daily wage faced an income loss of nearly 10 per cent, and together accounted for 10 per cent of the workforce. And since daily wage work and self employment absorbed large shares of the displaced workforce, this also meant a fall in earnings for these workers from anywhere between 40 per cent to 10 per cent of pre-Covid earnings.

Even earnings of workers who remain in the same kind of employment were affected. Thirty-five per cent of the workforce were self-employed in both time periods and experienced a fall in median earnings by 15 per cent. Similarly, for daily wage workers who remain as daily wage workers and account for 18 per cent of the workforce, there was a similar fall in median earnings by 11 per cent. Tahir, a fellow with the Stranded Workers Action Networks (SWAN) notes,

People are finding it difficult to find jobs, we have work on one day...then no work for three days. It is not like before where we had confirmed work. We have to go and live with a friend, look for work and do whatever we get.

Similarly, Raunaq Parveen (also a SWAN fellow) notes,

We get between ₹200-300 for the pant suits we stitch. Before Corona we used to get at least 2 pant shirts a day (₹600), now there is hardly any demand.¹¹

For a small share of workers, about 5 per cent, there is an increase in earnings, which has come from moving into irregular employment to permanent salaried work.

Notably, such high volume of transitions associated with a fall in median earnings, is specifically a characteristic of the lockdown year. In the baseline, barring a few exceptions, almost all transitions were associated with an increase in median earnings as depicted by earnings ratio greater than one ([Appendix 1 Table 7](#)).

4.3.2 / Evidence for large income losses over several months from Covid impact surveys

Smaller purposive surveys also support the findings of earnings loss across workers. During the

lockdown, the Dalberg survey conducted across 15 states finds that the average monthly household income declined from ₹9,960 (pre-crisis) to ₹4,110 as of early June (Dalberg 2020). On average there was a decline of 65 per cent in monthly income reaching as high as 81 per cent in Maharashtra. Diverse occupational categories (agricultural labourers, construction workers, farmers, and the urban self-employed), reported losing 60-70 per cent of monthly income.

According to a random sample survey of 8,500 workers in urban India conducted by the Centre for Economic Performance at the London School of Economics (LSE-CEP), the mean earnings loss was 48 per cent (Bhalotia, Dhingra, and Kondiroli 2020). When disaggregated by kind of employment, the authors find that for informal workers the loss in earnings was relatively higher, to the extent of 63 per cent compared to 17 per cent for formal workers, something which will clearly have implications for economic inequality as we will see in the next Chapter.

The NCAER-DCTVS survey of workers in Delhi and selected districts of Haryana, Rajasthan and Uttar Pradesh reported that for 44 percent of the respondents the casual daily wage rate was lower in November relative to that in the pre-lockdown period (NCAER 2020). A survey of 770 gig workers in India's largest cities (Delhi, Mumbai, Chennai and Bangalore) found a severe income loss for workers in precarious jobs (Flourish Ventures 2020). While 90 per cent of the respondents had an income in excess of ₹15,000 per month prior to the lockdown in March, after the lockdown in August this proportion had dropped to 10 per cent. In light of these falling incomes, only 12 per cent reported health safety as their primary concern, while 61 percent were primarily concerned about livelihood security.

Women in Informal Employment: Globalising and Organising (WIEGO) conducted a survey of 580

As per the India Working Survey, proportion of workers with no income increased sharply between February and August.

informal workers in Delhi, Ahmedabad and Tiruppur between April and July 2020 (WIEGO 2020c; 2020a; 2020b), The survey finds that the conditions of informal workers under lockdown was vastly different from the rest of the population. While 99 per cent of domestic workers in Delhi could not find work during the lockdown month of April, about 42 per cent could resume work only by July. The average earnings of rag-pickers, street vendors and home-based workers in Delhi fell by 90 per cent. The June earnings of home-based workers in Tiruppur had recovered only to 14 per cent of the pre-lockdown levels. In Ahmedabad, the average June earnings were only at 30 per cent of the February level.

The Self Employed Women's Association (SEWA) recently conducted a 'National Study on Future of Work for the Informal Workers' in collaboration with IWWAGE-IFMR to suggest evidence-based policy measures to increase productivity and improve working conditions for urban informal workers (SEWA, 2021). The study consists of a primary survey of 2,668 workers (55 per cent women) in street vending, construction and domestic work across five cities (Delhi, Lucknow, Ranchi, Ahmedabad, and Thiruvananthapuram). Like many other studies, the primary survey found a large drop in household earnings (an average fall of 90 per cent) during the lockdown. Seventy-eight per cent of construction workers reported zero earnings during the lockdown. For domestic workers and street vendors, the proportions were 60 per cent and 68 per cent respectively. Post-lockdown, as well, household incomes were 20 per cent lower than pre-pandemic levels. Further, this shock has come on an already low base. Before the pandemic, 50 per cent of the sample households earned less than ₹10,000 a month. After the lockdown, half the

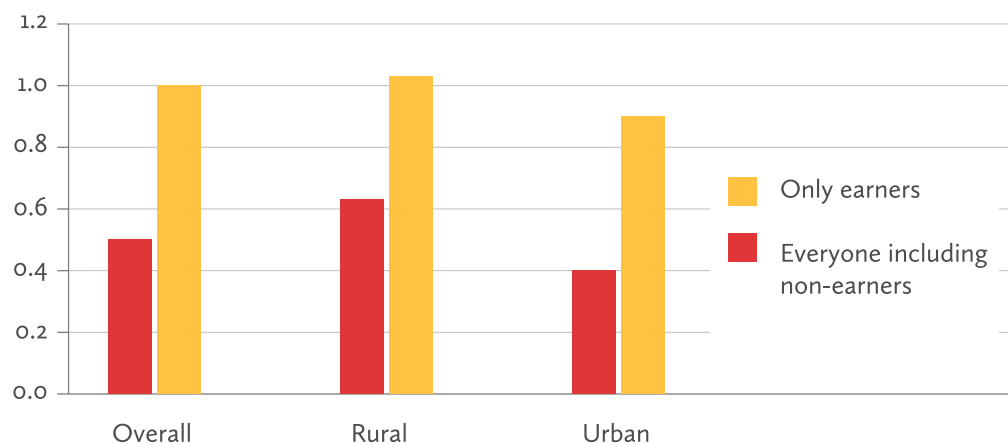
households were earning less than ₹8,000 per month. Average monthly income for domestic workers was ₹5,700 before the lockdown and reduced further

to ₹4,800 in the post-lockdown period. The average monthly earning of street vendors was about ₹8,500 before the lockdown and declined to ₹6,140 in the post-lockdown period. Delhi reported the highest monthly mean income and Jharkhand reported the lowest (before the lockdown), however street vendors of Delhi reported the maximum decline of 36 per cent in their earnings. 10.6 per cent street vendors even reported having no earnings post-lockdown. Another survey of street vendors (referred to in the SEWA study) shows that monthly income fell by nearly 50 per cent, from ₹9,588 before lockdown to ₹5,378 in the post-lockdown period.

The Azim Premji University CLIPS panel of 2,778 respondents from vulnerable households across 12 states in India collected earnings of workers pre and post lockdown in two separate phone surveys. This allows us to calculate the ratio of pre to post-lockdown earnings at the individual level. The median ratio is calculated for two different samples - one, covering all workers with a positive income in the pre-lockdown period, irrespective of their post lockdown employment status, and second, covering workers with non-zero earnings in both pre as well as the post-lockdown period. For the former, workers who lost jobs or became unpaid helpers are assigned zero earnings. Note that farmers were excluded from both estimations due to the fact that their earnings tend to be non-uniform across the year (Nath, Mandela, and Gawali 2021).

As reported in Chapter Three, a significant share of the sample was still out of work six months after the lockdown. Hence for the first measure (including those with zero earnings post-lockdown), earnings were half of the pre-lockdown levels (Figure 4.8). The situation in urban areas was worse with overall earnings being only 40 per cent

Figure 4.8 :
Ratio of
post to pre
lockdown
earnings
for informal
workers



Sources and notes: Authors' calculations using Azim Premji University CLIPS. See [Appendix Section 3](#) for details.

Table 4.5 :
Impact on
monthly
earnings,
Karnataka
and
Rajasthan

	February 2020		August-September 2020	
	Mean income (Rs.)	Share of zero income (%)	Mean income (Rs.)	Share of zero income (%)
Rural				
Self-employed	8,049	18	5,140	44
Salaried	10,167	1	9,986	42
Casual/daily wage worker	5,242	2.1	4,761	29

Sources and notes: Authors' calculations from India Working Survey panel. Mean incomes are calculated excluding zero incomes. See [Appendix Section 4](#) for details.

of pre-lockdown levels. However, restricting the sample to workers who regained employment in the post lockdown period (that is, reported positive earnings), earnings had nearly recovered to the pre-lockdown levels.

Consistent with CMIE-CPHS data being discussed in this chapter, CLIPS data also show that regular salaried workers transitioned to more precarious types of employment. Around 60 per cent of those employed as regular salaried workers before the lockdown were self-employed or doing casual wage work in October-November. For such workers, post-lockdown earnings were 75 per cent of pre-lockdown earnings.

The India Working Survey (IWS) is another panel survey that gives information on pre- and post-

lockdown earnings for the months of February 2020 and August-September 2020 for Karnataka and Rajasthan. There is a large increase in the proportion of individuals who report zero earnings despite being employed (Table 4.5). Even in normal times, as expected, a relatively larger proportion of self-employed workers compared to wage workers, report zero incomes in a given month. Since the sample is predominantly rural, it is also possible that some of these zero incomes have to do with seasonality of farm earnings. However, for every employment category, the percentage of those reporting zero incomes went up dramatically during the pandemic.

Lastly, it is important to note that informalisation and fall in earnings have also been accompanied by an intensification of work at least in some sectors (Box 4.3).

Box 4.3 : Intensification of work after the lockdown

Though no national level statistics are available, there have been reported instances of an intensification of work and an increase in the numbers of hours worked without a concomitant increase in wages after workers returned to work. Yadav (2021) shares the words of a young worker in a fan factory:

Since the factory reopened, the work is on at a maddening pace compared to earlier. I have been working 12-hour shifts, but the firm refuses to pay overtime as required to at double the hour rate for these extra hours even as it is asking to do longer shifts now.

An automotive factory contract worker narrates:

Earlier, when we first returned to work in July, our shifts were eight hours, now, in October, the shifts have got longer to 12 hours and production has increased a lot now. I don't know if it is because people are buying more cars or are the companies stocking it, or what is the reason. 'Aaj kal toh company mein behraaye ke kaam ho raha hai'. Work is at a maddening, intense pace these days.

They are extracting a lot of work, more than before. Earlier it was not this hectic, it has become excessive now. Maybe it is so because the company had to stay shut for three months? I have not ever seen production at this pace ever in the last 2-2.5 years I have worked, it is that intense.

Safety and social distancing protocols at factories and workplaces have become lax. Most workers do not have the income or insurance to cover them in the event of a health crisis. At the same time, companies have seized the opportunity to set up intrusive monitoring mechanisms under the guise of protocol and safety. Yadav (2021) shares the words of an automobile factory worker:

Now, in October, they have removed many Covid protections, even though the Covid-19 numbers are peaking. Initially, production was very low. Now, it is picking up. The firm too is not as strict about enforcing social distance etc. as more production is required. Now, they do some sanitizing at the entrance of the factory, and we wear masks. All distancing inside and shields etc have been removed.

So many of my co-workers have fallen ill in the past few weeks. We get no access to diagnosis and treatment through the company. If you go to the doctors in the urban areas near the industrial township, they will immediately give an injection without explaining what it is for and charge ₹5,000 for it. One young apprentice worker has died of COVID-19.

I had high fever around September 27, but I still went to work till because I had already taken three days leave in the first quarter, between July to September, for the Raksha Bandhan festival. Now, marking it in Aarogya Setu would mean getting ₹16,000 only in pay instead of ₹21,000, and losing ₹ 4,100. So, I went into work after taking a pill to reduce temperature to delay taking leave, as otherwise I would have had to automatically take four 4 days off.

The company's sick leave policy is that if I mark Aarogya Setu app as red, then you cannot enter the factory premises for four days and will be marked as sick. But this policy makes no sense given the overall leave policy. As per this, in a quarter, which is three months, a worker can take a total three days off. If you take more leaves than that in a quarter, then your monthly 'bonus' component of the pay, ₹4,100, will be deducted.

4.4 / Agriculture and petty trade were the key fallback sectors

We close this chapter by taking a look at sectoral transitions that occurred as a result of the shock. For this we return to CMIE-CPHS data. Just as self-employment and casual wage work act as fallback options for workers losing salaried employment, in sectoral or industry terms, agriculture and petty retail constitute the principal fallback options for workers losing work in higher risk sectors such as transport and manufacturing. In 2019, agriculture, according to CMIE-CPHS, accounted for 37 per cent of the workforce. A year later, its share increased to 39 per cent. On an already large base this two percentage point increase represents millions of workers. On the other hand, an already small manufacturing sector shrank further from 10 per cent to 7.6 per cent of the workforce. Education sector also saw a large decline shrinking by nearly 1.5 percentage points to only 2 per cent of the workforce.



Women were much more likely to lose work in those sectors where they were relatively weakly represented in the first place.



Here, we aggregate sectors of employment into twelve major groups: agriculture, mining and utilities, light manufacturing, heavy manufacturing, construction, travel and communication, trade, modern services personal non-professional services, health, education and public administration. Appendix Table 8 provides details of classification of industries. Using transition matrices we map the movement of the workforce across sectors between the pre-pandemic period (September-December 2019) and the most recent period for which data are available (September-December 2020), i.e. the same sample used to look at transitions across employment arrangements. Like before, we also compare these transitions with the baseline period, i.e. the same months over the years 2018 and 2019. Recall that these tables are in percentages that sum to 100 along a row. They answer the question, for

every 100 workers who were in manufacturing in period 1, how many transitioned to which sector in period 2.

As expected, there is a relatively high level of retention in the case of agriculture with 70 per cent of workers remaining in the same sector. Construction and trade are the next highest in terms of 'stickiness.' These sectors also saw the highest shares of workers entering from other sectors, as indicated by the warmer shades in these columns. For instance, 21 per cent of workers who were employed in modern services in 2019 moved to trade in 2020. About 18 per cent of workers in heavy manufacturing had moved into construction work in 2020 (Table 4.6). Compared to the baseline period (Appendix Table 9) we find an increased degree of mobility across sectors in the pandemic period.

Therefore, agriculture, construction and trade were the fallback sectors, akin to self-employment and daily wage work in terms of employment arrangements. Since these sectors and arrangements often go hand in hand, this is not unexpected. It is also interesting to note that while construction has absorbed a vast proportion of workers transitioning from other sectors, it has also shed a large proportion of workers, who are not finding employment in other sectors. This particularly points to the high level of flux and precarity that characterizes the Indian economy in general, and this sector in particular, and especially during the lockdown period.

A gender-wise disaggregation of sectoral transitions echoes the observations made when looking at differences in transitions between employment

arrangements between men and women (Table 4.7). Women, compared to men, are more likely to remain within the same sector between the two years. However, as mentioned earlier, this is because they typically do not move across industries, but rather exit the workforce altogether when they lose work. In other words, women do not have many fallback options. Construction, trade and agriculture absorb substantial shares of men from other sectors whereas for women, agriculture, and to a lesser extent, non-professional services are the major fallback sectors.

This disproportionate impact on women across all industries is apparent in Figure 4.9. We calculate a representation index that is the share of women in the total workers who have lost jobs in a sector industry as a ratio of the overall share of women workers in that industry. For example, women constituted 14 per cent of the workforce in agriculture but accounted for 38 per cent of the agricultural workers who lost work. The job-loss representation index for women captures this over-representation, with any value greater than one indicating that women are overrepresented in

Table 4.6 : Agriculture and trade were the principal fallback sectors during the pandemic

Employment arrangement in 2020

	Agri	Mining	Light Manu	Heavy Manu	Const	Trade	Public Adm	Health	Edu	Travel Com	Pers Serv	Modern Serv
Agri	76.8	0.2	0.6	1.9	7.7	5.8	0.5	0.2	0.7	2.4	2.9	0.3
Mining	12.8	36.7	3.8	4.5	11.0	12.7	3.4	0.3	1.2	5.6	4.5	3.5
Light Manu	17.0	0.4	25.8	5.8	12.2	16.7	1.7	0.9	1.0	5.8	10.2	2.5
Heavy Manu	18.3	0.8	4.5	23.5	18.4	14.3	1.6	0.5	1.5	6.8	5.5	4.3
Const	21.2	0.4	1.7	2.4	49.0	11.2	0.7	0.2	0.5	6.0	6.1	0.6
Trade	14.1	0.7	3.3	3.7	11.9	43.4	2.1	0.7	2.0	8.1	7.5	2.5
Public Adm	10.7	1.0	2.3	4.4	5.8	14.4	40.1	2.0	3.4	5.5	5.2	5.3
Health	10.9	0.4	1.6	4.3	4.1	18.3	3.7	36.1	5.4	6.1	5.1	4.1
Edu	17.9	0.8	1.8	3.2	7.0	20.1	4.2	2.0	28.0	4.8	5.1	5.1
Travel Com	12.7	0.8	2.4	4.7	14.8	16.9	2.5	0.7	1.8	32.1	7.1	3.5
Pers Serv	14.5	0.7	2.8	3.9	15.8	15.7	1.9	1.0	1.2	6.5	34.2	1.7
Modern Serv	8.9	0.8	3.5	7.1	8.0	20.6	6.6	2.3	4.5	8.5	7.3	22.0

Employment arrangement in 2019

Legend :



Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September-December (wave 3) of 2019 and 2020. See [Appendix Table 8](#) for details of industry categorisation.

Table 4.7a : Women had fewer fallback sectors than men during the pandemic

Sector of employment in 2020

		Agri	Mining	Light Manu	Heavy Manu	Const	Trade	Public Adm	Health	Edu	Travel Com	Pers Serv	Modern Serv
Sector of employment in 2019	Men	75.2	0.2	0.7	2.0	8.4	6.2	0.5	0.1	0.7	2.7	3.0	0.4
	Agri	12.9	36.9	3.7	4.4	10.9	12.6	3.4	0.3	1.2	5.6	4.6	3.5
	Mining	14.4	0.5	25.8	6.2	12.9	17.8	1.9	0.7	1.0	6.4	10.0	2.6
	Light Manu	18.2	0.8	4.5	23.6	18.5	14.3	1.6	0.5	1.4	6.9	5.4	4.3
	Heavy Manu	21.0	0.4	1.7	2.4	49.1	11.2	0.7	0.2	0.5	6.1	6.0	0.6
	Const	14.0	0.7	3.3	3.8	12.1	43.3	2.1	0.7	2.1	8.2	7.3	2.5
	Trade	10.9	1.0	2.3	4.6	5.9	14.7	40.0	1.9	3.4	5.3	4.9	5.2
	Public Adm	8.1	0.6	2.0	5.8	4.2	23.4	4.1	27.8	4.6	8.3	6.1	5.0
	Health	19.0	0.9	1.9	3.4	7.7	21.9	4.3	1.4	24.5	5.2	4.6	5.3
	Edu	12.7	0.8	2.4	4.7	14.9	16.9	2.5	0.7	1.7	32.2	7.0	3.5
	Travel Com	14.5	0.8	2.8	4.2	16.5	16.4	1.8	0.8	1.2	7.0	32.3	1.7
	Pers Serv	9.2	0.8	3.6	7.3	8.2	21.0	6.5	2.1	4.2	8.6	7.2	21.3
	Modern Serv												

Legend :



job loss compared to their representation in that industry's workforce. Across all industries, women were over-represented in job loss. But there was a negative relationship between women's share in an industry and the representation index, indicating that women were much more likely to lose work in those sectors where they were relatively weakly represented in the first place. For example, the index was highest in the travel and communication sector and public administration and defense. This is only a correlation and more work is needed to elucidate the mechanisms that may explain why

women workers were more precarious in male-dominated sectors.

When transitions are disaggregated by caste groups, trade and agricultural sectors are found to be important fallback sectors for all caste groups. These sectors absorbed between 10 to 30 percent of the workforce from other sectors. Notably, the more precarious construction sector was not a fallback for the general category workers. At most, about 14 per cent of general category workers from the personal non-professional sector moved

Table 4.7b : Women had fewer fallback sectors than men during the pandemic

Sector of employment in 2020

		Agri	Mining	Light Manu	Heavy Manu	Const	Trade	Public Adm	Health	Edu	Travel Com	Pers Serv	Modern Serv
Sector of employment in 2019	Women												
	Agri	92.1	0.0	0.2	0.6	1.7	2.1	0.1	0.5	0.4	0.2	2.2	0.0
	Mining	0.0	4.9	26.8	20.6	30.7	14.3	2.7	0.0	0.0	0.0	0.0	0.0
	Light Manu	43.6	0.0	26.2	1.6	4.9	5.4	0.4	3.1	1.2	0.2	12.1	1.3
	Heavy Manu	25.7	0.0	10.3	14.4	12.7	12.0	2.0	2.4	4.0	0.9	11.9	3.6
	Const	27.9	0.0	0.7	0.5	45.8	9.6	0.7	1.6	0.2	1.1	11.3	0.6
	Trade	17.4	0.1	3.2	0.8	4.5	47.7	1.8	1.9	1.0	3.7	16.1	2.1
	Public Adm	4.8	0.6	0.4	0.0	3.0	6.7	43.8	5.7	3.6	11.7	11.0	8.8
	Health	18.7	0.0	0.4	0.0	3.8	4.1	2.4	59.3	7.7	0.0	2.2	1.5
	Edu	7.4	0.1	0.7	0.9	0.8	3.4	2.9	7.8	60.3	1.5	10.5	3.6
	Travel Com	9.9	0.1	1.4	5.1	1.5	13.7	0.1	3.1	12.6	26.0	18.4	8.0
	Pers Serv	15.6	0.1	2.6	0.6	6.8	7.0	2.6	4.1	1.9	1.0	56.2	1.6
	Modern Serv	1.8	0.0	0.8	0.7	2.1	11.2	8.9	6.6	11.6	6.1	9.9	40.4

Legend :



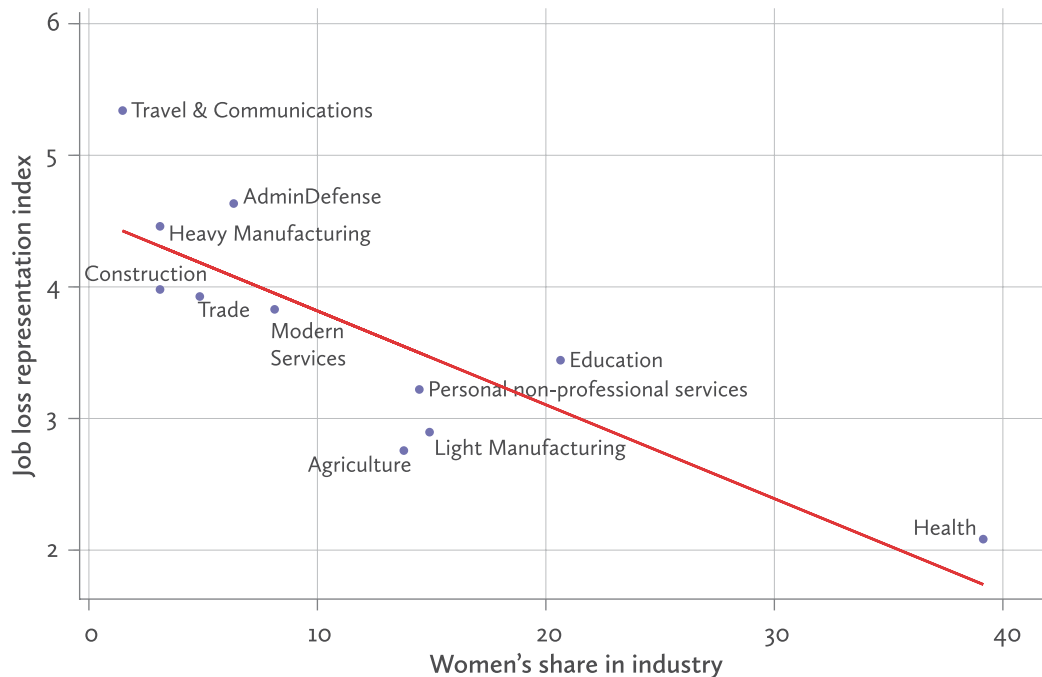
Sources and notes: Authors' calculations based on CMIE-CPHS. Data are for the months of September-December (wave 3) of 2019 and 2020. See Appendix Table 8 for details of industry categorisation.

into construction, but from all other sectors the movement is below 10 per cent. On the other hand, around 15 to 18 per cent of ST workers from other sectors moved into construction (Appendix Table 10).

There are some notable differences in the inter-sectoral movement of workers from different religions. For Hindus, agriculture is a major fallback sector absorbing between 23 per cent (construction) to 10 per cent (modern services) of workers from

other sectors (Appendix Table 11). Trade is a secondary fallback sector, and the largest influx into this sector trade is from the health sector (17 per cent). For Muslims, in contrast, agriculture is less of a fallback sector, perhaps attributable to the lower shares of Muslims with access to land assets. Instead, trade emerges as a major sector absorbing large shares of the Muslim workforce exiting other industries. Thirty five per cent and 32 per cent of workers from education and health respectively, entered into the trade sector between

Figure 4.9 :
Women
more likely
to lose work
in sectors
where
they are
relatively
more under-
represented



Sources and notes: Authors' calculations based on CMIE-CPHS. Data is for the months of September, October, November, December (wave 3) of 2019 and 2020. Mining and utilities not shown due to small sample size. See [Appendix Table 8](#) for details of industry categorisation.

2019 and 2020. For Hindus, the shares from education and health entering into trade is lower, at only 19 per cent and 17 per cent respectively. In fact, for Muslims, trade absorbs nearly a quarter of the workforce from other sectors. Chanchani and Garimella (2021) share the words of Nasim, a street vendor from Muzzaffarnagar.

During the pandemic, my family faced an acute financial crisis, making me run here and there for work. After not seeing any chance to move to Maharashtra (where I was working as a street vendor selling clothes), I ventured into many fields to sustain my family. I tried working in the fields where the wages went low due to an abundance of hands looking for any kind of work in the rural economy. Then, I went to the nearby fields to collect herbs, which someone told me, would fetch some money by selling it in the market. However, this did not work as we were not allowed by the landowners to enter their fields.

4.5 / Conclusion

This chapter and the previous one together present extensive evidence from nationally representative as well as purposive surveys showing that the pandemic has had a devastating impact on India's workers. Even after the immediate impacts of the nationwide lockdown were over, employment levels remained slightly below pre-pandemic levels for several months, and more importantly there was a significant drop in earnings and rise in precarity. Women and younger workers were hit particularly hard both in terms of loss of work and ability to re-enter the labour market. Workers crowded into fallback arrangements and sectors further lowering earnings. All these impacts have obvious implications for household finances, food security and other welfare indicators. It is these that we turn to in the next chapter.

Endnotes

¹ The exact numbers will change if we use PLFS workforce participation rates instead of CMIE-CPHS, since the former tend to be higher than the latter by 7 percentage points or so. However, PLFS estimates for this Q2 of 2020-21 are not yet available. Nevertheless the fall in labour share will still be of the same order, 5 to 6 percentage points.

² See Data [Appendix Section 2](#) for details of this sample.

³ Average earnings are calculated for all individuals who report being employed in a particular period. It should be noted that around 10 per cent of individuals in the CMIE-CPHS data report zero earnings for a given month even when they are employed in that month. This proportion increased during the pandemic (see [Appendix Section 2](#) for details). In normal times such zero incomes are observed much more frequently for self-employed workers. During the Covid period, it became even more likely that self-employed workers were operating businesses but making no income (as discussed in [Box 3.2](#) in the previous chapter for PLFS data), or that wage workers had retained employment but had not been paid. For the purpose of this analysis, we include zero incomes in the average. However, the results are not fundamentally altered by excluding zero incomes.

⁴ The decomposition is done as follows:

$$N_t Y_t - N_{t-1} Y_{t-1} = (N_t - N_{t-1}) * (Y_{t-1}) + (Y_t - Y_{t-1}) * (N_{t-1}) + (N_t - N_{t-1}) * (Y_t - Y_{t-1})$$
 where N_t refers to the number employed in period t , and Y_t is average earnings. The first term on the RHS is the change in income due to change in employment, the second is the change due to decline in earnings, and the final term is the interaction term.

⁵ For details on the construction of these panels, see [Appendix Section 2](#).

⁶ <https://www.thehindu.com/news/cities/bangalore/garments-factories-forcing-workers-to-resign-survey/article34125059.ece>

⁷ While there is a similar ordering of transitions out of permanent salaried employment across income quintiles in the baseline year, i.e. 2019 to 2018, for the same months, the scale of exit and transition is much lower ([Appendix 1 Table 6](#))

⁸ CMIE-CPHS collects information on members' income from wages which includes income for self-employed individuals if they take a salary from their business. CMIE-CPHS also collects information on households' income from business activities. For self-employed individuals, household-level business income is apportioned equally between all self-employed members in the household, and this amount is added to the wage income to arrive at total earnings of self-employed workers. See [Appendix Section 2](#) for details.

⁹ Employment transitions for the September-October panel between 2019 and 2020 is similar to that observed in the larger September to December panel

¹⁰ All reported earnings are median values and include zero earnings. Earnings are deflated to January 2020 prices using the respective state-wise rural or urban Consumer Price Index. Removing zero earnings alters levels but does not alter the results qualitatively. During the same months in the baseline period (2018 and 2019) there was a 10 per cent drop in real earnings indicating the impact of the economic slowdown discussed in [Chapter Two](#).

¹¹ <http://strandedworkers.in/the-swan-fellowship/>

¹² The two surveys differ in the way they ask earnings questions; in the underlying definitions of business earnings; and the frequency with which data are collected (see [Appendix](#) for details).

5

**Falling
incomes, rising
hunger and
indebtedness**

5

Falling incomes, rising hunger and indebtedness

We continue our investigation of the economic impact of Covid and containment measures by shifting the focus from workers to households. The analysis presented in Chapters Three and Four demonstrates large and persistent losses in employment and labour earnings. These are likely to manifest at the household level in various ways, including reduced incomes, increased debt and increased food insecurity. This chapter examines the evidence for such impacts.

We first document the decline in total household incomes during the pandemic months. Our analysis shows that on average, cumulative household incomes declined around 22 per cent over eight months (March 2020 to October 2020). Next we show that inequality in the distribution increased during the pandemic. There has also been a large increase in poverty in India in 2020. Lastly, we show that households have coped with the shock by borrowing (largely from informal sources), selling assets, cutting back on food consumption, and increased burden on women's time.

“ Seasonally adjusted incomes in October were still 13 per cent below February levels. ”

Our analysis relies mainly on monthly household income data from the CMIE-CPHS (see [Appendix Section Two](#) for details). In addition we draw on data from the India Working Survey (IWS) and Azim Premji University Covid-19 Livelihoods Phone Survey (CLIPS) (see [Appendix Section Three and Four](#) for details). Finally, when relevant, we bring in other purposive surveys that were carried out to understand the impact of the pandemic.

5.1 / The pandemic caused a large drop in household incomes

5.1.1 / Average household incomes – trends and cumulative losses

We begin with an analysis of the trends in average per-capita household incomes over the course of one year, between October 2019 and October 2020 (the last available data point at time of writing).

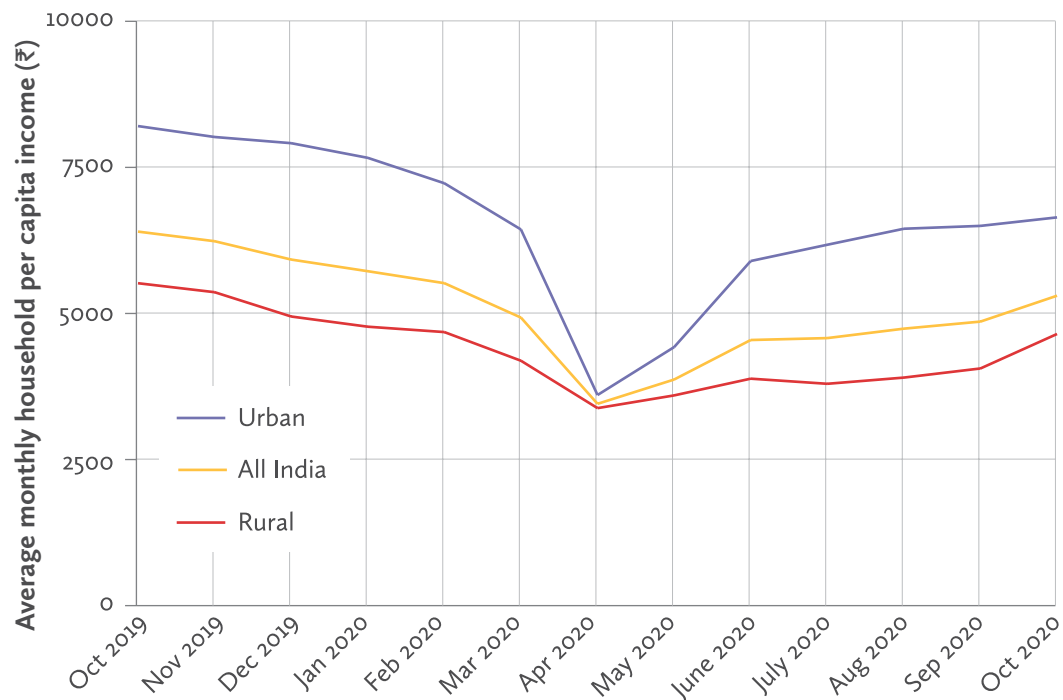
The pre-pandemic per capita monthly incomes as measured by CMIE-CPHS were around ₹6,000. As a point of comparison, recall that per capita GDP pre-pandemic was around ₹13,000 per month.¹ Compared to their immediate pre-pandemic levels, average monthly incomes declined in real terms from ₹5,518 per month in February 2020 to ₹3,454 in April 2020, a drop of 37 percent (Figure 5.1). The drop in incomes was starker in urban areas compared to rural areas. This is expected since the pandemic and the containment measures have impacted economic activity much more in urban areas. Income for a family of four in

urban areas dropped by ₹14,495 in April 2020 than in February 2020 (a drop of 50 per cent), while in rural areas the corresponding drop was ₹5,206 (a fall of 28 per cent).

As expected, immediately after the lifting of lockdown restrictions, incomes started recovering. By October, in rural areas the recovery seemed complete while in urban areas incomes were 8 per cent below February levels.

However, an important caveat here is that incomes are generally higher than average in October since it is harvest and festival season. Seasonally-

Figure 5.1 :
Drop and
recovery of
household
incomes in
2020



Sources and notes: Authors' calculations based on CMIE-CPHS. Monthly averages are calculated by averaging per-capita incomes for all the households interviewed in the month without doing any adjustments for seasonality of incomes. All incomes are expressed in January 2020 rupees.

adjusted incomes in October 2020 were still 13 per cent below February levels.² In fact, seasonal adjustments make a large difference to the impact and recovery trends. The difference in losses between rural and urban areas reported above for the unadjusted numbers, narrows significantly. Seasonally adjusted rural incomes in April 2020 were 39 per cent below their February 2020 level bringing the size of the shock much closer to the urban value of 50 per cent reported earlier. Finally, another indicator of incomplete recovery of incomes is that, in comparison to the same month the previous year (October 2019), household incomes in October 2020 were 17 per cent below in real terms.

It is worth noting here (and can be seen in Figure 5.1) that incomes were already on a downward trend prior to the Covid shock, possibly due to the overall economic slowdown in 2019. As noted in Chapter Two, the Covid crisis has hit the Indian economy on the back of the most prolonged slowdown in recent

history. This points to potentially severe distress particularly among vulnerable households.

It is possible to argue that the income decline was sharp but localised to the lockdown months of April and May and that the recovery of incomes post-June 2020 implies that the impact of Covid is in the past. Quite apart from the fact that the second wave of the pandemic is now upon us, there is another reason why such a conclusion would not be valid. This is because incomes lost during the months when economic activity was more severely impacted leave a long-term impact either as depleted savings or as incurred debt, which must be built back or paid back, by curtailing future consumption and investment. Thus, the fact that income levels in a particular month (say October) are almost back to pre-pandemic levels, does not mean that no future negative effects on welfare or demand will be observed. Hence, a better measure of the likely longer term impact on households is the cumulative loss of income over the pandemic.

As of the time of writing, we have data available for the Covid period from March 2020 to October 2020. The seasonally-adjusted cumulative income in the months of March to October was 22 per cent less compared to the preceding eight months of July 2019 to February 2020.³ The cumulative decline was higher in urban areas than rural areas (26 per cent versus 21 per cent). For an average household in urban areas this amounts to losing 2.1 months of income (about ₹64,000 for a family of four) and in rural areas losing 1.7 months of income (about ₹34,000 for a family of four).

Thus, whether we look at the immediate impact of the lockdown or at the cumulative impact over eight months, there is a large drop in household incomes that can have serious consequences for food security, education, and health.

5.1.2 / Event study model of income dynamics

An important consideration when analysing the impact of the pandemic on household incomes is that different households are differently equipped to weather the crisis - resilience varies with occupation, caste, location and many other factors. In order to measure the extent of income decline while controlling for such observed and unobserved household characteristics that do not change in this period but that may affect the ability to withstand the shock, we perform an event study regression.⁴ This helps us isolate the impact of the pandemic on incomes. We find that the pandemic and the subsequent lockdown caused a 47 percent drop in the seasonally-adjusted per capita real household income in April relative to February and even in October, incomes remained 17 percent below February levels, controlling for various household characteristics.

In line with the descriptive findings that showed a 39 per cent drop in rural and a 50 per cent drop

Both for incomes and for employment, there was a rapid bounce back in June and July, but thereafter, both the WPR and household incomes stagnated.

in urban areas in April compared to February, the event study also shows that the pandemic caused larger income declines in urban areas (53 per cent) than in rural areas (40 per cent). The income levels in both the regions vis-a-vis February recovered sharply till June but subsequently slowed down. Between August and October recovery stagnated (Figure 5.2). Given the already low average incomes of ₹7,334 in urban and ₹5,004 in rural areas, this decline has massive implications for household welfare. In line with the descriptive results presented above, in October 2020, income levels were around 16 to 18 per cent below February levels in both rural and urban areas.

Thus, both for incomes and for employment (reported in Chapter Three), we see a similar pattern over this period. There was a rapid bounce back from the lockdown impact in the months of June and July, but thereafter, both the WPR and household incomes stagnated and had not recovered to pre-pandemic levels till the months for which CMIE-CPHS data are available (October for incomes and December for employment). The coming of the second wave of infections in March 2021, accompanied by another round of mobility restrictions indicates that a full recovery will be further delayed.

5.1.3 / State-level analysis

Finally, we analyse state-level variation in the fall in household incomes. The availability of monthly income data over the eight month period (March to October) along with Google Mobility data, allows us to examine the state-level impact of mobility restrictions on income. Mobility data measure the proportionate reduction in footfalls in outdoor areas compared to a baseline period in January-

Figure 5.2 :
Event study
model
reveals a
sharp drop
in incomes
followed
by an
incomplete
recovery



Source and notes: Author's calculations based on CMIE-CPHS. The graphs plot the proportionate change in per capita income estimated separately for rural and urban sectors using an event study framework. The event study estimates measure the impact of the the pandemic and the containment measures on the monthly per-capita household income, controlling for various household characteristics. The change in monthly incomes is reported as compared to incomes in February 2020. The estimates are reported along with their 95% confidence intervals. See [Appendix Section 2](#) for the event study model as well as seasonality and inflation adjustments.

February 2020 (see [Endnote 2 in Chapter Three](#) for more details). The scatter plot in [Figure 5.3a](#) shows all the state-month combinations (where 1 = March and 8 = October). As expected, the earlier months (April and May) when the full lockdown restrictions were in place, are associated with higher drops in mobility and larger drops in income.

These data also allow us to calculate the average relationship over time for a state. Delhi, for example, experienced a 50 per cent decline in mobility on average between March and October and this was accompanied by a 39 per cent decline

in income. Uttar Pradesh, on the other hand, was less affected, with a 32 per cent decline in mobility and a 22 per cent decline in income. Because states differ in their pre-pandemic per capita State Domestic Product (SDP), the extent of urbanisation, structure of the workforce, and other factors that can affect the impact of the pandemic, we examine the average relationship between mobility reduction and income loss in a regression framework with state fixed effects (i.e. controlling for factors that are specific to a state and do not vary over this eight month period).⁵

Figure 5.3a :
Larger decreases in mobility are associated with higher drops in household income

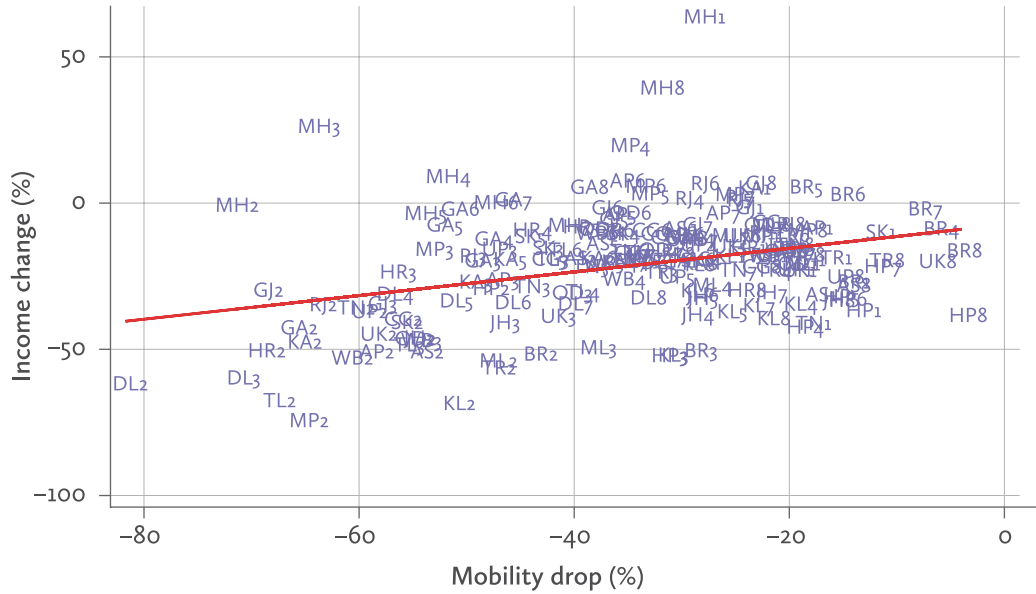
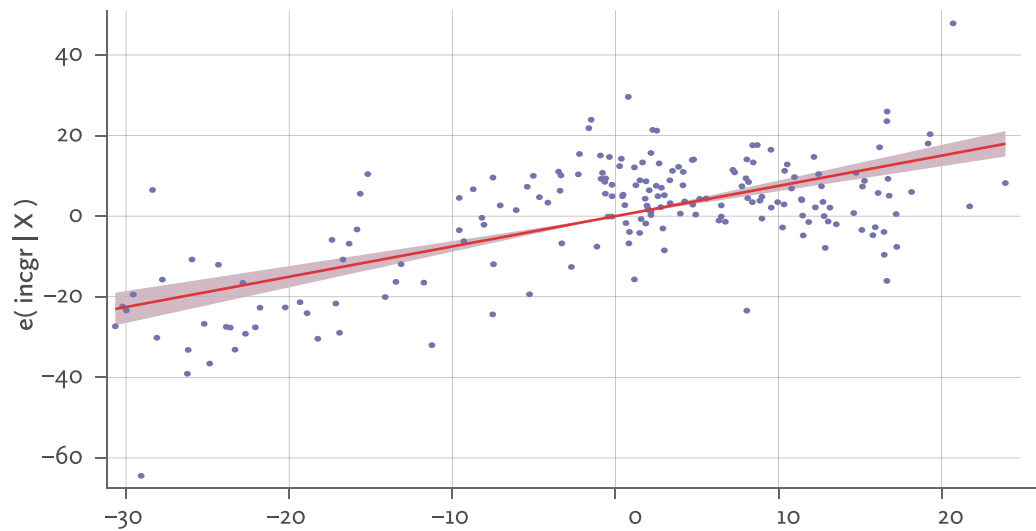


Figure 5.3b :
A mobility reduction of 10% is associated with an income reduction of 7.5%



coef = .7514497, se = .0669427, t = 11.23 e(mobility | X)

Sources and notes: Authors' calculations from CMIE-CPHS data for the months of March to October 2020 compared to February 2020. Mobility data are from Google (see [Chapter Three, endnote 2](#) and [Appendix Section 2](#) for details). Average drop in mobility for the month with respect to a baseline period in Jan-Feb 2020. The figure in (a) shows a bivariate regression with no controls. The partial residual plot in (b) is the result of a regression with state fixed-effects (see text). Numbers next to state labels indicate month (1= March and 8 = October).

This relationship between mobility and income, after controlling for state fixed effects, can be depicted as a partial residual plot (Figure 5.3b). In such a plot, the x and y axis show departures from the trendline for a given state-month pair (residuals in the regression). Clearly, positive deviations from average (mobility decline less than average)

are associated with positive deviations in income (income drop less than average).⁶

The above analysis enables us to estimate the likely income loss that will result from future restrictions on mobility and can help in designing effective policy support.

5.2 / The impact was felt more severely by poorer households

5.2.1 / Income losses across the distribution

In this section we show that the impact on the lower half of the distribution has been larger than on the upper half of the distribution and there has been a large increase in poverty in India. First we examine the drop in incomes across the distribution by arranging households from lowest to highest incomes into hundred equal-sized groups (percentiles). Percentile groups are defined in each period separately (per-covid and covid), on the basis of average incomes in that period.⁷ The cumulative decline in incomes in the Covid months as compared to pre-Covid months is higher for the lower percentiles and decreases for higher

percentiles, before showing a small increase again at the very top of the distribution (Figure 5.4).

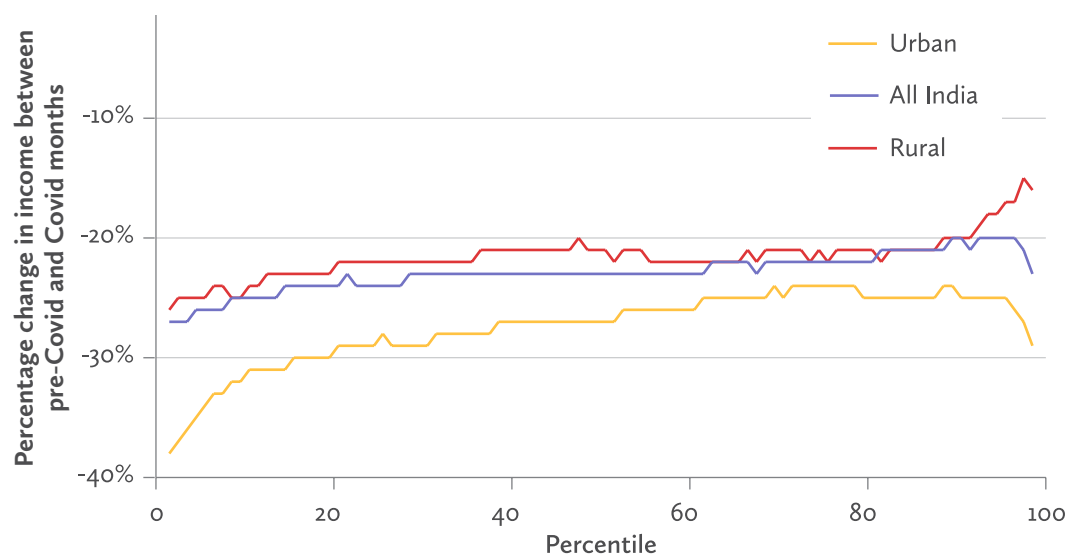
On average, the bottom 10 percentiles (first decile) experienced a 27 per cent drop in incomes which declines to 23 per cent for the 40 to 50 percentiles and further drops to 22 per cent on average for the top 10 percentiles. The pattern is broadly similar in rural and urban areas with the urban declines being higher. Households in all percentiles in urban areas experienced higher declines than their corresponding percentiles in rural areas. The difference of a few percentage points between the poor and the relatively well-off may not appear too significant, but it is worth remembering that for an average household of four members in the bottom decile, the proportionate decline of 27 percent translates in absolute terms to a decline of ₹15,700, or just over two months' income. And this decline is on a very low base to begin with, thus implying a severe reduction in welfare during the Covid period.

An average household in the bottom decile lost ₹15,700 or just over two months' income. This loss is on a very low base thus implying a severe reduction in welfare.

5.2.2 / A large increase in poverty

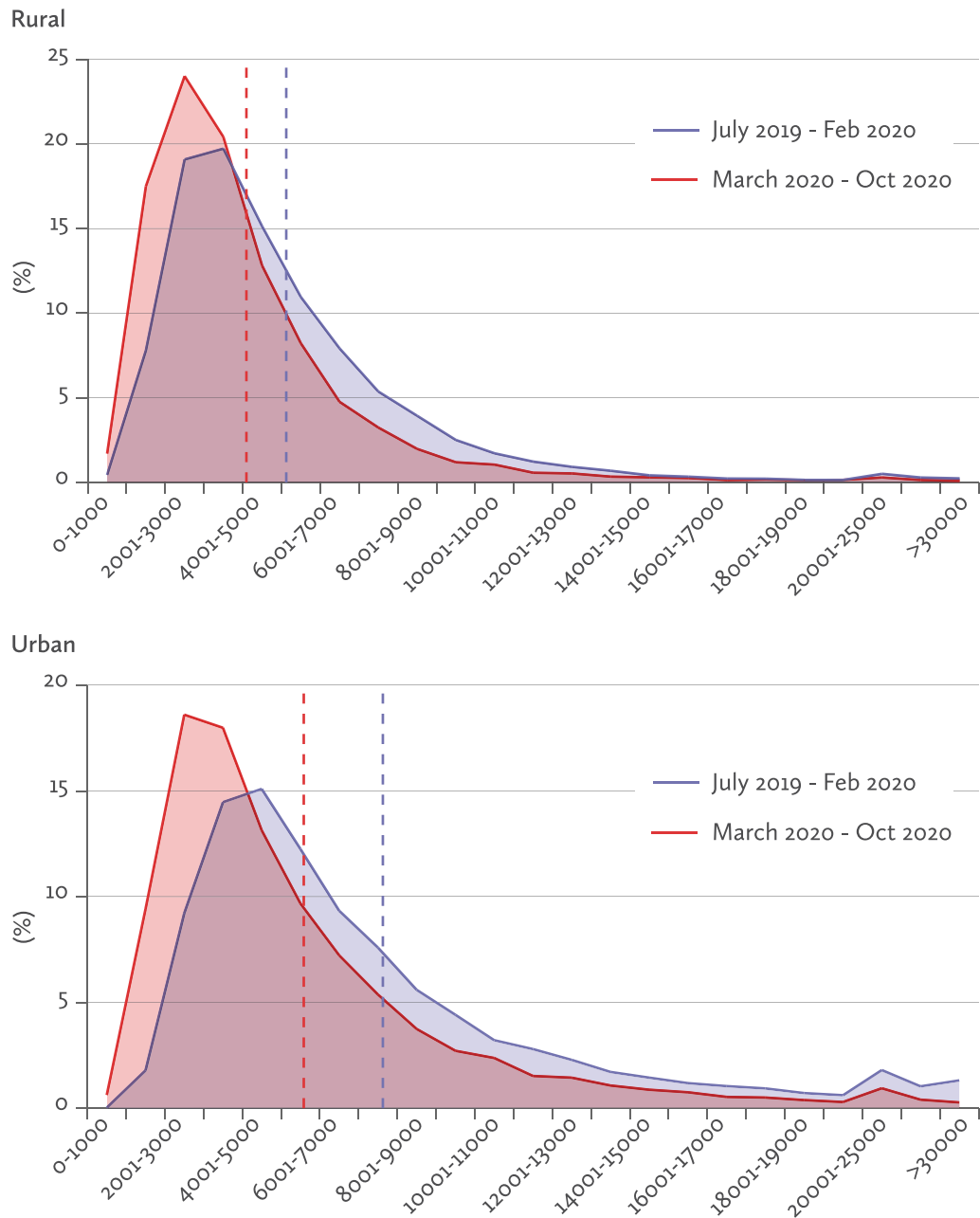
As a result of the shock, the income distribution has clearly shifted to the left as all groups have experienced

Figure 5.4 :
Relative decline in income is higher for poorer households



Sources and notes: Authors' calculations based on CMIE-CPHS. Note: These are Growth Incidence Curves for seasonally adjusted incomes in the first eight Covid months (March-Oct 2020) as compared to the eight months preceding Covid (July 2019-Feb 2020) for each percentile. See [Appendix Section 2](#) for details.

Figure 5.5 :
Shift in rural
and urban
per-capita
income
distribution
before and
during the
pandemic



Sources and notes: Authors' calculations based on CMIE-CPHS. The top panel shows the rural and the bottom panel the urban distribution for average monthly per capita seasonally adjusted income before Covid (July 2019 to Feb 2020) and in the Covid months (March 2020 to Oct 2020). See [Appendix Section 2](#) for details.

decline in incomes. To gain a more intuitive understanding of the impact on household incomes, Figure 5.5 shows the frequency distribution across income categories based on seasonally-adjusted average per-capita monthly income in the pre-Covid and the Covid months. We find that the percentage of households that have an average monthly income below ₹4,000 per capita (for a

typical family of four this is equivalent to ₹16,000) increased sharply in the Covid months in both rural and urban areas.

Using this distribution, we can estimate the change in number and proportion of people below various poverty thresholds. (see [Appendix Section 2](#) for details of methodology for poverty estimates). The

The number of individuals who lie below the national minimum wage threshold increased by 230 million during the pandemic.

similar methodology as the national minimum wage but the allocations for various expenditures are higher and the dependency ratio per income earner is lower.

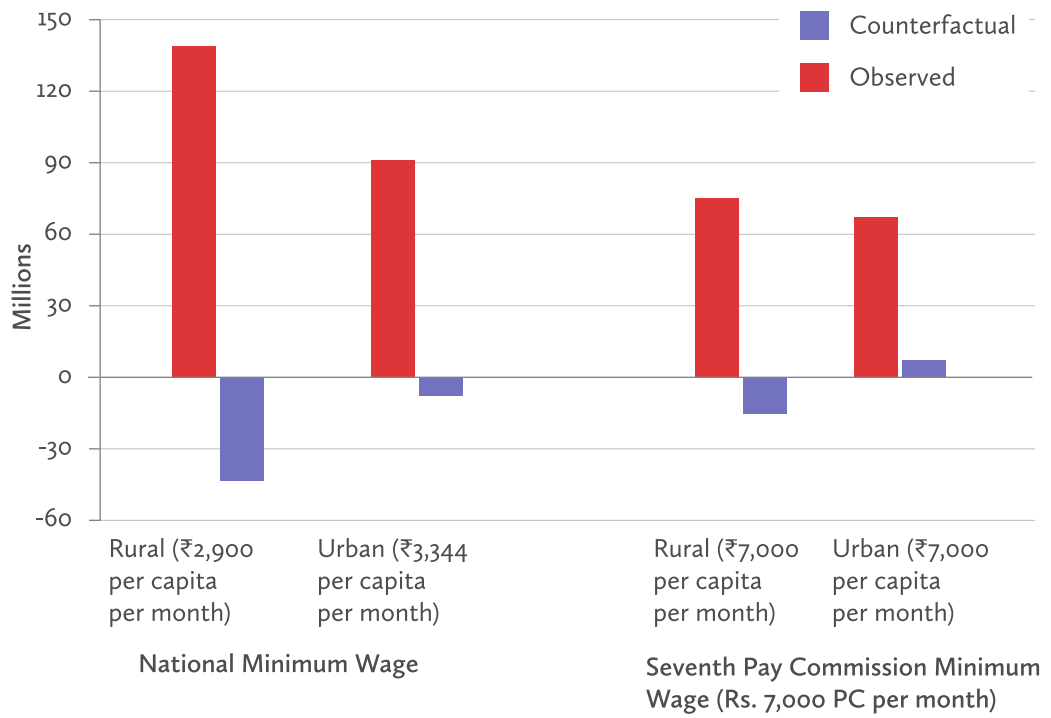
official Tendulkar Committee poverty line of ₹1,240 per capita per month for rural areas and ₹1,480 per capita per month for urban areas (in Jan 2020 rupees) is very low and has not been updated (other than inflation adjustments) for over ten years. It is, therefore, not a very meaningful threshold. Even the World Bank's absolute poverty line of \$1.90 per day, which is higher than the Tendulkar poverty line, has been criticized for its low level and for lacking any substantive interpretation (Klasen et al. 2016; Lahoti and Reddy 2016). So we consider two other thresholds that are high enough to provide for basic needs - the recommended national floor minimum wage and the minimum monthly salary prescribed for government employees. The Expert Committee on Determining the Methodology for fixing the National Minimum Wage (Ministry of Labour and Employment 2019) proposed a wage such that the expenditure on minimum recommended food intake, essential non-food items (namely clothing, fuel and light, house rent, education, medical, footwear, and transport) and other non-food items for the wage earner and their dependents can be met. The recommendation was ₹375 per day (₹104 per capita per day) for rural areas and ₹430 (₹119 per capita per day) for urban areas as of July 2018. This works out to ₹2,900 per capita per month and ₹3,344 per capita per month respectively after adjusting for inflation in Jan 2020 terms. This is consistent with Indian Labor Commission (ILC) norms and the Supreme Court guidelines. However, the recommendation has not been accepted by the Government of India, and as we saw in Chapter Two, a substantial fraction of informal workers earned less than this minimum even before the pandemic. A more aspirational minimum income in the Indian context is the one recommended by the 7th Central Pay Commission (CPC) for government employees which works out to ₹7,000 per capita per month.⁸ This threshold is determined using a

In addition to calculating the absolute number and the proportion of individuals who fell below these two thresholds during the pandemic, we also calculate a counterfactual scenario based on the observed growth in incomes prior to the pandemic. We calculate the growth rate of income for each percentile between 2018 and 2019 and apply the same rate to the pandemic year.⁹ This gives us the 'business as usual' scenario, had the pandemic not occurred, and had incomes continued to grow at the same rate. We provide the absolute numbers as well as proportions below the line for both the Covid and the counterfactual scenarios.

The absolute and proportional changes are shown in Figure 5.6 and [Appendix Table 12](#) gives the levels from which these changes are obtained. We estimate that the number of individuals who lie below the national minimum wage threshold (adjusted to January 2020 rupees) increased by 230 million in the Covid months. This amounts to an increase of 15 percentage points in rural and nearly 20 percentage points in urban areas. Had the pandemic not occurred, poverty would have declined by 5 percentage points in rural areas and 1.5 percentage points in urban areas between 2019 and 2020 and 50 million would have been lifted above this line.

The number of individuals in households with income below the 7th CPC level increased by 142 million as compared to pre-Covid period (over 10 percentage points). Of course, an overwhelming majority of individuals were below the 7th CPC even before the pandemic (81 percent in rural areas and 62 percent in urban areas).

Figure 5.6 :
Massive
increase in
poverty seen
during the
pandemic



Sources and notes: Authors' calculations based on CMIE-CPHS. The first panel is the change in number of people and bottom panel is the change in proportion of people below different seasonally adjusted per-capita income thresholds. The observed change is the change between covid months (March to October 2020) and the preceding months (July 2019 to February 2020). The average seasonally adjusted monthly per capita real incomes over the two periods are calculated and used to estimate the proportion of individuals who live in households earning below these levels. The change without Covid is the counterfactual scenario in which household incomes would have grown at the same rate as prior to the pandemic (see text for details).

Our finding of large increases in poverty during the pandemic is in line with other recent estimates. The World Bank estimates that global poverty (as per the \$1.90 a day line) will rise for the first time in twenty years with South Asia contributing 61 percent of this increase (75 million increase in South Asia and 119 million across the globe).¹⁰ The major contribution within South Asia is estimated to come from India. The Pew Research Center estimates that the middle class in India will shrink by 32 million and the low income class by 35 million with many of them becoming poor.¹¹

“ For the poorest 10 per cent, per capita incomes in October 2020 were 42 per cent below their levels in October 2019. ”

5.2.3 / Event study analysis by income deciles

The foregoing analysis gives us a sense of the cumulative impact of the pandemic months, across the income distribution. But it is also worth knowing the dynamics of fall and recovery of incomes over this period, for the poor as well as the more well-to-do sections. For this, we repeat the event study analysis described above, for every decile in the rural and urban areas. Here too, the regressive nature of the impact on household incomes emerges clearly. Recall that the event study method allows us to capture the extent of impact of an event (here, the nationwide lockdown) on an outcome variable of interest (here, household income) controlling for household-level characteristics that do not change over this time period. This includes observable factors such as caste, religion, educational levels and location as well as unobserved ones like skills, social networks and other factors relevant to resilience during the crisis.

We find that the pandemic had a significantly larger impact on the bottom deciles as compared to the

top deciles. We assess the impact of the pandemic on income deciles by tracking deciles in each month. Decile groups are defined in each month separately, on the basis of incomes in that month.¹² We show the percentage drop in incomes relative to February 2020 for every income decile in rural and urban areas in Figure 5.7. Clearly, there was a sharper decline in incomes for the bottom deciles than the top deciles. In fact, the bottom 20 percent did not earn any income in April 2020. The recovery was also sharper for these deciles. But it was far from complete by October 2020. The pandemic led to the bottom decile’s seasonally-adjusted incomes in October 2020 dropping by 15 to 20 per cent below their levels in February 2020 even after accounting for various household characteristics. The situation seems far more grim upon comparing the year-on-year change in income. For the bottom decile (i.e. the poorest 10 per cent of the population), per capita incomes in October 2020 were 42 per cent below their levels in October 2019.

The data for the lowest decile in rural areas is relatively more volatile in CMIE-CPHS and even prior to the pandemic, between October 2019 and February 2020, incomes seem to have fallen by 80 per cent for the rural poor. So one needs to be cautious when interpreting these results.

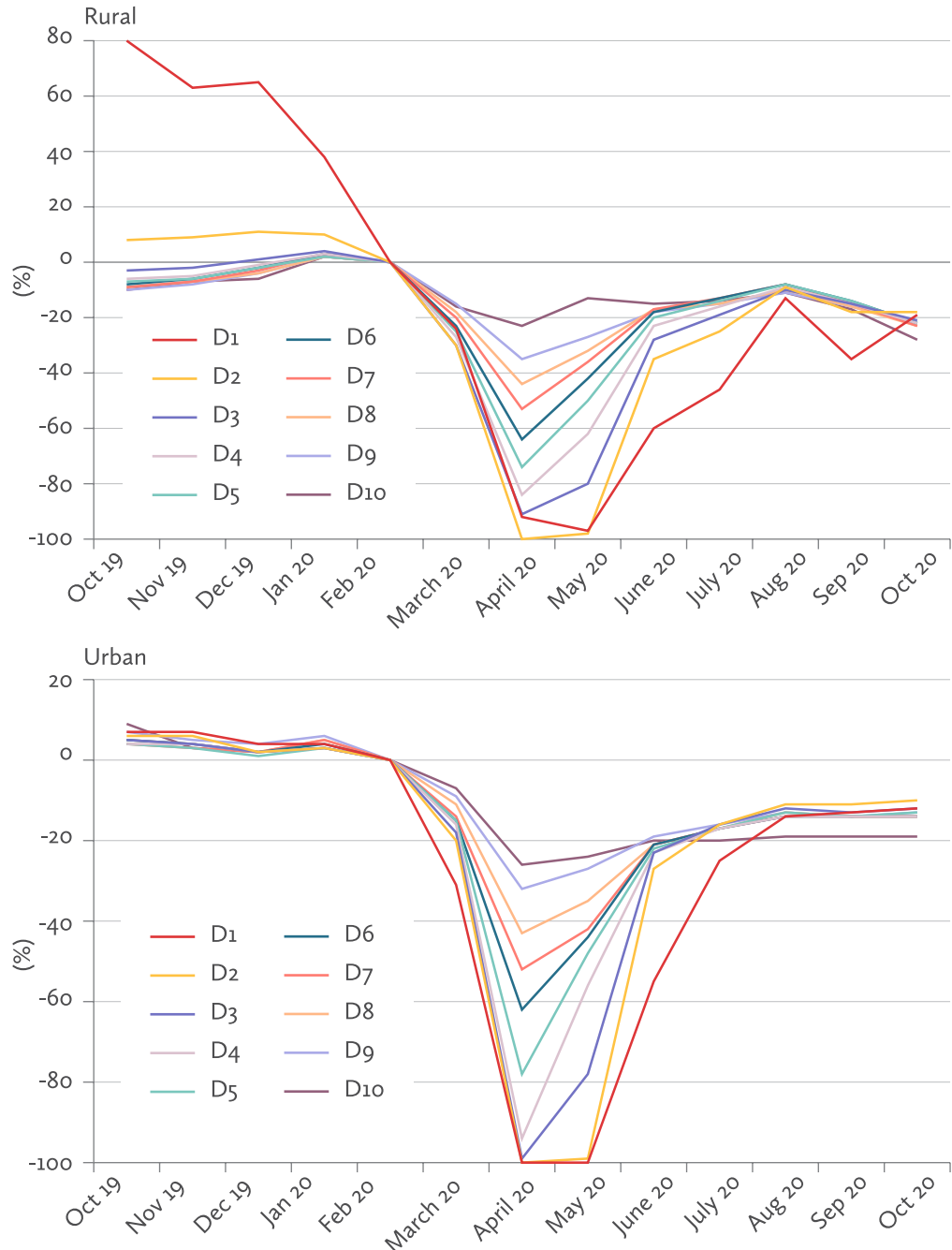
The top decile saw a far smaller decline in incomes in April, but their incomes had not recovered from the depressed levels even by October. In rural areas, the top few deciles have experienced further declines in their seasonally-adjusted incomes since August. We estimate that even after controlling for various household characteristics, top decile’s seasonally-adjusted income in October 2020 was about 30 and 20 percent below their levels in February in rural and urban areas respectively. That is, relative to the bottom decile, the top decile experienced a weaker recovery. The households belonging to the top decile are more likely to

have individuals who work as permanent salaried workers. If they lose jobs, finding jobs with the same salary is often difficult and hence their recovery might be slower. On the other hand, household incomes for the bottom deciles are more likely to come from casual labor. Casual labor jobs

are relatively easier to find and hence recovery for these households has been somewhat faster.

The higher cumulative decline in incomes of the lower deciles as compared to the top deciles has led to an increase in inequality.

Figure 5.7 :
Event study
model
reveals
larger losses
for lower
deciles in
rural (top)
and urban
(bottom)
areas



Sources and notes: Authors' calculations based on CMIE-CPHS. The graphs plot the proportionate change in per capita income estimated separately for rural and urban areas using an event study framework for each income decile (D1 to D10). The event study estimates measure the impact of the the pandemic and the containment measures on the monthly per-capita household income, controlling for various household characteristics. The change in monthly incomes is reported as compared to incomes in February 2020. Households are classified into income deciles in each month separately based on their per capita incomes in that month. See [Appendix Section 2](#) for the event study model as well as seasonality calculations. See [Appendix Figure 1](#) for graphs with confidence intervals.

5.2.4 / Inequality increased during the pandemic

Expectedly, as a result of the differential impact on poorer households, inequality increased during the pandemic. In rural areas, the share of the poorest 10 per cent in the total income decreased from an already low 3.3 per cent to 3 per cent during the Covid months. In urban areas it went from 3.1 per cent to 2.8 per cent. Correspondingly, the ratio of mean incomes of the top decile to the bottom decile increased from 11.9 to 13.6 in rural areas and from 11.4 to 12.7 in urban areas.

These results are in line with results from other surveys during this period. We have already seen results from various Covid-impact surveys in Chapter Four showing that labour earnings losses were higher for poorer workers. The LSE-CEP survey mentioned in Chapter Four shows that urban workers in the lower income quartiles experienced bigger income losses. This resulted in an increase in income inequality with those in the top quartile of pre-Covid income going from 64 per cent share of total income to 84 per cent post-lockdown. They argue that policy support measures have barely addressed the rise in inequality, reducing the post-welfare share to 80 per cent (Bhalotia, Dhingra, and Kondirolli 2020). The Dalberg survey of approximately 47,000 low income households across 15 states also found that households in the lower quintiles were harder hit, with the bottom 20 per cent reporting 71 per cent loss compared to 51 per cent for the top quintile (Dalberg 2020).

It is important to note here that household surveys generally fail to capture upper incomes accurately. This is due to higher non-response rates among these households as well as under-reporting of incomes. The mean monthly household income of the top 5 per cent in CMIE-CPHS is approximately ₹80,000. So our results are unlikely to capture the impact of the pandemic on these households. CreditVidya, an organization that uses Artificial

Intelligence, big data and a sample of 500,000 to track consumption among various segments of the society, has found that the affluent section of the society that earn more than ₹60,000 per month experienced the least drop in incomes and had completely recovered by September. The affluent section saw their incomes decline by 12 per cent in April as compared to February, but were less than 1 per cent below February levels in September.¹³ Another way to estimate the potential impact of the crisis on the affluent is to look at the changes in the wealth of the richest individuals in the society. The IIFL Wealth Hurun India Rich List 2020 saw a cumulative wealth growth of 20 per cent or ₹10 lakh crores compared to the last year.¹⁴ According to Oxfam Inequality Virus' report, Indian billionaires increased their wealth by 35 per cent in the lockdown.¹⁵

5.3 / Coping strategies among vulnerable households

What are the ways in which poor households have responded to cope with this unprecedented crisis? In their SWI background paper, based on new questions introduced in the CMIE-CPHS interview, (Kumar and Kumar 2021) identify a set of positive and negative coping strategies. Positive coping strategies include use of personal savings and sale of liquid assets, and borrowing from formal financial institutions or self-help groups. In addition, transitioning to formal employment or taking on additional work are also considered positive coping strategies. Negative coping strategies include transitioning to risky, less formal employment, reducing consumption and borrowing from informal sources at high rates of interest (see Box 5.1 for more on this study). To this one can also add the increased burden on women's time as a coping mechanism (Box 5.2).

We have already investigated the transition to informal work in detail in Chapter Four. We now look at the evidence on borrowing, food security, and asset sales. There is a lot of information on these aspects available from several smaller,

purposive surveys that have been carried out by researchers and civil society organisations over the past year. A database of reports from these surveys is available online.¹⁶

Box 5.1 : Negative and positive coping strategies among households

Kumar and Kumar (2021) draw on data from customized Covid impact questions fielded in the CMIE-CPHS. Households were interviewed between May and August 2020 and were asked about their coping strategies retrospectively, i.e. pre-lockdown, and their strategies post-lockdown at the time of the interview. Using the responses, the authors identify the share of households by decile groups that resort to the following coping strategies, i.e. consumption reduction, use of savings, informal borrowing, and supplementing existing income.

Reliance on formal and informal savings emerged as the most common coping strategy. Households, across all income groups, reported resorting to savings, with not much variation in the share of households using this strategy across income groups. Around 30 per cent of households in the lower decile also looked to supplement their income from alternate sources, while this strategy was hardly employed among the upper deciles.

The more severe negative coping strategy, i.e. reduction in consumption, was predominantly seen in poor households. About seven out of ten households in the lower income decile had reduced consumption after the lockdown. The share of households reporting reduction in consumption steadily declined with the increase in income, indicating that the use of negative coping strategies is clearly a function of income and employment. Similarly, many poorer households reported resorting to borrowing in kind from their social networks. In the case of this negative coping strategy too, there was a clear decline in the share of households resorting to borrowing as household incomes increased.

Pre-existing vulnerabilities including informal sector employment, low wages and the lack of access to or non-availability of social security measures increases the vulnerability of households. In the face of such a drastic economic shock, poorer households resort to negative coping strategies such as reducing consumption or resorting to high-interest informal borrowings further exacerbating their poverty and vulnerability.

Box 5.2 : Women are bearing an increased burden of domestic work

During the pandemic schools and workplaces have remained closed or moved online, and many families have been forced to spend a lot more time at home. As a result women's work has increased manifold and they have had to navigate increased domestic work alongside pressures to cope with income losses.

Historically, Indian women have spent far more time than men on unpaid care and other domestic work. On average, women spend four to five hours more on such work compared to men. During the lockdown, the average gender gap in the hours spent in domestic work initially narrowed, however, these 'green shoots of gender equality within the household' did not develop further. By August, men's time on housework had declined, although not to pre-lockdown levels (Deshpande 2020).

In round two of the India Working Survey (August-September 2020), respondents were asked about the time they spent in cooking, washing/cleaning, fetching water, working in the kitchen garden, producing goods for household use, childcare and elderly care, on the day prior to the survey visit. The data show that, expectedly, women did the bulk of

the work both before and after the lockdown. More significantly, whether women were employed or not did not make a difference in the number of hours spent doing these activities.

As a result of the pandemic, the burden of domestic work increased, but women had to absorb this increase without any corresponding relief in hours spent in employment. This is evident from the fact that (restricting the sample to only those women who were employed in both periods), median number of hours spent per week in paid work have remained the same (42 for women and 49 for men), but the hours spent in domestic work have gone up substantially (see table). Among women who were employed in both periods, the proportion who spent more than 2 hours a day cooking went up from 20 per cent to almost 62 per cent in Karnataka and from 12 to 58 per cent in Rajasthan. Similar changes were observed in washing and child care. For men, the corresponding numbers were all under 5 per cent, except child care which increased from 4 per cent to 20 per cent. Other surveys also report a disproportionately greater increase in time spent on housework for women compared to men (IMPRI 2020; WIEGO 2020b; 2020a).

Sharp increase in the burden of unpaid domestic work for women

Time spent in a day on cooking	Karnataka Share of women (%)		Rajasthan Share of women (%)	
	February-March	September	February-March	September
0 hrs	5	4	4	6
Less than 1 hr	10	8	8	5
1-2 hrs	65	27	76	31
2-4 hrs	19	55	12	54
More than 4 hrs	1	7	0	4

Sharp increase in the burden of unpaid domestic work for women

Time spent in a day on washing/cleaning	Karnataka		Rajasthan	
	Share of women (%)		Share of women (%)	
	February-March	September	February-March	September
0 hrs	2	4	4	6
Less than 1 hr	13	9	18	7
1-2 hrs	67	45	66	40
2-4 hrs	18	39	12	39
More than 4 hrs	1	3	1	9

Time spent in a day on child care	Karnataka		Rajasthan	
	Share of women (%)		Share of women (%)	
	February-March	September	February-March	September
0 hrs	54	59	44	54
Less than 1 hr	11	5	11	4
1-2 hrs	25	11	31	12
2-4 hrs	9	21	8	23
More than 4 hrs	1	5	5	8

Sources and notes: India Working Survey 2020. The February-March round was a field survey while the September round was a phone survey. See [Appendix Section 4](#) for details. Numbers pertain only to rural areas for reasons of sample size.

5.3.1 / Decline in food intake

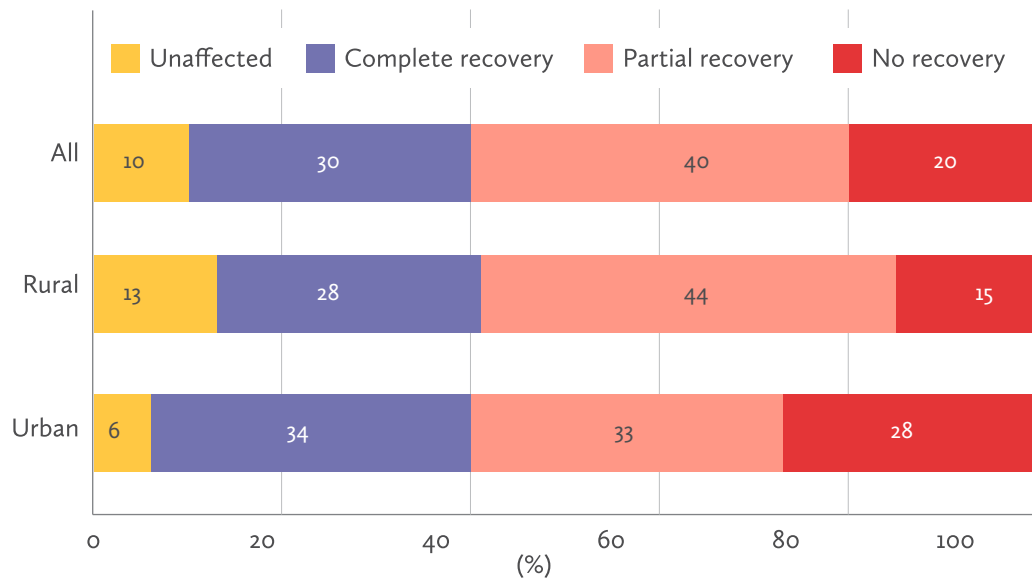
We do not have anything else besides this work. We work every day for twelve hours and this is why we are able to drink and eat.

- Kajal, a construction worker, as interviewed by (Chanchani and Garimella 2021)

For many workers earning minimum wages with little or no savings, the stoppage of work during the lockdown and slowdown in economic activities subsequently, has meant compromising on their daily consumption needs. An alarming 90 per

cent of respondents in CLIPS reported that their households had suffered a reduction in food intake as a result of the lockdown.¹⁷ Even more worryingly, 20 per cent (going up to 28 per cent in urban areas) reported that food intake had not improved even six months after the lockdown. Rural households were better off, with the food intake of a relatively higher share of households (13 per cent) remaining unaffected and a lower share (15 per cent) reporting no recovery relative to their urban counterparts. Taken together, 60 per cent of households were in the partial or no recovery categories (Figure 5.8).

Figure 5.8 :
Food intake was still at lockdown levels for one in five households in October 2020



Sources and Notes: Azim Premji University CLIPS. The figure plots the response of survey respondents regarding the level of food recovery experienced by their households post the lockdown. The respondents could choose one of the following options to document how the lockdown impacted the food intake of the households and the level of recovery post the lockdown: Unaffected - Household's food intake was not affected by the lockdown; Complete recovery- Household's food intake fell during the lockdown, and was back to prelockdown levels during the post lockdown survey months; Partial recovery- While the food intake fell during the lockdown and, subsequently, improved post lockdown, it has still not recovered to the prelockdown levels; No recovery- Food intake fell during the lockdown and there has not been any improvement since then. The figure plots the proportion of respondents that chose each of these options. See [Appendix Section 3](#) for survey details.

The survey sample consists predominantly of informal workers and Below Poverty Line households (see [Appendix Section Three](#) for sample details), but even in this population relatively poorer households were less likely to recover from the shock in their food consumption. The average monthly per capita income prior to the pandemic for those households that remained unaffected was ₹2,891, while it was ₹2,079 for those whose food consumption had still not reached pre-lockdown levels.

Nath, Mandela and Gawali (2021) analyse these data using a logistic regression model to identify the determinants of food insecurity. Focusing on those households which experienced a reduction in food intake during the lockdown, the study finds that poorer households and Muslims households were significantly less likely to recover by October.¹⁸

An alarming 90 per cent of respondents reported that their households had suffered a reduction in food intake as a result of the lockdown.

Moreover, if the respondent was employed in October their household was significantly more likely to experience a complete recovery in food consumption. While these findings pertain only to the survey sample and cannot be generalised, the direct link between unemployment and food insecurity that emerges is important to keep in mind when estimating the welfare impacts of the pandemic.

A Hunger Watch Survey was carried out by the Right to Food Campaign in September and October 2020.¹⁹ This was a purposive survey of nearly 4,000 vulnerable and marginalised individuals across 10 states and one union territory (average monthly

incomes less than ₹7,000). Once again, similar to CLIPS, the survey found that 66 per cent had less to eat than prior to the pandemic, even five months after the lockdown. Although the pandemic disproportionately affected lower-income families, even among the relatively richer respondents (pre-pandemic incomes greater than ₹15,000 per month), 62 per cent reported that their nutritional quality had degraded by September relative to the pre-lockdown period. The Right to Food Campaign has called for a universalisation of the Public Distribution System with at least 10 kg cereal and 1.5 kg pulses till June 2021. We discuss this further in Chapter Eight.

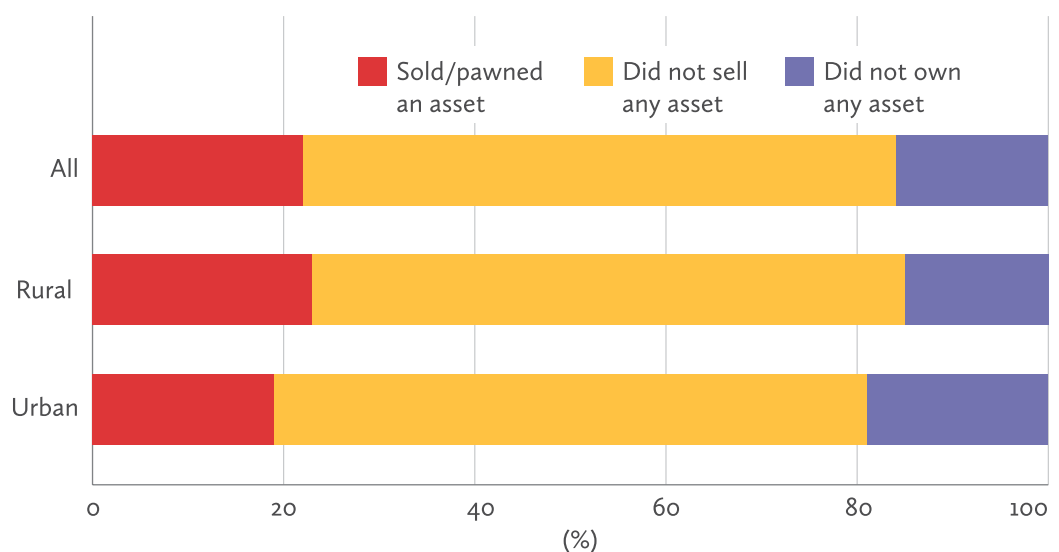
5.3.2 / Increase in household debt and sale of assets

A second significant stress indicator for households is increased debt or distress sale of assets. Surveys find that significant losses of income have forced households to sell assets or borrow even for daily consumption or health expenditure. According to CLIPS, 22 per cent of respondents reported having sold or pawned an asset (Figure 5.9). A higher share of those in rural areas (23 per cent) sold or pawned

an asset compared to those in the urban areas (19 per cent). This could partly be explained by the fact that relatively fewer urban households had assets worth selling or pawning to begin with. Among the different types of assets sold or pawned, jewellery was the most common (35 per cent) followed by livestock (25 per cent). The latter was sold or pawned by relatively poorer households whose average monthly per capita income before the lockdown was ₹1,846. To put this into context, the average pre-lockdown per capita monthly income of households in the sample was ₹2,366.

A much larger proportion (43 per cent) of respondents reported having to borrow to meet expenses. Most respondents depended on informal institutions and networks for loans, with friends, relatives and local money lenders providing more than half of all loans lent out to the respondents. Banking institutions and co-operatives provided only 15 per cent of all loans in both rural and urban areas. Self-help groups (SHGs) also formed an important source of support.²⁰ It is worth emphasising here that the survey was carried out with the help of Civil Society Organisations that were engaged in relief work and respondents are

Figure 5.9 :
More than 1/5th of vulnerable households sold or pawned an asset to cover expenses during the lockdown



Sources and notes: Azim Premji University CLIPS. The figure plots the response of the survey respondents when asked whether they had to sell or pawn any asset to cover expenses emerging as a result of the lockdown. This question was administered between the months of October, November and December, 2020 and the reference period in question was since the beginning of the lockdown.

Not only were poorer households more likely to borrow, the amount of loan borrowed by these households was a much higher multiple of their pre-pandemic incomes compared to better-off households.

in the networks of these CSOs. Thus they are more likely to have greater access to (or at least information about) various kinds of institutional support than the average household. Hence these results are likely to be a conservative estimate.

The relative importance of informal sources of credit as well as SHGs in meeting consumption needs during the crisis also emerges from the India Working Survey in Karnataka and Rajasthan. About 42.6 per cent of respondents reported having borrowed from friends or relatives, 31.7 per cent from self-help groups, and 14.7 per cent from money-lenders. A further 3 per cent borrowed from both friends and money-lenders. Less than 2 per cent reported borrowing from banks. This could partly be explained by the fact that the sample is relatively more rural in nature (see [Appendix Section Four](#) for sample details).

But significantly, over 90 per cent of respondents reported having borrowed money and the median loan amount was ₹15,000 (mean amount of

₹26,300). Worryingly, the average amount borrowed from money lenders and traders was far higher at ₹29,000 compared to borrowing from friends and relatives (₹18,000).

A significant minority reported borrowing from multiple sources and had debts going up to ₹45,000. It is worth noting that the average income in this sample is ₹7,800 per month. Thus debts ranging from twice to six times monthly income were observed.

A particularly disturbing finding from Azim Premji University CLIPS is that not only were poorer households more likely to borrow, the amount of loan borrowed by these households was a much higher multiple of their pre-pandemic incomes compared to better-off households. Table 5.1 shows the burden of debt across income quartiles based on February household income. The median February household income of the bottom quartile was ₹4,000 while that of the top quartile was ₹18,000. The median loan amount in the bottom quartile was ₹12,000 and that in the top quartile was ₹30,000. The poorest households (bottom quartile) had debt burdens 3.8 times their monthly household income in February. This ratio was only 1.4 for the top quartile. This increased indebtedness among the poorest of the poor is likely to further stifle their ability to recover from this crisis.

Table 5.1 :

The poorest households took the largest loans relative to their earnings

	Overall	Bottom 25%	Second 25%	Third 25%	Top 25%
Median income in Feb 2020 (₹)	8,500	4,000	7,000	10,000	18,000
Loan amount (₹)	18,000	12,000	15,000	20,000	30,000
Ratio	2.1	3.8	2.1	2	1.4

Sources and notes: Azim Premji University CLIPS (see [Appendix Section 3](#) for details). The table shows the burden of debt across the income quartiles based on February household income. Medians are reported on account of outliers. Ratios are calculated at the household level and then averaged. Hence values arrived at by dividing the median value of loan to median household income will not match with the ratio values provided.

The reliance on loans and selling of assets primarily to cover food, health and other daily expenses indicates the intensity of the impact on livelihoods. Strikingly, in CLIPS, 61 per cent of all those respondents who had either taken a loan or sold or pawned an asset had done so only to cover such basic expenses. A further 23 per cent cited food, health and other daily expenses as one of the main reasons why they had to sell or borrow (Figure 5.10).

Anecdotal evidence also indicates the extreme distress that families were thrown into, forcing them to borrow to meet essential health expenses. For Parvesh, interviewed by Chanchani and Garimella (2021) for their SWI background paper, the fall in earnings for her husband and herself meant having to resort to borrows to meet the health expenses of her young child.

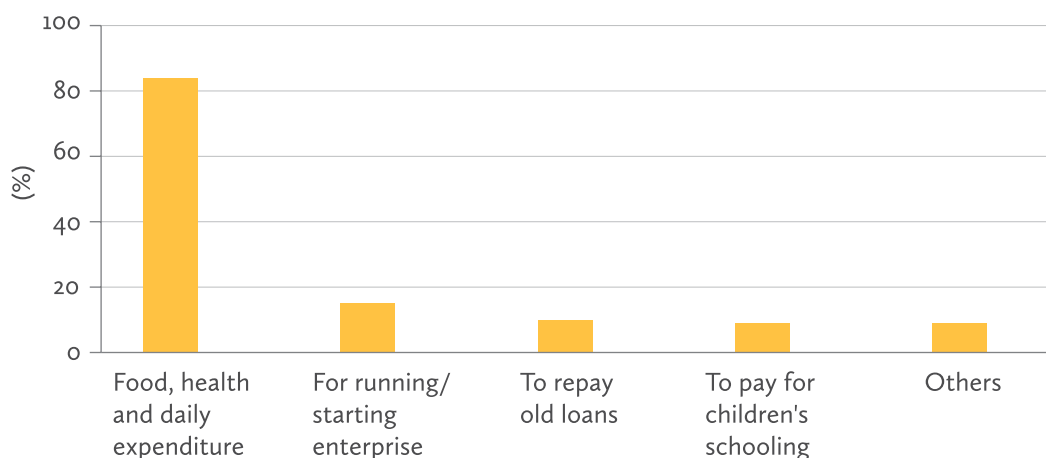
My husband and I are only able to earn 9500 rupees together now. We have a baby, one year old...she is frail and weak. Her medicines alone cost us 1000 rupees a month. Tell us, how else would we manage? So, we had to take out a loan on top of this.

CLIPS also allows us to examine household finances taking food insecurity as an indicator of distress.

More than 45 per cent of those households whose food intake was unaffected did not have to sell assets or borrow (Table 5.2). On the other hand, close to two thirds of the respondents whose households had not recovered in food intake had to resort to borrowing or selling an asset. When it comes to households who did not have any asset to sell, we observe that greater the food insecurity, higher the share of households that took a loan. Thus clearly, a disturbing pattern developed during the pandemic wherein workers lost work and households had to cut back on food and other consumption or borrow/sell assets to meet basic needs. Finally, it should be noted that household assets often double as business assets for self-employed workers. Hence such distress sale can have implications for future productivity and incomes as well.

High levels of indebtedness can be validated from other surveys also. In the Dalberg survey of low-income households, the median debt accumulated as of the end of May was 67 per cent of pre-lockdown monthly household income, with the number reaching 100 per cent of the household income for the bottom quintile of low-income households (Dalberg 2020). The Gaon Connection survey of 6,040 households in 16 states and one

Figure 5.10 :
Food, healthcare and daily expenses were the main reason for borrowing or selling assets



Sources and notes: Azim Premji University CLIPS. The respondents who had taken a loan or sold/pawned an asset were asked about the reasons for doing so. This was a multiple choice question and the figure above plots the frequency of each reason provided. Given that a respondent might have provided more than one reason, the columns do not add up to 100%.

Table 5.2 :
Poorer the food intake recovery, greater the likelihood of borrowing or selling

	Owned assets				Did not own assets	
	Took loan, sold asset	Took loan, did not sell asset	Did not take loan, sold asset	Did not take loan, did not sell assets	Took loan	Did not take loan
Unaffected	10.1	24.7	9.1	10.1	2.5	8.1
Complete Recovery	16.7	23.6	7.4	16.7	5	9.3
Partial recovery	13.2	27.9	8.8	13.2	4.3	8.6
No recovery	18	27.6	10.1	18	9.6	8.4

Sources and notes: Azim Premji University CLIPS (see [Appendix Section 3](#) for details). The table shows for each food recovery status, the share of households who had to take a loan and/or sell an asset. The rows sum to 100.

Union Territory in December 2020 reported that 23 per cent of households borrowed money during the lockdown, 8 per cent sold a valuable possession (phone, watch etc.), 7 per cent mortgaged jewellery, and 5 per cent sold or mortgaged land.²¹

5.3.3 / Social networks

Since government-provided social safety nets are not adequate, poor households often rely on each other for support in difficult times. However, the nature of the present crisis is such that the shock has impacted everyone simultaneously. Under such circumstances, what support can social networks provide? The India Working Survey 2020 gathered information in the pre-pandemic period (February-March 2020) on social networks of respondents by asking them about people outside their households with whom they had interactions, such as visiting each other's homes or asking for advice. During the second round (in August-September 2020) respondents were asked if any of the people in this network had helped them in their employment or business, since the lockdown. Only 18 per cent of the respondents said that this was the case. This number is surprisingly low given the amount of distress the respondents report while comparing

their incomes to the previous year (around 88 per cent report that their incomes were lower than last year).²²

One reason for this could be that most of the networks are homogeneous. Almost 60 per cent of the respondents have their social networks consisting entirely of people of their own sub-caste (jati). People from a different jati formed at least half of the network for less than a quarter of respondents. Similarly, 44 percent of respondents reported social networks in which all members (22 per cent) or the majority (another 22 per cent) were engaged in a similar occupation as themselves. These kinds of networks with similar people may insure against individual shocks like illness or accident. But the pandemic likely affected everyone from a similar background similarly and in the case of such a coordinated general shock, such networks would not provide much insurance. The kinds of help that people did receive was varied, with personal loans being the predominant kind. Examples of other kinds of help that was forthcoming are provided by Downs-Tepper, Krishna and Rains (2021) in their SWI 2021 Background paper (Box 5.3).

Box 5.3 : Experiences of Slum Residents in Bengaluru and Patna

The impact of the pandemic has been particularly severe among the urban poor. Downs-Tepper, Krishna and Rains (2021) document the experiences of two such communities - slum residents in Bengaluru and Patna. Slums are densely populated and have inadequate provisioning of basic services like water, electricity, and sanitation, making them highly vulnerable to infectious diseases. Moreover, almost all working residents of slums have jobs in the informal economy without social security and limited savings and assets to fallback on, making them particularly vulnerable to the lockdown and its after-effects.

Slum residents, in general, have faced serious economic hardship as a result of the pandemic. Drawing on a sample of 40 slum neighbourhoods in Bengaluru and Patna, the authors interviewed 120 key respondents over six times in three months to document the health and economic effects of the pandemic and the lockdown. In April 2020 based on interviews, the authors estimated that roughly 50 per cent of household heads in Bengaluru and 82 per cent in Patna lost their primary source of income. The recovery was only partial till November and was faster in Bengaluru than Patna. The worst health shocks of the pandemic were clustered in a small number of neighbourhoods in Bengaluru while it was more widespread in Patna. They found no reported Covid-19 sickness in Patna, and limited sickness in Bengaluru. While Patna slum residents recovered only two-thirds of their pre-pandemic levels of income, the corresponding number for Bengaluru was three-fourths.

In addition, slum residents have spent their small savings and have liquidated their meagre assets. Many have been pushed into poverty or are just at the edge of poverty. The authors argue that any further shocks or delayed recovery could push many slum households into chronic poverty.

The authors also noted that it was neighbours and community members who provided support rather than NGOs or the government, and illustrate the point with this account of a working woman in a Patna slum.

Nita is a 38-year old widowed mother of two children in Patna's East Lohanipur settlement. Before the pandemic, she earned about ₹7,000 per month working as a maid in four different houses. When the pandemic began, three of the four clients asked her not to continue working for them, and she struggled to pay her rent of ₹2,500 per month as well as to pay for food. Nita does not have a ration card needed to access subsidised food rations and, though she applied for one during the lockdown, she has yet to receive one. Nita did not receive any support from political parties or NGOs during the lockdown, but her neighbours stepped in to support her. They negotiated with her landlord to postpone her rent payments and helped provide her with some of their rations and loans. The local shopkeeper also donated food to her. After the lockdown, Nita began working in a second home again (in September), and is now making around ₹4,000 per month."

5.3.4 / Impact on education

Lastly, it is important to note that alongside compromised nutritional intake and indebtedness, loss of education in the past one year (and counting) is also likely to have persistent effects. In Round 2 of Azim Premji University CLIPS, respondents with children enrolled in schools were

asked about the status of their child's schooling. They were asked if children were attending physical classes, or online classes (conducted by the school or for private tuitions).

As of October-November, classes were taking place for around 75 percent of children in rural areas and

ninety percent of children in urban areas. However, only four in ten students were attending online classes in urban areas. The number is lower (3 in 10) in rural areas perhaps due to the lower number of online classes taking place there.

If children were not attending classes, they were asked to select the reasons for the same with the options including - schools not functioning, schools no longer affordable, or not having smartphone/ internet to attend classes, or other reasons. Overall, 43 per cent of children could not attend functional classes as they did not have an internet connection or a smartphone that would allow them to participate in online programmes. Worryingly, another 24 per cent were not going for classes as their parents could no longer afford to send them to these institutions.

For those with smartphones or who could afford one, as Chanchani and Garimella (2021) reveal, the internet recharge was an additional expense on an already-burdened household budget. For Nasim, a street vendor from Muzaffarnagar, continuing the schooling of his sons was no longer an option. With the pain and sadness in his voice, he says,

My son was very good in his studies. But my financial condition doesn't allow me to fund his studies any longer. I am deeply pained to see him roam around selling clothes. But I had no other option left, as my debt has increased manifold during the lockdown. Once the family condition improves, I will ask him to enrol for further studies.

- Nasim, reported in Chanchani and Garimella (2021)

The educational impact is likely to be profound and long-lasting. In an Azim Premji Foundation survey of 1,137 public schools across five states, conducted in January 2021, 16,067 children in second to sixth standard were assessed on four specific abilities each in language and mathematics (Azim Premji Foundation 2021). The language abilities included

describing a picture or an experience orally, reading familiar words, reading with comprehension and writing simple sentences based on a picture.

The mathematical abilities included identifying single- and two-digit numbers, simple arithmetics, describing 2D or 3D shapes, and reading or drawing inferences from data. The findings were alarming. Ninety two per cent of children had lost at least one language ability from the previous year and 82 per cent had lost at least one specific mathematical ability from the previous year.

We have seen in the preceding pages that vulnerable households have experienced larger losses in employment and earnings. These have the potential to increase hunger and indebtedness for a significant proportion of the population unless appropriate policy actions are taken. Taken together, the household level impacts presented in this chapter present a picture that demands urgent action. None of these effects (nutritional deficits, indebtedness, educational deficits) will disappear in the short-run after the pandemic has run its course. Rather, their consequences will be felt for years to come, unless action is taken now.

5.4 / Conclusion

With this chapter we conclude our analysis of the impact of the pandemic on labour markets and households. Most of the data we have drawn on were collected between April 2020 and December 2020. While the pandemic is still raging and the impacts are likely to persist, we believe that the information presented here constitutes a firm basis for designing and implementing policy measures to support workers and households in these extraordinary times. Several policy interventions have already been carried out at the Central, State and local government levels over the past year. In the next chapter we discuss these interventions and their effectiveness.

Endnotes

¹ Thus the household income share of GDP was less than 50 per cent. This divergence between per capita incomes as measured by surveys and as measured in the national income accounts is observed in many countries and has been attributed to differences in definition of the 'household' sector, ability of survey to capture all incomes accruing to households and incomes, and the division of corporate earnings into dividends, employee compensation and retained earnings. For example, see various OECD briefs on 'Growth and economic well-being' (<https://www.oecd.org/sdd/na/Growth-and-economic-well-being-oecd-01-2021.pdf>) and also Nolan, Roser, and Thewissen (2016)

² See [Appendix Section Two](#) for details on seasonal adjustments.

³ To estimate the cumulative average income in the Covid months only households for which income data is reported in all the Covid months (March 2020 to October 2020) are used. Similarly, for calculating average household income in the pre-Covid period (July 2019 to Feb 2020) only households who report data in all the eight months preceding Covid are used. This is done to eliminate the bias that might be introduced due to attrition and non-response. This is particularly an issue in the lockdown months of April to May 2020, when the survey sample declined by more than half. This results in a sample size of 50,133 households in the March-October 2020 period and 62,194 households in the pre-Covid period.

⁴ The event study regression incorporates household fixed effects and error terms clustered at the household level. Details of the model can be found in [Appendix Section 2](#).

⁵ The regression model is $(\Delta y/y)_{it} = \alpha + \beta(\Delta M/M)_{it} + S_i + \varepsilon_{it}$ where y is monthly household income, M is the number of footfalls in various public areas, S captures state fixed effects, i indexes states and t indexes months.] This exercise allows us to estimate the average percentage loss in income for a given percentage decline in mobility

across states. We find that a 10 per cent decline in mobility was associated with a 7.5 per cent decline in income.

⁶ The relationship is statistically significant. This can be assessed visually based on the fact that the confidence bands do not overlap with the X axis.

⁷ Due to the dynamic nature in which percentile groups are defined, we do not follow the same set of people over time. The composition of households within any percentile will change in the two periods due to change in incomes of households and also attrition of households.

⁸ The 7th CPC recommended a minimum salary of ₹18,000 per month (₹200 per capita per day). We adjusted this for inflation using rural and urban CPIs and converted it to January 2020 rupees. See <https://www.finmin.nic.in/seven-cpc>

⁹ Households are classified into percentiles based on income in July 2018-February 2019 and growth rate in the average monthly seasonally adjusted per capita real income between the periods July 2018-February 2019 and March 2019-October 2019 is calculated. This growth rate is applied to average monthly per capita incomes of each percentile in July 2019-February 2020 to get the counterfactual incomes.

¹⁰ This is the increase in the number of people whose consumption will fall below the absolute poverty line of \$1.9 per capita per day in International Purchasing Power Parity (PPP) terms (about ₹2,520 per month for a family of four). <https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-effect-new-data>

¹¹ Pew defines lower incomes as those earning between \$2-\$10 per capita in 2011 PPP terms (between ₹1,280 and ₹6,400 per capita per month) and middle class as those earning between \$10-\$20 2011 PPP (between ₹6,400 - ₹12,800 per capita per month). <https://www.pewresearch.org/fact-tank/2021/03/18/in-the-pandemic-indias-middle-class-shrinks-and-poverty-spreads-while-china-sees-smaller-changes/>

¹² Due to the dynamic nature in which decile groups are defined, we do not follow the same set of people over time. The composition of households within any decile will change from month to month due to change in incomes of households and any attrition of households.

¹³ <https://compass.creditvidya.com/Sept%202020/Earnings/Earnings%20by%20value?queryTime=1616954998835>

¹⁴ <https://www.hurun.net/en-US/Info/Detail?num=LWAS8B997XUP>

¹⁵ <https://www.oxfam.org/en/research/inequality-virus>

¹⁶ https://cse.azimpremjiuniversity.edu.in/covid19-analysis-of-impact-and-relief-measures/#other_surveys

¹⁷ The Azim Premji University CLIPS is a purposive panel of 2,778 respondents across 12 states in India who were interviewed in April-May (during the lockdown) and subsequently in October-December 2020.

¹⁸ This analysis takes into account only those households whose respondents were working in February and who had experienced a loss in food intake during the lockdown, accounting for 29 per cent of the entire sample. Household-level characteristics are regressed on a binary response variable which takes the value 1 if the households food intake recovered to pre-lockdown levels and 0 if the household has not completely recovered.

¹⁹ <https://thewire.in/rights/hunger-watch-survey-lockdown>

²⁰ This could be explained by the nature of the sample. Two-thirds of all those respondents who had received a loan via an SHG were individuals whom we had contacted using the networks of the civil society organisation, Pradan. One of Pradan's major objectives is to set up viable SHGs in rural areas.

²¹ <https://insights.gaonconnection.com/wp-content/uploads/2020/12/COVID-19-VACCINE-AND-RURAL-INDIA-1-1.pdf>

²² Owing to the small size of the urban sample, all analysis here pertains to rural areas.

6

**India's social
protection
architecture**

6

India's social protection architecture

The report on social security by the National Commission for Enterprises in the Unorganised Sector (NCEUS 2006) noted that India did not have a comprehensive national social security policy for the entire labour force. Despite some progress, unfortunately, the statement remains more or less true fifteen years later.

As we have seen in [Chapter Two](#), employer- or work-linked social security and insurance measures are rare, covering around 10 per cent of the workforce (16 per cent of the non-agricultural workforce). Even if the self-employed (own-account and unpaid family workers) are excluded from the estimate, such provisions are only available to 26 per cent of wage earners. Thus only a small minority of workers, such as public servants, corporate sector employees, or some groups of informal workers can hope to emerge relatively unaffected from such a crisis.

Concerningly, expenditure on social protection has stagnated in recent years. The Asian Development Bank has estimated that India spent 1.7 per cent of GDP on social protection (excluding health) in 2009 (ADB 2013). The average for lower middle income countries of Asia was 3.4 per cent. By 2015, this had fallen to 1.3 per cent. For comparison Vietnam spent 2 per cent, Sri Lanka 5.6 per cent, and China 5.7 per cent (ILO 2017, Fig 6.31).

On the other hand, India does possess a long-standing commitment to a social development agenda as enshrined in the Directive Principles of the Constitution, as well as a history of legislative and executive action at the Centre and State level whose aim has been to reduce poverty and

vulnerability. The current government has also displayed a strong desire to formalise the informal workforce and extend social protection to all workers.

“The ‘ration, pension, NREGA’ trinity is a cornerstone of India’s social assistance policy.”

In this chapter we provide a brief overview of these programmes and schemes prior to pandemic, so that the reader may get a better understanding of the strengths and weaknesses of this architecture. The next chapter presents information on how the programmes were deployed during the crisis and how they performed.¹

6.1 / Social protection programmes – some conceptual distinctions

We start with some basic conceptual distinctions that are important to understand programme effectiveness in the Indian context.

a. Social assistance versus social insurance

A distinction is generally made between programmes that address persistent deficiencies or deprivations versus those that address contingencies. The former, also called promotional programmes or social assistance, are intended for those who cannot work (for example, children, the elderly or the disabled) as well as those who work

but do not earn enough to guarantee a minimum level of consumption. Examples include subsidised food (such as the Public Distribution System or PDS), food for work or other types of employment programmes (such as the Mahatma Gandhi National Rural Employment Guarantee Programme or MGNREGA), as well as various types of pension programmes (such as the National Social Assistance Programme or NSAP). This 'ration, pension, NREGA' trinity is a cornerstone of India's social assistance policy. It has historically had the widest reach for the informal sector or for Below Poverty Line and vulnerable households, at least in the rural areas. Its coverage expanded greatly between 2004 and 2011 (see Table 1 in Drèze and Khera (2017)).

Programmes intended to provide a safety net in case of accidents or contingencies are called protective programmes or social insurance. These provide a safety net in case of foreseen as well as unforeseen contingencies such as retirement, motherhood, unemployment, accidental injury and death, as well as other health-related contingencies. With the development of the post-World War Two welfare state, especially in the advanced industrialised countries, governments have acted to ensure that such social protection is available via employment contracts.

In recent years, several policies have been enacted that bypass the employer and instead set up an insurance fund to which the State and the worker contribute.

Of course, there are grey areas between social assistance and social insurance programmes. For example, MGNREGA can be seen as doing a bit of both - supplementing incomes for those who do not earn enough as a matter of course (assistance) as well as offering a fallback for those who lose work, such as happened during the Covid crisis (insurance).

b. Work status versus citizenship or domicile

A second important distinction is between social programmes where eligibility is based on citizenship as opposed to work status. The former include programmes like the PDS, MGNREGA, the Integrated Child Development Scheme (ICDS), and various forms of cash transfers. Such programmes have eligibility criteria rooted in domicile, rather than a particular type of employer or employment arrangement. The latter have employment status as eligibility criterion and may include programmes and schemes that address adversity (ill health, accidents/death and old age) as well as deficiency (access to credit/finance especially for the self-employed, loans for upgrading skills, loans for housing, children's education and so on. Unfortunately, as we saw in Chapter Two, stable and unique employer-employee relationships exist for less than 10 per cent of the Indian workforce.

But this does not mean that developing countries cannot afford decent social protection systems. The report on social security by the National Commission for Enterprises in the Unorganised Sector (NCEUS 2006) notes that social security evolved in the now developed countries alongside stable employment relations (and not after them), as a result of strong labour movements as well as

older patrimonial and community beliefs regarding the duty of the State or the collective to take care of those who could not take care of themselves. Further, developing countries have made impressive gains since decolonisation, demonstrating the feasibility of both promotional

and protective social security arrangements despite low levels of income and a large informal sector.

In India, in recent years, several policies have been enacted that bypass the employer and instead set up an insurance fund to which the State and the worker contribute. Some examples are the Atal Pension Yojana and the PM Shram Yogi Man Dhan Yojana.

c. Legislative versus executive action

Another key distinction that has implications for effectiveness and responsiveness to public concerns, especially when it comes to transparency and grievance redressal, is that between social protection as a legal right versus programmes passed by executive order as ‘schemes’ which the government of the day may launch, modify, or withdraw as it deems appropriate. Social protection schemes passed by executive order have a long history in India (Kumar 2020). Recently, several landmark rights-based legislations have been passed, such as the Right to Work, Right to Food, Right to Education (RTE), and Right to Information (RTI). But the scheme-based approach remains popular.

At least for important basic protections, legal entitlements are crucial because they allow citizens to hold the State accountable. There are ample examples of this from active public campaigns around MGNREGA, National Food Security Act (NFSA), RTE, and RTI. There are also examples of work-related social security for unorganised workers ensured via legislation such as the Maharashtra Mathadi Workers (1969) Act (discussed later in more detail). However, it should be emphasised that while legal rights are necessary to guarantee entitlements, they are far from sufficient. Active civil society movements, labour unions, and citizens’ rights groups are needed to ensure that rights turn into realised entitlements.

d. Targeting and mode of delivery

With respect to delivery, once again, there are two distinctions that should be highlighted. First, targeted versus self-targeted or universal measures, and second, cash versus in-kind benefits. Both are associated with an extensive scholarly, policy, and campaign literature. It is outside the scope of the present study to delve deeply into these debates. We only offer some remarks here to set the context.

India’s data poverty makes effective targeting of benefits difficult. For example, absence of national data on consumption since 2011 has made updation of the national poverty lines challenging and has left millions out of the NFSA net, with tragic consequences during the Covid crisis. Even when consumption data are available, Drèze and Khera (2017) note that Below-Poverty-Line (BPL) targeting has caused exclusion errors and has been abandoned in due course in many instances. In the case of PDS, targeting varies from state to state, depending in part on whether recent socio-economic data are available at the state level. Due to exclusion errors with targeting, a strong demand for at least temporary universalisation of PDS emerged during the Covid crisis.² The MGNREGA and the mid-day meals programmes work on a more practical self-selection principle since those willing to do manual labour for a subsistence wage belong to poor households and because children attending government schools also tend to come from poor households. Going forward, efforts at generating higher frequency data to allow better targeting, as well as self-targeting where possible should be policy goals.

The debate on cash or in-kind transfers has also given rise to a vast literature.³ Some insights on the preference for cash or in-kind transfers come from a random survey of PDS functioning among 1,200 rural households across nine Indian states conducted in 2011 (Khera 2014).

Overall, the proportion of respondents who expressed a preference for cash over rations (PDS) was only 18 per cent. Where the PDS functioned well, people preferred food. They also mistrusted cash due to fears of inflation driving down the real value of the entitlement. That this fear is real is shown clearly by the case of NSAP pensions discussed below. There was also a fear that cash could be misused, that banking facilities were inadequate, and that food prices might increase if the PDS were to be dismantled. In states (such as

Bihar) where the programme suffered from large leakage or quality problems, people were more open to substituting it with cash (54 per cent). The study concluded that the unpopularity of cash transfers (where PDS works well) can only be offset by making the transfers much larger than the implicit value of food subsidies. However, this may not lead to net savings for the government.

Narayanan (2011) notes that unconditional cash transfers work well where no specific goal is intended, but instead a general safety net is to be provided - for example, old age pensions. On the other hand, if the intention is to promote a particular developmental goal such as better nutrition, greater school attendance and so forth, then either conditional transfers, vouchers or direct provisioning of the good or service work better. Of these three which is to be preferred usually depends on the quantity and quality of the relevant infrastructure (physical or digital), digital or formal literacy, as well as more subtle factors such as familiarity with existing systems or unfamiliarity with new ones.

All five aspects of social protection system discussed above - nature of the goal (insurance or assistance), eligibility (domicile or work relationship), legal rights or lack thereof, type of targeting and type of entitlements - have strong implications for inclusion or exclusion from programmes, timeliness of delivery, and extent as well as type of corruption or leakages. For example, cash transfers suffer from smaller leakages but have proved to be far less inclusive than the PDS due to lack of banking infrastructure. On the other hand, PDS has proved to be more inclusive during the crisis, but generally suffers from more leakage problems than direct cash transfers, in some cases exceeding 50 per cent (Gulati and Saini 2015).

“ If the NFSA percentages are applied to population numbers for 2020, an estimated 100 million people are found to be excluded. ”

6.2 / General social protection programmes

We now discuss, in brief, the coverage, entitlements, and delivery aspects of key programmes that proved useful during the Covid-19 pandemic. This section deals with general programmes that are not conditional on a person's current or past employment status. The next section gives an overview of employment-linked or work-status targeted programmes.

6.2.1 / The Public Distribution System (PDS)

PDS is one of India's oldest State-run social protection programmes dating back to the 1940s. It provides subsidised monthly fixed rations of cereal (rice or wheat) to eligible households through a system of fair-price shops. Depending on the state, PDS outlets also provide subsidised pulses (dal or chana), oil, sugar, and salt. A few states (such as Karnataka) have also attempted to provide millets through the system. The PDS has been a significant source of minimum food security and preventing starvation, even when entitlements have remained very basic. Right to Food campaign advocates point out that the system is old and therefore familiar, and the PDS shop dealer is part of the local ecosystem, often part of the village community.

In 2013, the PDS was made part of the National Food Security Act, a part of a series of rights-based legislations undertaken between 2004 and 2013.⁴ It has two levels of entitlements- priority (BPL) households entitled to 5 kg per person per month of grain (rice or wheat) at subsidised prices and the poorest of the poor (Antyodaya) households, entitled to 35 kg of free grains per household per month. Seventy five per cent of the rural population and 50 per cent of the urban population is supposed to be covered under

the NFSA. 237 million ration cards and 808 million beneficiaries are recorded nationally making it by far the largest safety net in the country.⁵

Drèze and Khera (2017) note that, over the years, many states have moved beyond a Below Poverty Line (BPL) approach, toward a more inclusive (even near-universal) PDS coverage using their own resources (see Tables 1 and 7 in their paper). In some cases, such as Tamil Nadu, coverage of subsidised grain is universal. But the coming of the NFSA has set a national floor. Simultaneously leakages have been reduced in many states -including states that have not traditionally been associated with good governance (such as Chhattisgarh). The NFSA plus the state-level extensions are thus the largest social assistance programme in India. As we will see in the next chapter, this system proved to be crucial during 2020, especially in its extended form under the PM Garib Kalyan Yojana.

Despite its large coverage, however, it is also true that a failure to update population data has resulted in an exclusion of vulnerable households. Mandated NFSA percentages have been applied to 2011 population levels and hence the number of households which need assistance now exceeds the initial targets. If the NFSA percentages are applied to population numbers for 2020, an estimated 100 million people are found to be excluded.⁶ In Jharkhand, for example, the failure to update the population numbers has meant that once the BPL and Antyodaya ration card quotas are exhausted, the remaining households are either issued Above Poverty Line (APL) cards (the 'white card') or no card at all. Either way, they are not entitled to subsidised grains.⁷ Targeting, in practice, often means setting an arbitrary quota and then finding people to fill this quota. Deserving households that do not make the quota end up on waiting lists. Waiting lists also exist to add individuals to existing ration cards in cases such as an individual having recently acquired an Aadhar card. Hence, relaxing

the requirement of a ration card was an important way this problem was handled during the Covid crisis.⁸

In addition to selecting the right households, the second major challenge in programme implementation is to ensure that these households (and not some other non-deserving ones) actually avail of the entitlements. The major development here in the past few years has been the move to Aadhaar-based biometric authentication (ABBA). Without going into the details, the process works as follows.⁹ At least one member of the household acquires an Aadhaar number that is linked to their biometric identity (thumbprint, photo, iris scan). This number is linked ('seeded') to the PDS account (ration card number). This is supposed to ensure that the identity of the person availing the grain at the shop can be authenticated and the transaction recorded in the system. The aim is to reduce identity fraud as well as discourage dealers from pilferage to the extent that they think they could be held responsible for unaccounted grains in the system.

Even though the principal rationale for ABBA has been to reduce leakages (inclusion errors), it is rather the resulting exclusion errors that have made the headlines. Several newspaper reports as well as targeted surveys have reported failures of authentication resulting in a denial of entitlements to genuine beneficiaries (Khera 2017).¹⁰ Despite these problems, in 2018, the Supreme Court allowed governments to continue with the system for availing benefits or entitlements under welfare programmes.

The issue of ABBA in PDS has attracted the most attention because it affects hundreds of millions, and exclusion errors in the system can mean starvation deaths. Given this, the burden on the system to deliver as intended is significant. As Aadhaar becomes the basis for delivery of more

and more benefits, the accuracy of underlying demographic data becomes critical. However, often the same IDs that were intended to be replaced by the more reliable Aadhaar, have been used to enroll people into the system, essentially carrying over the errors into the new database (Khera 2017).

In addition to problems of network access or other technical failures resulting in authentication failures,¹¹ there have also been cases reported of failures due to fingerprints not being readable, particularly in older workers who have worked with their hands their whole life. Further, the problem of this design is that the Fair Price Shop dealer, who is often responsible for pilferage, is still key to the ABBA process.¹² He or she can falsely report an authentication failure to a customer and divert the quota to the open market.



If the government expects the private sector to pay decent minimum wages to workers, it needs to lead by example by paying a living wage in its own public workfare programmes.

A recent paper by Muralidharan, Neihaus, and Sukhtankar (2020) documents the results of a large RCT in Jharkhand to measure the trade-off between reducing leakages and excluding deserving beneficiaries. The authors find that moving to ABBA from earlier paper-based authentication did not reduce leakages, or when it did do so, this came at the cost of increased exclusion errors.

One more long-standing problem with the PDS is worth noting here, viz. the contrast between excluded deserving households on the one hand and excess grains in storage with the Food Corporation of India (FCI) on the other. In brief, the problem is this. Procurement of grain from farmers at Minimum Support Prices (MSP) typically varies with the electoral cycle. But the distribution does

not expand or contract with procurement. It cannot contract for obvious reasons of legal entitlements under the NFSA. It cannot expand easily for two reasons. First, officials fear that temporary increases in distribution would have to be made permanent and that this may not be sustainable. Second, when distribution occurs, in accounting terms it appears as a food subsidy and hence becomes part of the fiscal deficit. If grain is not distributed, it appears as FCI losses and does not show as part of the government budget.¹³

Finally, we note that, there continue to be calls for replacing the in-kind system entirely with cash transfers, using an Aadhar-linked direct benefit transfer (DBT) programme (Gulati and Saini 2015). However, given that the problems with ABBA described above will also be present in a DBT

system, the question of how to avoid exclusion errors remains pertinent in either cash or in-kind systems.

The problem of exclusion from the system either due to lack of a ration card or because of authentication problems, can have profound consequences during a crisis such as

Covid-19. A recent study by Dvara Research and Gram Vaani on exclusion and grievance redressal in social protection programmes found that deserving households were excluded from free rations being provided under the Pradhan Mantri Garib Kalyan Yojana (PMGKY, discussed in greater detail in the next chapter) mainly because they did not have a ration card, which was an eligibility criterion in the relief package (Seth, Ahmed, and Ruthven 2020).¹⁴ This despite the fact that, as noted earlier, states did try to waive this requirement for availing free rations in the crisis.

The pandemic has presented an opportunity to move beyond these legacy problems and implement a universalised PDS that can truly end food insecurity in India.

6.2.2 / The Mahatma Gandhi National Rural Employment Guarantee Act

MGNREGA is, next to PDS, one of India's largest social protection programmes. Prior to the pandemic in 2019-20, 177 crore person-days of work were created under the programme with an estimated 82 million active job card holders. It has been recognized to be 'unique in the global context of social protection policies' (Carswell and De Neve 2014, p.567). Several studies have come out examining almost all aspects of its design and functioning: employment generated, infrastructure created, the impact on wage rates and household incomes, impact on local social relations, problems with implementation, corruption and so on.¹⁵

The Act provides a guarantee of 100 days of employment in a financial year per household to adults willing to do public work-related manual work at a programme wage. It builds on earlier employment programs (such as the Maharashtra Employment Guarantee Act, the Sampoorna Gramin Rozgar Yojana, and the National Food For Work Program) by legally binding the Government of India to provide employment to those who demand it, within 15 days of the demand being officially made. The Act also includes equal pay for men and women, and on-site child-care facilities as well as an unemployment allowance if work is not provided within 15 days. A key feature of MGNREGA is self-targeting, which at least in principle gets away from the problems of targeting based on consumption levels that have always beset the PDS and other programmes.

However, this does not mean that exclusion or rationing of work do not occur under MGNREGA. Several problems of implementation as well as design remain, relating to unmet demand for work, wages rates below state minimum wages, delayed or rejected payments, non-payment of unemployment allowances, opaque system of selecting works and so on.¹⁶ Despite some

devolution of power and responsibilities to the local level, the programme is very centralised, especially in its financial aspects. The level of fiscal support remains short of making it a truly demand-driven programme as envisioned in the Act. Rather, it is effectively driven by the supply of work, with work availability drying up as the financial year progresses.

After its upwards revision as part of the PMGKY in April 2020 the minimum programme wage for MGNREGA works stood at ₹202, well below the national floor minimum wage of ₹375 suggested by a government expert committee (Ministry of Labour and Employment 2019). Since 2010-11, MGNREGA wages have also been set separately from state minimum wages and are outside the purview of the statutory national minimum wage floor in the new Code on Wages (2020). If the government expects the private sector to pay decent minimum wages to workers, it needs to lead by example by paying a living wage in its own public workfare programmes. Thus, there is a need to increase MGNREGA wages and bring them under the purview of the Code on Wages. Additionally, it needs to be noted that the Act provides for a right to get unemployment allowance in case employment is not provided within fifteen days of submitting the application or from the date when work is sought. However, consultations with MGNREGA activists and newspaper reports suggest that despite legal provisions, unemployment allowance has hardly ever been paid to workers, except in instances where the judiciary has intervened.

Another significant problem with delivery of entitlements under MGNREGA is timely payment of wages for completed work (Narayanan, Dhorajiwala, and Golani 2019). Significant wage payment delays have been reported across many states, particularly in the second half of the financial year when funds run short compared to work demand. Survey evidence shows that rural workers often lose interest in the programme because they

are not paid several weeks or months after work has been finished. Paradoxically, the resulting reduced demand on part of workers for MGNREGA work is used by officials to argue that programme funding is adequate given the demand. The solution to this has taken the form of active public campaigns that have ensured some accountability, but this also means large state-level divergences in performance driven by presence or absence of such campaigns (for example, see the difference between Rajasthan and Karnataka discussed in [Chapter Seven](#)).

A recent report by Libtech India highlights last mile payment delivery problems in Jharkhand, Rajasthan, and Andhra Pradesh (Narayanan, Dhorajiwala, and Khambatla 2020). As Jean Drèze notes in his Foreword to the report, pensioners and workers in rural Jharkhand had 'the greatest possible difficulties in accessing their meagre payments,' including rejections for unknown reasons, unfamiliarity with 'Know Your Customer' requirements, or being cheated by intermediaries. This led to a waiting for weeks or months for payments due to them within days as a matter of legal right.

Prior to 2009, payments for work performed under MGNREGA were delivered by local authorities in cash. The move from local cash payments to direct bank transfers in 2009 reduced local corruption. But it increased payment delays and more importantly the payment system became centralised and inaccessible to workers. While these problems should have reduced over time, Jean Drèze observes that 'the modalities of bank payments kept changing, creating periodic waves of new transition problems for many years.'

The Libtech survey offers valuable insights into last-mile problems. For example, 40 per cent of respondents who accessed banking services via Customer Service Points (CSPs) or Banking Correspondents experienced at least one failed biometric authentication in their last five

transactions. Seven per cent reported each of their last five transactions failing due to biometric authentication problems. Case studies and anecdotes reported in newspapers also reveal situations where workers are told their withdrawal transaction has not succeeded only to find later that their wages have been deducted as per system records. Twenty five per cent reported being informed about wages being credited to their bank account which could not be traced when they checked their account at the bank. Almost half of all workers surveyed had to make multiple visits to the bank or payment agency for their wages, often having to travel to the block headquarters for this purpose. For daily wage workers who earn close to subsistence wages, the opportunity cost of this time is very large in welfare terms.

'Rejected payments' are transactions stuck due to technical errors of the payment system, bank account problems or data entry errors. The vast majority of respondents (77 per cent) did not know the reason for the rejection. The authors note that unless resolved, all future wage payments to these individuals will continue to be rejected. That this problem is significant is indicated by the fact that over the last five years, about ₹4,800 crore worth of payments have been rejected.

In addition to expanding banking infrastructure, a key recommendation of the study is that information system design must be worker-centric and that worker participation in designing information systems is critical. An example of this is Rajasthan's new Jan Soochna Portal.¹⁷ Further, accountability structures need to be in place for intermediaries, and agencies such as the Unique Identification Authority of India (UIDAI), the National Payments Corporation of India (NPCI), banks, and Customer Service Points (CSPs) as well as Banking Correspondents (BCs) should be brought within the ambit of social audits.

6.2.3 / National Social Assistance Programme

This programme is the third arm of the ration-pension-NREGA trinity which forms a safety net for the most vulnerable households in Indian society. It provides very modest cash assistance of ₹200 per month to widows, the disabled, and the elderly who live in BPL households.¹⁸ These pensions are non-contributory. The old-age pension came earlier while the widow and disability pensions were started in the aftermath of the 2008 economic crisis. The Central government assistance amount has not changed since 2006–07, significantly reducing the real value of an already meagre level of support. As a result states have gone substantially beyond the Centre in supplementing amounts and widening eligibility criteria. For example, Telangana provides a pension of ₹1,200 per month. Others have reduced disability requirements (from 80 per cent to 40 per cent) or eliminated the condition that a widow must not have an earning son in order to qualify for assistance. These are cash transfer schemes that operate via bank or post-office accounts.

“ 56 per cent of all women and 46 per cent of all households are likely to be excluded from cash transfers if delivered only via Jan Dhan accounts. ”

Although the payments are called pensions, they are unconnected to earlier work status. But NSAP can still be considered a pension scheme for the unorganised sector by virtue of the fact that elderly individuals from BPL households are highly likely to have been unorganised sector workers during their working life. The old age pension coverage is the largest among the three, estimated to be 28 million in 2019-20. Mehrotra (2016) argues that the method used for identifying beneficiaries is flawed and results in large inclusion and exclusion errors (see chapter 12 of his book). Indeed a survey of NSAP beneficiaries in Chhattisgarh showed not only that

ABBA was leading to exclusion errors, but also that pensioners in the village had to travel 9 km to collect their pension, that being the nearest point with connectivity.¹⁹ Problems with ABBA, discussed earlier in the case of PDS and MGNREGA, have also plagued the NSAP payments (Narayanan, Dhorajiwala, and Khambatla 2020).

6.2.4 / Cash transfer programmes

The last type of social safety we consider are unconditional cash transfers. In the past few years, the widening penetration of bank accounts (specially zero balance Jan Dhan accounts), the spread of ABBA (with all its faults discussed earlier) and mobile connectivity have created a policy discourse around the ‘JAM trinity’ (Jan Dhan, Aadhar, Mobile) and how this new infrastructure can be used to carry out DBT payments (MoF 2015). Just prior to the crisis, in 2019, the PM-KISAN programme was the first national level cash transfer programme introduced to provide cash support to landholding farmers. But the Covid crisis was the first time that such transfers were used on a wide

scale in India when payments of ₹500 per month for three months (April, May, and June) were announced for all women Jan Dhan account-holders.

“ The PM Jan Dhan Yojana (PMJDY) is a financial inclusion programme that was launched in August 2014 with the aim of providing banking services to every unbanked adult. There are around 400 million accounts. Zero-balance accounts are allowed under the scheme. Jan Dhan accounts have been used to deliver cash benefits under the following social security schemes: Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY) and Pradhan Mantri Mudra Yojana (PMMY). Rohini Pande and colleagues note that as of April 2020, 205 million women had PMJDY accounts.²⁰ As per their estimates, 326 million women live below

the national poverty line, indicating that more than one-third of poor women would be excluded from the benefit even if all female-owned PMJDY accounts belonged to poor women. And this is not the case. Estimates based on the 2018 Financial Inclusion Insights (FII) survey show that 75 per cent of all PMJDY accounts belong to BPL women, that is, 150 million accounts. Thus, more than half of all BPL women are not covered under PMJDY. Still, the potential coverage of a cash transfer programme undertaken via the Jan Dhan accounts, at 150 million, would be higher than any other programme barring PDS, if the cash did reach every BPL account holder and they were able to avail of it.

Anmol Somanchi extends the analysis of Pande and colleagues to estimate Jan Dhan penetration at the household level, based on individual-level coverage estimates.²¹ The idea is to get an estimate of the proportion of households that are likely to not have even one woman with a PMJDY account. This can be calculated by combining FII data which gives the probability of poor women in rural and urban areas not having an account, with National Family Health Survey (NFHS) data that gives the distribution of the number of adult women in rural and urban households (see Table 2 in the study). The analysis shows that 56 per cent of all women and 46 per cent of all households are likely to be excluded from cash transfers if delivered via Jan Dhan accounts. As we will see later, the Jan Dhan based cash transfers undertaken during the pandemic did not have the penetration that was needed to reach the most vulnerable households. The FII survey finds that 78 per cent of poor female respondents have a bank account but only 23 per cent have a PMJDY account. Thus extending transfers to women with non-PMJDY accounts would have substantially increased inclusion.

Further, among those who do receive a transfer, accessing the cash remains a challenge. We saw

earlier, the case of old-age pension recipients having to walk up to 9 km to avail of their meagre pensions under the NSAP. The FII survey finds that 26 per cent of poor women live more than 5 km away from the nearest bank or ATM. Not only that, in contrast to the ration-pension-NREGA system where lists of beneficiaries are publicly available and beneficiaries are usually certain about their status of inclusion, not all women know if their accounts are PMJDY accounts. Clearly, some of these are initial problems since the infrastructure as well as the programmes are new. But there is a need to learn from the experience of the past decade on DBT, if improving programme effectiveness is the goal.

Either mandatory registration or the presence of a strong union or public campaign are essential to ensure awareness and enrolments under programmes.

The PM-KISAN scheme is a cash-transfer scheme launched in February 2019. It offers an income support of ₹6,000 per year in three equal installments to farm families. Initially the eligibility criterion was a land holding/ownership of no more than 2 hectares. This has been done away with and all landholders are now eligible irrespective of the size of the holding.²² As of date, a total of 102.2 million farmers are registered. Of these 70.7 million have received all four installments of ₹2,000 delivered thus far.²³ The scheme excludes agricultural workers who do not own land. This programme builds on earlier state-level programmes such as Krushak Assistance for Livelihood and Income Augmentation (KALIA) in Odisha and Raithu Bandhu in Andhra Pradesh.

Taken together, the NASP, PMJDY, PM-KISAN and other smaller schemes like the PM Ujjawala Yojana are creating a growing infrastructure for providing cash assistance.

6.3 / Programmes linked to employment status

We end this chapter with an overview of employment-linked social security programmes as they relate to the informal workforce. Here by 'informal' we mean those workers who are either self-employed or casual wage (no fixed employer) or earn regular wages but do not fall within the Employee Provident Fund (EPF) or Employee State Insurance (ESI) systems. Readers are pointed to Asher and Bali (2010) for an overview of the EPF system. We discuss some EPF-related measures undertaken during the pandemic, in the next chapter.

There are three distinct types of challenges in ensuring employment-linked social protection. First, as shown in Chapter Two, enterprises that employ more than 10 workers and therefore fall under the ambit of labour laws as well as various other types of regulation, often employ casual and temporary workers via contractors. These are informal wage workers in the organised sector. While some are part of the EPF system, many are not. This coverage needs to be expanded.

Second, casual workers in the informal sector who are wage earners working with multiple employers need to be considered separately. These are daily wage construction workers, head-loaders, domestic workers and others. Here the welfare board model has had mixed success, as we discuss later. Finally, self-employed own-account and unpaid workers need a different model altogether. Here the lack of any employer has been the principal stumbling block. Hence, the State has generally stepped in directly to provide social assistance in the form of PDS, employment guarantee and pensions.

6.3.1 / Contributory insurance programmes for informal workers

These are new programmes or expansions of older programmes since 2015, that extend the coverage of life and accident insurance as well as old age pension to working adults in the unorganised sector. The principal difference from the NSAP pensions discussed earlier, is that these are programmes where the beneficiary and the government both contribute. Enrollment and contributions are voluntary and they operate via Jan Dhan accounts.

Atal Pension Yojana is for those between 18 and 40 years. The person contributes until the age of 60 at which point they can receive the pension. The pension amount varies between ₹1,000 and ₹5,000 per month. The central government contributes ₹1,000 per annum or 50 per cent of the annual contribution, whichever is lesser. The accidental death or disability insurance, PM Suraksha Bima Yojana, is available to those between ages 18 and 70. The premium is ₹12 per annum to avail of accident insurance worth ₹2,00,000. The life insurance programme, PM Jeevan Jyoti Bima Yojana, is available to those between ages 18 and 50. An amount of ₹2,00,000 is paid to the nominee on the death of the insured. The annual premium to be paid by the beneficiary is ₹330. All schemes operate via Jan Dhan accounts and require Aadhar linked accounts.

Mehrotra (2020) notes that the total cost to the central government of these programmes is unclear and the government has only committed to meeting these costs for its term in office. Thus, these are not legally binding entitlements such as PDS or MGNREGA. Further, he argues that the international evidence favours mandatory programmes over voluntary ones, since enrollment tends to remain low in the latter.

A new scheme was launched just before the general elections in 2019, the PM Shram Yogi Maandhan

Yojana, an old-age contributory pension scheme for unorganised workers very similar to the Atal Pension Yojana. This is intended for unorganised sector workers with monthly incomes up to ₹15,000 per month and of an entry age group of 18-40 years. Workers enrolling in this pension plan should not be covered under the NPS, ESIC or EPFO.²⁴ This is a comparatively new scheme and the total enrolment so far is only around 4.5 million, a miniscule fraction of the informal workforce for whom it is intended. As in the case of welfare boards, either mandatory registration or the presence of a strong union or public campaign are essential to ensure awareness and enrolments under such programmes. Unfortunately enrollment under this scheme has taken a large hit during the pandemic declining sharply from 1.6 million in 2019-20 to a mere 130,000 in 2020-21.²⁵

We do not go into the details on these schemes here. The reader is referred to Mehrotra (2020) for further information.

“ Examples of relatively well functioning contributory state welfare boards are the Mathadi Boards set up under the Maharashtra Mathadi, Hamal, and other Manual Workers (Regulation of Employment and Welfare) Act 1969.

6.3.2 / Welfare boards or funds²⁶

These are bipartite or tripartite bodies that regulate conditions of work and provide social security benefits to workers in particular occupations or industries. They can be either tax/cess based or contribution-based. Tax-based funds exist centrally for beedi workers, dock workers, construction workers, cinema workers, and certain types of mine workers. A dedicated cess is levied on the relevant goods or services, and the funds thus raised are earmarked for providing benefits to the workers registered under the board. But most of these

funds, including the most well-known Building and other construction workers BOCW board (discussed in more detail later), do not provide social insurance (pension, death and disability benefits, maternity benefits). Rather the funds are used to support healthcare and education expenses, housing etc.

State-level welfare boards have tended to be contributory. Kerala has been a leading state in the creation of welfare boards, covering around 54 per cent of informal workers as early as 2004 (NCEUS 2006). These include funds for autorickshaw drivers, construction workers, and agricultural workers. The major benefits provided are provident fund, gratuity, monthly pension (old age), disability and accident cover, health cover, unemployment relief, educational allowance, housing assistance, marriage assistance and funeral expenses. Mehrotra (2020) observes that contributory funds have not been successful due to problems in raising funds.

We consider two examples in further detail, the BOCW and the Mathadi (headloaders) Welfare Board, that hold lessons for the way ahead.

“ Examples of relatively well functioning contributory state welfare boards are the Mathadi Boards set up under the Maharashtra Mathadi, Hamal, and other Manual Workers (Regulation of Employment and Welfare) Act 1969. This model has been highlighted by the ILO and the National Commission on Labour-II as well as the National Commission for Enterprises in the Unorganised Sector (NCEUS) have underlined the importance of creating something similar for other unorganised sector workers. Our discussion here is based on Jatav and Jajoria (2020) as well as a consultation with a representative of the Hamal Panchayat, a union of headloaders that has played a key role in ensuring proper functioning of the welfare fund.²⁷

Over the years, the Mathadi Act and the Hamal Panchayat union have built a model that provides daily wage workers comprehensive social security, including provident fund, gratuity, bonus, health coverage, life insurance, accident coverage, maternity benefits, paid leave, and assistance for childrens' education. There are 14 broad types of employment scheduled in the act in connection with manual operations including loading, unloading, stacking, carrying, weighing, measuring, and other similar works. There are 34 registered Mathadi Boards in Maharashtra.²⁸

The Act took 11 years to implement after being passed in 1969 and two unions, the Rashtriya

Hamal Panchayat and Mathadi Kamgar Union were actively involved in the formulation and implementation of the Act. Problems that have plagued other boards, such as lack of awareness among workers, lack of registration, non-transparency in funds utilisation etc. have been addressed in this case by active involvement of workers via the unions. It shows that formalising daily wage workers who do not have fixed employer-employee relationships is indeed possible. But the experience also reveals that creating a functional system for providing benefits where employers of casual workers bear at least some of the costs, is not an easy task. Box 6.1 gives the key features of this model.

Box 6.1 : The Maharashtra Mathadi Model

Maharashtra's Mathadi Kamgar Boards set up under the Maharashtra Mathadi, Hamal, and other Manual Workers (Regulation of Employment and Welfare) Act 1969 are examples of relatively well-functioning welfare boards. The key features of the 'Mathadi model' are as follows:

1. It does not depend solely on public resources because contributions are drawn from workers, employers and the government.
2. Both employers and workers have to register themselves with the district level Mathadi boards.
3. A Mathadi board at the district level has members representing employers, workers, and the state government. Further members representing the state government cannot be more than one-third of the total members representing both the employers and unprotected workers.
4. These boards assign workers to employers, define the terms of conditions of employment and address grievances.

5. The boards pay workers' wages, after collecting earnings and levy from employers. Workers' contributions are deducted before wages are paid.
6. The model closely follows ILO's tripartite system and promotes collective bargaining for wages.
7. There is a provision for an unemployment allowance ('disappointment money') at the rate of minimum wages. These are paid by the assigned employer in case they fail to assign work to the worker.
8. Unlike many other labour regulations, there is no minimum enterprise size (number of workers) required to be able to provide benefits.

Hamal Panchayat, the union that has been instrumental in the implementation of this system, emphasises the importance of mandatory registration, making the Board in charge of wages and working conditions, the particular nature of the work which requires a large number of workers to work in close proximity, and a strong union movement to ensure provisions are implemented.

At the other end of the spectrum, in terms of effectiveness as a social protection programme, is the BoCW. As we saw in Chapter Two, workers in the construction sector, which account for roughly 12 per cent of the total workforce, and predominantly engage in casual work, have been severely impacted by the Covid-19 shock. India has in place two Central Acts pertaining to the regulation of the conditions of work and the provision of a measure of social security. These are the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act (1996); and the Building and Other Construction Workers Welfare Cess Act (1996).

The Acts are applicable to every establishment that employs ten or more workers in any building or construction work, wherein the project is worth more than ₹10 lakh. The Welfare Funds proposed in the Act are to be financed by contributions from beneficiaries, levy of a cess on construction works at a rate ranging between 1 and 2 per cent of the construction cost incurred by an employer, and non-mandatory grants by the State/Central governments. Every construction worker between the age of 18 and 60, and who has been engaged in construction work for not less than 90 days during the preceding 12 months is eligible for registration as a beneficiary.

Under these umbrella legislations, all State governments are expected to enact their own legislations and through their respective State Building and Other Construction Workers Welfare Boards (constituted under the BOCW Act) utilise the cess fund. As per Section 22 of the BOCW Act (1996), the cess fund can be used to provide assistance to a beneficiary in case of an accident; give pension to those who have completed the age of 60 years; sanction loans and advances to a beneficiary for construction of a house and on prescribed terms and conditions pay premia for group insurance scheme of the beneficiaries; give financial assistance for the education of children

of the beneficiaries, for medical expenses for treatment of major ailments, payment of maternity benefits and make provision and improvement of such other welfare measures and facilities as may be prescribed. Further, the Board may grant a loan or subsidy to a local authority or an employer in aid of any scheme approved by the respective state government for the welfare of building workers in any establishment.

Since registration is voluntary and not mandatory, and since the kind of concerted union activity seen in the case of the mathadi workers has been absent, both registration rates and utilisation rate of funds collected have been low. Of course, the construction workforce is far larger and more dispersed than the mathadi workers, who are concentrated in some district towns in Maharashtra. While the registration rates in the BoCW stand at about 52.5 per cent at a national level, there is considerable heterogeneity across states, with rates as low as 11 per cent in Assam and 18.6 per cent in Bihar (Jha 2020). It has also been pointed out that there are problems in renewal of registration of workers. For example, in Maharashtra, there were about 0.56 million registered construction workers in 2016, of which only 50 per cent of the total registrations were found to be valid. In Delhi, too, the process of new registrations and the renewal of old ones is very slow (Jha 2020). Other studies have pointed to problems of selective registration, non-updation of identity cards, enrolment of non-construction workers as beneficiaries, and corruption.²⁹

Another challenge pertains to the issue of collection of cess at the stipulated rate of 1 per cent of the total cost of construction and its proper distribution among workers. The Lok Sabha's 38th Standing Committee on Labour noted that there is no proper mechanism of collection of cess and its transfer to the boards.³⁰ Also, in many cases, there is an under-assessment of cess. The report of the Committee also noted that the utilisation ratio of the cess

funds stood at only 39 per cent nationally in 2019. Here too, there is considerable heterogeneity across states. While states such as Kerala, Karnataka and Chhattisgarh spent more than 80 per cent of the funds collected, in states such as Maharashtra, Delhi and Gujarat which collect the largest amount of cess, less than 10 per cent was utilised.

Last, but by no means the least, migrant workers are preponderant in the construction industry. This raises the issue of portability of their registration and benefits. For instance, there is no clarity what happens when a worker who is attached to a contractor migrates from one state to another (Mehrotra, 2020).³¹ It is also important to note that most migrant workers engaged in this sector come from poor economic and social backgrounds, lack education, and often live in worksites. Organising such workers is also extremely challenging, though organisations such as Aajeevika Bureau and several others, including traditional labour unions, have been trying interesting models in this regard.³²

6.4 / Direct Benefit Transfer: Issues in delivery

Delivery challenges can be divided into two broad categories: inadequate coverage of the safety net, and failure to deliver specified quantities of entitlements or benefits in a timely manner to those who are in the net. These typically arise from difficulties of identification of beneficiaries (due to lack of data for example) as well as inadequacy of the relevant infrastructure (administrative, physical, or digital).

Over the past few years, physical delivery of cash and in some cases, in-kind delivery of food rations, have been gradually replaced by direct cash transfers into Aadhar-linked bank accounts. As of

January 2020, 429 government schemes relied on DBTs (Gupta 2020). These include NSAP payments, informal sector insurance schemes, PM KISAN (cash transfers for small and marginalized farmer families), MGNREGA and PDS among others.

Before 2013, distribution of cash was implemented by physical movement through various intermediaries to the panchayats, from where it was distributed. This system made cash available to everyone including those outside formal banking, but only at the cost of leakages. The shift to DBT (and subsequently to Aadhar-linked DBT) was undertaken to reduce leakages, however, this came at the cost of increased exclusion due to errors in data entry, low penetration of bank branches, authentication errors, point-of-sale machine problems, and other deficiencies of the financial infrastructure.

Typical problems that result are payment delays, rejected payments, authentication failures, and large amounts of time invested in accessing benefits (such as long or repeated trips to the bank to withdraw wages or update passbooks). In this respect three recent reports on last mile delivery issues are worth flagging for those interested in reading further on this issue (Narayanan, Dhorajiwala, and Khambatla 2020; Gupta 2020; Sharma, Natarajan, and Udhayakumar 2021). For last-mile delivery, in particular, availability of banking access points, whether in the form of branches, ATMs, customer service points (CSPs), or village-level entrepreneurs known in this case as banking correspondents (BCs), is a key determinant. Not surprisingly, the DBT system works much better in states where rural bank penetration is high to begin with (for example, Andhra Pradesh).³³

Work by the social protection initiative at Dvara Research has identified the principal points where exclusion of true beneficiaries can occur.³⁴ Four points are identified: identification of beneficiaries, getting identified households or individuals

registered or enrolled, successfully linking the bank account to Aadhar number that is, becoming part of the Aadhar-based Payment Bridge System or APBS), and last-mile delivery of cash to the beneficiary (Aadhar Enabled Payment System or AEPS). Without venturing into the details of these processes, we highlight the central concerns that will be useful in making recommendations to reduce exclusion errors.

“ Identification of beneficiaries, getting identified households registered, successfully linking the bank account to Aadhar, and last-mile delivery of cash to the beneficiary - are the points where exclusion can occur. ”

Failures between enrollment and successful crediting of payments to the beneficiary's account are particularly vexing. These can occur due to errors in data entry, such as incorrect bank account number, incorrect Aadhar number, incorrect mapping of bank information to Aadhar data (such as linking Person A's bank account to Person B's Aadhar number) and so on. The result is a 'rejected payment' where the account is not credited and the reason is not known, or a 'diverted payment' where the wrong person's account is credited.³⁵ A peculiar problem here is that welfare payments are set up to be delivered to the last (most recent) Aadhar-linked account. Thus, if a person opens a new Aadhar-linked bank account, payments automatically get diverted to that account. If the person does not know this, he or she may continue to check the old account and not find payments credited to it.

Failures between successful crediting to the account and cash-in-hand constitute the last-mile problems of welfare delivery. We have already discussed some of these problems earlier in the context of MGNREGA payments. Here we only reiterate that structural problems of weak banking

infrastructure result in infrequent updating of passbooks, lack of bank updates via SMS etc. and contribute to recipient anxiety on whether payments have been credited. The results are several trips to the bank or Common Service Centre (CSC), loss of wages, or in case of older persons, undue hardship. Over-reliance on unregulated banking correspondents also exposes the most vulnerable to fraud.³⁶

The key takeaway is that significant improvements in banking infrastructure, putting in place auditing and grievance redressal systems for banking correspondents and CSCs, as well as re-orientation of MIS from the point of view of welfare recipients rather than the administrative or bureaucratic system in mind is crucial to successful DBT.

6.5 / Conclusion

The foregoing account of India's key social protection programmes for vulnerable households and informal workers sets the stage for our analysis of how the system is being used and how it has performed so far during the pandemic. In terms of coverage, PDS, cash transfers, NSAP, and MGNREGA are clearly the front-runners and formed the backbone of the policy response. However, as we will see in the next chapter, many other smaller programmes were also pressed into service.

Endnotes

¹ The chapter and the next draw extensively on a background paper on Covid-19 and social protection written for the Asian Development Bank (Kapoor and Basole 2020).

² In more general terms (abstracting away from the immediate needs of the Covid crisis), universalization need not mean that everyone receives the same entitlements, rather only that everyone is part of the system without condition, and receives individual entitlements regardless of current residence. Special provisions for the poorest of the poor can certainly exist, as is already the case with the Antyodaya category under the NFSA.

³ Ministry of Finance 2017; Khera 2014; Kapur, Subramanian, and Mukhopadhyay 2008; S. Narayanan 2011; Gulati and Saini 2015

⁴ Maternity benefits (cash), the midday meals and ICDS programs for child nutrition, and PDS together make up the NFSA programmes.

⁵ <https://nfsa.gov.in/> and <https://dfpd.gov.in/pds-caeunfsa.htm>

⁶ <https://www.ideasforindia.in/topics/poverty-inequality/a-review-of-the-coverage-of-pds.html>

⁷ <https://www.firstpost.com/india/jharkhands-daily-wage-labourers-left-out-of-pds-safety-net-fear-starvation-as-employment-dries-up-during-Covid-19-lockdown-8407431.html>

⁸ E.g. Karnataka: <https://www.thehindu.com/news/national/karnataka/state-govt-announces-ration-to-non-cardholders-at-pds-shops/article31259310.ece>

⁹ See <https://www.ideasforindia.in/topics/governance/consent-to-nothing-aadhaar-based-payment-systems-in-welfare.html> for one account of how the process works in the context of welfare delivery.

¹⁰ For example, a study by Drèze and co-authors, based on a survey of 1,000 households in 32 villages in Jharkhand which had introduced ABBA for every sale, estimated exclusion error to be around

20 per cent. (Drèze and Khera 2015; Khera, Khalid, and Somanchi 2017).

¹¹ In answers to Parliamentary questions, the Rajasthan government mentioned that ABBA was disrupted due to “inadequate server capacity of the Rajasthan Government”, “insufficient lease line capacity”, “poor mobile signal at POS devices”, “incorrect seeding of Aadhaar numbers in PDS database”, etc. (in Khera 2017).

¹² <https://www.ideasforindia.in/topics/poverty-inequality/aadhaar-that-doesn-t-exclude.html>

¹³ In this context it is worth noting that in the 2021-22 Union Budget, the government has brought all its outstanding payments to FCI on the books, thereby causing a jump in the fiscal deficit (see Basole 2021).

¹⁴ <https://www.dvara.com/blog/2021/03/02/making-grievances-matter-unpacking-exclusion-grievance-redress-and-the-role-of-civil-society-organisations/>

¹⁵ See Basole and Jayadev 2018; Sukhtankar 2016 for overview.

¹⁶ <https://www.businesstoday.in/top-story/4-reasons-why-mgnrega-is-not-benefitting-workers/story/282891.html>, <https://www.downtoearth.org.in/blog/economy/mgnrega-is-failing-10-reasons-why-62035>, <https://www.downtoearth.org.in/blog/economy/underfunding-misleading-claims-the-story-of-mgnrega-in-new-india-65627>

¹⁷ <https://jansoochna.rajasthan.gov.in/> and <https://www.thehindu.com/opinion/op-ed/a-milestone-in-greater-transparency-accountability/article29411242.ece>

¹⁸ <http://nsap.nic.in/>. These include the Indira Gandhi National Old Age Pension Scheme, Indira Gandhi National Widow Pension Scheme and Indira Gandhi National Disability Pension Scheme.

¹⁹ <https://thewire.in/politics/in-chhattisgarhs-kardana-village-biometric-failures-are-depriving-old-villagers-of-their-pension>

²⁰ <https://egc.yale.edu/sites/default/files/COVID%20Brief.pdf>

²¹ <https://www.ideasforindia.in/topics/poverty-inequality/Covid-19-relief-are-women-jan-dhan-accounts-the-right-choice-for-cash-transfers.html>

²² See exclusion criteria here: <https://www.pmkisan.gov.in/>

²³ <https://www.pmkisan.gov.in/StateDistBeneficiary.aspx>

²⁴ Note that Atal Pension Yojana and Shram Yogi Maandhan are both defined-benefit pension plans while NPS is a defined-contribution plan: <https://www.financialexpress.com/budget/budget-2019-atal-pension-yojana-vs-pradhan-mantri-shram-yogi-maandhan-vs-nps-what-sets-them-apart/1470277/>

²⁵ https://economictimes.indiatimes.com/news/economy/indicators/enrolments-in-informal-workers-pension-plan-drop-92-to-130000/articleshow/82055146.cms?utm_campaign=Worker%20Web&utm_medium=email&utm_source=Revue%20newsletter

²⁶ Welfare boards are extensively reviewed in NCEUS (2006) and Mehrotra (2020).

²⁷ Consultation with Chandan Kumar, Hamal Panchayat Union.

²⁸ <http://mahamathadi.in/#/>

²⁹ See Nirmana Organisation, Pilot Social Audit of BOCW Act in Delhi, at http://www.nirmana.org/Documents/social_audit_report-delhi.pdf

³⁰ Parliamentary Standing Committee on Labour (2014): "The Building and Other Construction Workers Related Laws (Amendment) Bill, 2013," Lok Sabha, New Delhi, http://164.100.47.193/lsscommittee/Labour/15_Labour_44.pdf. — (2018): "Action Taken by the Government on the Observations/ Recommendations of the Committee Contained in their Twenty-Eighth Report (Sixteenth Lok Sabha) on 'Cess funds and their Utilisation for Workers' Welfare," Lok Sabha, New Delhi,

http://164.100.47.193/lsscommittee/Labour/16_Labour_38.pdf.

³¹ <https://scroll.in/article/964108/how-india-can-strengthen-its-social-security-code-to-include-the-422-million-workers-left-behind>

³² <https://www.aajeevika.org/sr-collectivizing-workers.php>. See (De 2020) for a close analysis of the multiple vulnerabilities faced by migrant construction workers in Ahmedabad.

³³ Consultation with Rajendran Narayanan, Libtech India and Azim Premji University

³⁴ Dvara Research has been documenting cases of DBT exclusion in collaboration with Gram Vaani in <https://www.dvara.com/research/social-protection-initiative/falling-through-the-cracks-case-studies-in-exclusion-from-social-protection/Madhya-Pradesh,-Bihar,-Uttar-Pradesh-and-Tamil-Nadu>.

³⁵ E.g. <https://www.dvara.com/blog/2020/08/20/exclusion-from-pm-kisan-due-to-delay-in-correction-of-beneficiary-records-in-pfms/>

³⁶ <https://www.dvara.com/blog/2020/09/01/agent-fraud-in-welfare-transfers-a-case-study-in-exclusion/>

7 Effectiveness of the Covid-19 policy response

Effectiveness of the Covid-19 policy response

One measure of the uniqueness and magnitude of the current crisis is that nearly all types of social protection measures available to the government (central and state), whether they are promotional or protective, citizenship-based or work-linked, legal entitlements or schemes, have been pressed into service. PDS, MGNREGA, cash transfers, worker welfare boards, provident funds, all have proved to be crucial during the past year. But much more needs to be done. With the second wave of infections going on at the time of writing, we believe it is all the more imperative to learn from the experience of 2020 and offer immediate support measures.

In this chapter we first place India's fiscal response in a comparative international perspective.¹ Then, we review the evidence on the reach and effectiveness of some key systems such as the Public Distribution System (PDS), Mahatma Gandhi National Rural Employment Act (MGNREGA), National Social Assistance Programme (NSAP), Jan Dhan cash transfers, and welfare boards. This is necessarily a survey of the landscape rather than a deep dive into any one programme or scheme. However, we have referred to more detailed studies that interested readers can pursue. Next, we discuss some state-level schemes and responses that were innovative in nature. Lastly, this chapter also analyses some information on migrant workers - a group that has brought the shortcomings of the current social protection architecture into sharp focus.

7.1 / Estimating the size of India's fiscal response²

The first fiscal support package, intended to provide immediate relief during the lockdown was the ₹1.7 lakh crore Pradhan Mantri Garib Kalyan Yojana (PMGKY) announced in March 2020. This built upon 12 different existing schemes and included in-kind transfers, cash transfers, livelihood support benefits and insurance support to frontline health workers.³ This was followed by the Atmanirbhar Bharat set of measures announced over a few months, starting May, 2020.



Thus it seems likely that the direct additional fiscal outlay for Covid-related measures in 2020-21 was around ₹3 to 3.5 lakh crores or around 1.5 to 1.7 per cent of GDP.



Covid impact surveys (discussed later in this chapter) show that the free grains distributed via the PDS and expanded fiscal outlay for the MGNREGA, and to a lesser extent the Jan Dhan cash transfers as well as ex-gratia payments under the NSAP provided a vital safety net to vulnerable households. These, together with some EPF (Employee Provident Fund)-based subsidies, constituted the main additional fiscal support. The remaining measures such as those based on PM-KISAN and the newly constituted PM Rozgar Abhiyan front-loaded or redirected spending that had already been allocated in the 2020-2021 budget and thus do not constitute additional stimulus.

Agrawal et al. (2020) analysed the PMGKY package and came to the conclusion that the allocation was insufficient and should have been in the range of three to 3.75 lakh crore.

“ As per the India Working Survey, 65 per cent of card-holders received some additional grains as part of PMGKY. ”

The 2021-22 Union Budget documents allow us to calculate the actual extent of fiscal support delivered by the Union government last year.⁴ The fiscal deficit jumped from 4.5 per cent to 9.5 per cent of GDP, going in absolute terms from ₹9.33 lakh crores in 2019-20 to ₹18.5 lakh crores in 2020-21. Compared to 2019-20, receipts were lower by ₹1.6 lakh crores (of which revenue receipts were lower by ₹1.3 lakh crores) and expenses were up by ₹7.5 lakh crores (of which revenue expenditure was up by ₹6.5 lakh crores). To arrive at the actual net stimulus, we remove the increased interest payments (₹0.81 lakh crores), payments made to FCI to correct for previous years' incorrect treatment of its borrowings from the National Small Savings Fund (NSSF) (₹1.94 lakh crores) and increased defence spending (₹0.25 lakh crores). Taking these numbers into account, we estimate that the total additional spending in 2020-21 over that incurred in 2019-20 was around ₹4.5 lakh crores. It is difficult to ascertain exactly what part of this additional expenditure went to Covid support measures. Adding up the spending on expanded PDS rations (₹1.5 lakh crores), MGNREGA (₹40,000 crores), Jan Dhan transfers (₹31,000 crores), NSAP payments (₹30,000 crores) and a few other smaller items, brings us close to a figure of ₹3 lakh crores. Thus it seems likely that the direct additional fiscal outlay for Covid-related measures in 2020-21 was around ₹3 to 3.5 lakh crores or around 1.5 to 1.7 per cent of GDP.⁵

7.2 / Policy measures undertaken during the crisis – Reach and effectiveness

7.2.1 / Food relief via the Public Distribution System

As we saw in Chapter Five, the drastic fall in incomes during 2020 forced households to borrow as well as sell assets in order to survive. Despite these drastic measures, widespread hunger was reported. The survey results discussed below show that broadly, at the national level, PDS did provide a crucial safety net.

The PMGKY extended free grains to those households who held ration cards under the NFSA. But there were two challenges. First, as discussed in Chapter Six, potentially millions of deserving households are not on NFSA lists. Second, those individuals who were not residing at their permanent domicile at the time of the crisis (such as migrant workers), could not easily avail of their entitlements. To take care of the former, State governments tried to supplement the national NFSA list with their own lists of beneficiaries. However, exclusions were still common with one survey reporting that 60 per cent of all complaints regarding the free rations were about households not possessing a ration card in the first place (Seth, Gupta, and Johri 2021). Those who were state-level card holders (but not NFSA card holders) were able to receive the extra entitlement depending on state-level implementation of the relief package (see [Appendix Table 15](#)).

To address the second problem (of migrants), the Atmanirbhar Bharat package extended subsidised grains to 80 million migrants without cards. But in the absence of a national migrant register, the notification simply allowed for 10 per cent additional recipients (80 million is 10 per cent of

800 million existing NFSA beneficiaries) and left it to states to identify the migrants who needed this. We discuss the migrant crisis separately later in this chapter.

We now examine some survey evidence on the reach of PDS rations. In Azim Premji University CLIPS, close to nine out of ten respondents had a ration card (94 per cent in rural areas compared to 82 per cent in urban areas). Households with BPL or Antyodaya cards (priority households) constitute close to two-thirds of the entire sample in the survey (see [Appendix 3](#) for survey sample details). Ninety-one per cent of rural and 67 per cent of urban households with cards reported receiving at least some food via PDS in the month prior to the interview (Oct-Nov 2020). Of these, 41 per cent of priority households got more than 5 kg of grains per person i.e. they had received some free ration under the PMGKY and 27 per cent reported receiving the full PMGKY free quota.

The survey data also allow us to relate PDS grain availability to the households' food security situation. Worryingly, 42 per cent of households who reported that their consumption was still below pre-pandemic levels as of November 2020, had received at least some free rations and 29 per cent had received the full 10 kg quota. The fact that the extra grains did not help in completely eliminating the consumption shortfall could be explained by the severity of the income shock or inadequate quantity or type of entitlements. This is captured in the testimony of an agricultural workers from Jalna district of Maharashtra:

We got a little rice, but we are five people in the household. We had to calculate our meals every day and ate much less to keep the little ration going.

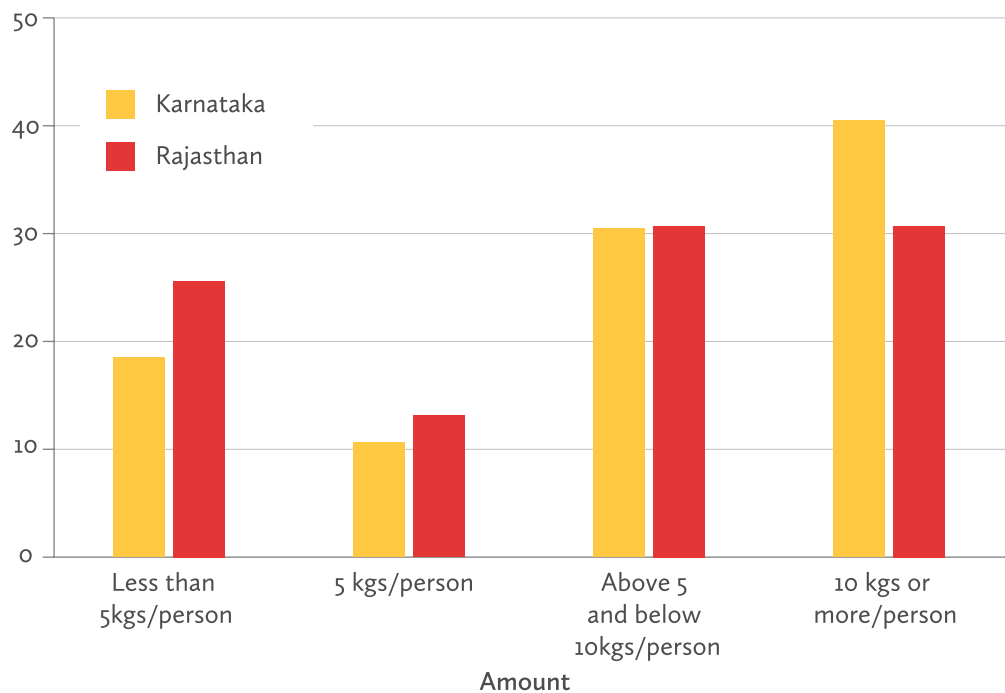
- Sanjeev Gambhir, quoted in Chanchani and Garimella (2021)

A second source of information that we have on the reach of PDS is the India Working Survey, which has a largely rural sample from Karnataka and Rajasthan (See [Appendix Section 4](#) for survey details). The reach of PMGKY seems to be better in the former than the latter. Figure 7.1 shows the distribution of priority (BPL and Antyodaya) households receiving the specified amount of PDS grains per person. As can be seen, 40 per cent of households in Karnataka reported receiving the full quota of grains made available under the relief scheme, compared to 30 per cent in Rajasthan. Sixty one per cent in Rajasthan and 71 per cent in Karnataka received at least some free rations, over and above the usual quota. This is broadly consistent with the findings from CLIPS, and the IWS number for Karnataka is not too distant from what was found in CLIPS for the same state (61 per cent). Of course, the two surveys are not strictly comparable due to differences in sampling strategies (IWS is a random sample while CLIPS is directed purposively towards vulnerable households).

Cash transfers have been on average 40 per cent of GDP per capita in lower middle-income countries. But in India it amounted to only 12 per cent of GDP per capita.

In the Dalberg survey, once again, PDS had the widest reach among all social safety nets, covering 87 per cent of interviewed households, as compared to 56 per cent covered under Jan Dhan, 42 per cent under MGNREGA and 32 per cent under PM KISAN.⁶ PDS also had the best performance in terms of accessibility with 91 per cent of priority households reporting that they had availed of free rations announced under the PMGKY in May (Dalberg 2020).⁷ As expected (and revealed in other surveys) the PDS worked much better in rural areas with 83 per cent of priority households receiving free grains easily as compared to only 66 per cent in urban areas.

Figure 7.1 :
Distribution
of households
by amount
of PDS grain
received



Sources and notes: India Working Survey 2020 (IWS). Respondents were asked about grains received in the month prior to the interview. See [Appendix Section 4](#) for survey sample details.

In the Rapid Rural Community Response to Covid (RCRC) survey, a comparable 88 per cent of rural households had received free grains (RCRC 2020). The corresponding number for the Gaon Connection-Lokniti survey is 71 per cent of ration card-owning households receiving wheat or rice. Significantly, in this survey, of the 17 per cent households who did not have ration cards, only 27 per cent received rations which corroborates the findings of the Gram Vaani survey reported earlier in this chapter that lack of ration card was a problem for vulnerable households (Seth, Gupta, and Johri 2021). This underlines the necessity of universalising PDS (with at least a temporary halt on checking identity), to aid households in overcoming the income shock of the pandemic.

Lastly, it should be kept in mind that the above surveys were carried out at different points in 2020 from April to November. Thus, apart from sampling differences, another reason for the difference in reach reported among various surveys could be that the scheme functioned well in the months of May and June (when the Dalberg survey was conducted),

but had become less effective by August (IWS) and even less so by November (CLIPS). Nevertheless, it seems clear that over 90 per cent of households with cards received at least regular rations, while around 50-70 per cent received at least some additional grains during April to November. The free rations were discontinued thereafter. But the results of the Hunger Watch reported in Chapter Five as well as renewed losses in livelihoods that are resulting due to new restrictions in place during the second wave suggest that the time for food relief is not yet past. Hence it is welcome news that free PDS rations have been announced once again for the months of May and June 2021.⁸

7.2.2 / Cash transfers

Alongside in-kind transfers, the PMGKY also included cash transfer schemes. Women Jan Dhan account holders were promised a monthly cash transfer of ₹500 during the months of April, May and June. As we saw in the previous chapter, this is around 200 million women. Thus the expenditure on cash transfers to Jan Dhan accounts was approximately ₹31,000 crores (this is verified as per

the 2021-22 Union Budget documents). In per capita terms, India falls well short of the global average on the size of the cash transfer. On average, total Covid relief cash transfers have amounted to 32 per cent of a month's GDP per capita, varying between 26 per cent in upper middle-income countries to 40 per cent for lower middle-income (the group India belongs to), to 86 per cent in low income countries (Gentilini, Almenfi, and Dale 2020). India's total transfer of ₹1500 amounted to 12 per cent of a month's GDP per capita (approximately ₹13,000). Another measure of the inadequacy of cash support is that in Azim Premji University CLIPS, respondents whose households received Jan Dhan transfers, had lost earnings of around ₹1,200 in just the month prior to when the interviews were conducted (October-November), let alone the interim period between April and October. Further, as we saw in Chapter Five, CMIE-CPHS data reveal that the poorest 10 per cent of households experienced a loss of ₹15,700 over these months. Thus the size of cash support fell well short of the size of the income shock for vulnerable households.

“ Conditional on having a woman-owned Jan Dhan account in the household, 71 per cent of respondents in Karnataka and 76 per cent in Rajasthan reported receiving transfers. ”

Another problem, that emerges from the surveys, is that Jan Dhan accounts have a low level of penetration. Of course, compared to PDS or even NSAP, Jan Dhan is a much newer programme and both penetration and use should increase over time. However, the fact remains that 48 per cent of rural respondent households and 63 per cent of urban respondent households in Azim Premji University CLIPS did not have a Jan Dhan account. Amongst those that did have an account, 70 per cent received cash payments (Figure 7.2a). However, only 32 per cent of account holding households had received all three transfers as of October-November

2020 (the transfers were scheduled for April, May, and June). 35 per cent received two transfers and 21 per cent received only one transfer (Figure 7.2b).

In IWS (conducted in August-September 2020), there were no large rural-urban differences, but there were state-level differences in the share of households having women-owned accounts- 44 per cent of households in Karnataka and 68 per cent in Rajasthan. Among BPL and Antyodaya card holders, penetration was marginally higher (45 per cent in Karnataka and 70 per cent in Rajasthan). Conditional on having a woman-owned Jan Dhan account in the household, 71 per cent of respondents in Karnataka and 76 per cent in Rajasthan reported receiving transfers. Once again, as in CLIPS, around 30 per cent reported receiving all three transfers. The full distribution of transfers in both states is shown in Figure 7.2c.

In the Dalberg survey, again, 73 per cent of eligible low-income households had received cash under Jan Dhan but only 56 per cent of low-income households reported having Jan Dhan accounts

in the first place. Rural coverage was fully ten percentage points higher than urban (59 per cent versus 49 per cent). As a part of their overall work on the response of rural communities to the Covid crisis, RCRC conducted a survey

of 10,992 women Jan Dhan account holders in 51 districts spread over 10 states. 66 per cent of active Jan Dhan account holders had received ₹500 while another 20 per cent did not know. In the Indus Action survey, 60 per cent of households reported receiving Jan Dhan transfers (Table 3 of report).

Thus taken together, we have multiple, independent sources of information on the penetration of Jan Dhan accounts as well as the receipt of cash transfers. These are broadly consistent with each other in showing penetration levels of around 50 per cent among poor

Figure 7.2a :
Proportion of households receiving Jan Dhan transfers (CLIPS)

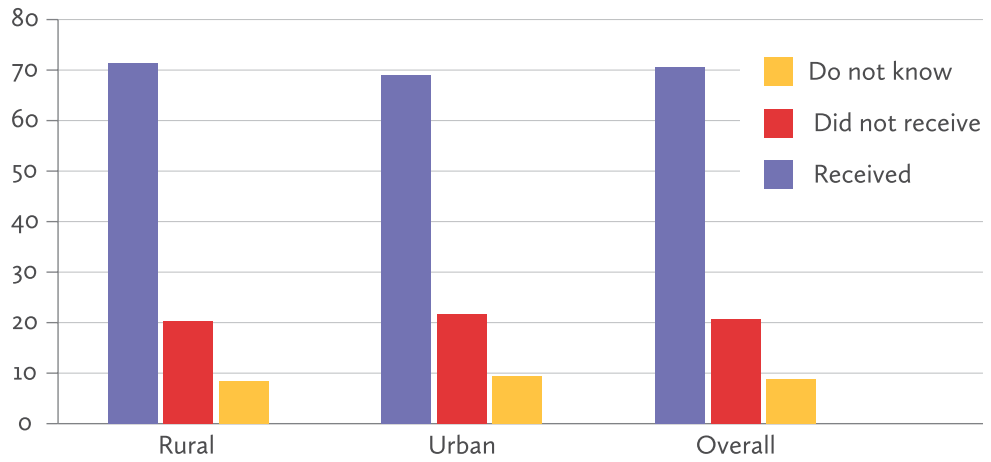


Figure 7.2b :
Number of transfers received in Jan Dhan account (CLIPS)

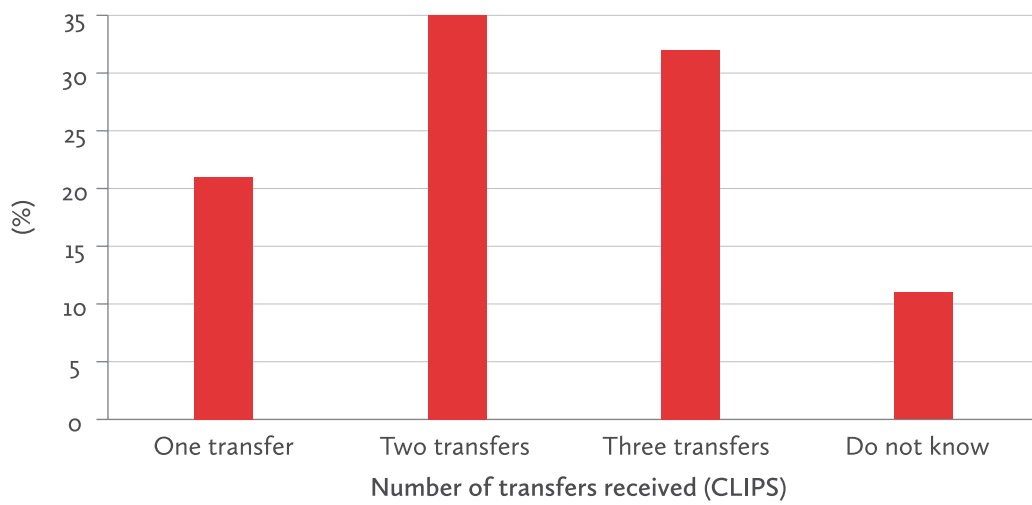
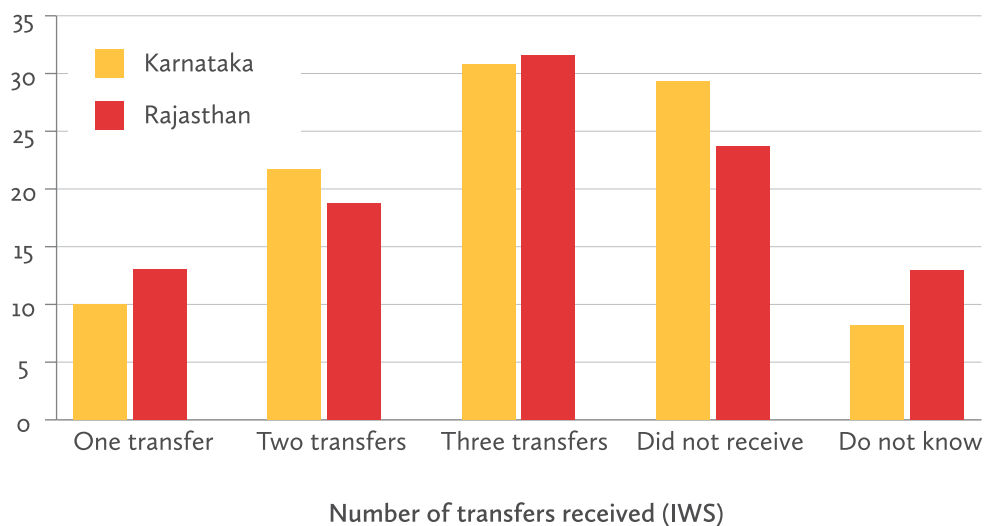


Figure 7.2c :
Number of transfers received in Jan Dhan account (IWS)



Sources and notes: Azim Premji University CLIPS (October-November 2020) and India Working Survey (August-September 2020). Numbers pertain to households who reported having a woman-owned Jan Dhan account. See [Appendix Sections 3 and 4](#) for survey details.

households as well as in the finding that around 70 per cent of eligible households received at least some cash. The former is also consistent with the findings from a study by Somanchi and others, reported in the previous chapter, that 46 per cent of all households are likely to be excluded from cash transfers if delivered via Jan Dhan accounts.⁹ Hence, in the immediate future, if a second round of transfers is undertaken (as we propose it should), it is worth considering other avenues of reaching the cash to poor households, in addition to Jan Dhan accounts.

The failure in reaching 30 per cent of eligible households is concerning, especially given the level of distress that prevails during the pandemic. And it is possible that this arises from more general failures in the Direct Benefit Transfer (DBT) system. Some clues as to why this may have occurred come from a recent study on delivery of social welfare entitlements conducted by the community radio organization, Gram Vaani, in collaboration with Dvara Research (Seth, Gupta, and Johri 2021). The study is based on documentation of complaints received on community radio.¹⁰ It finds that the most common type of exclusion in the DBT system, accounting for 84 per cent of complaints, is failure to credit the beneficiary's account. The report identifies several stages in the system where problems may arise which can form the empirical basis for reforming the system and ensuring better delivery.

Finally, there is the question of the 'last mile.' Even when cash does reach bank accounts, it may not be accessible due to poor banking infrastructure (we saw some evidence for this in the previous chapter). As per the RCRC survey, nearly 50 per cent of households either did not try to withdraw cash (43 per cent) or were not successful when they tried (6 per cent). The principal reasons for not withdrawing were prohibitions due to lockdown rules (41 per



Jan Dhan had penetration levels of around 50 per cent among poor households and around 70 per cent of eligible households received at least some cash.



cent), health concerns (21 per cent) and crowding in banks/ATMs (21 per cent).¹¹

Some surveys have also collected information on other central and state cash transfer schemes. Around 31 per cent of rural respondents in CLIPS owned land and were eligible to receive cash under the PM-KISAN scheme. Around half of the General category farming households did receive it, but only 10 per cent of Scheduled Tribe households and 20 per cent of Scheduled Caste households engaged in farming received the transfer. The survey also reports the share of households who received at least one Covid relief cash transfer from either the central or the state government. It finds that 36 per cent of all urban and 58 per cent of all rural vulnerable households received some cash. Muslim households were least likely to receive even a single cash transfer compared to Hindus and other religious groups. Inter-state migrant households were once again the worst-off with two-thirds of such households not receiving any transfer. In the Dalberg survey, the coverage is better with 84 per cent of low-income households being covered under one of four cash transfer schemes (Jan Dhan, pension, PM Ujjwala, or PM KISAN) and 81 per cent receiving at least some form of cash assistance in May.

To sum up, two main recommendations arise from the cash transfer experience during the pandemic. First, the financial infrastructure needed to reach vulnerable households requires significant expansion and second, the size of the cash transfers (even if we include the state programmes) fell far short of what was needed given the magnitude of the shock and must be expanded.

7.2.3 / Mahatma Gandhi National Rural Employment Guarantee Act

This programme has always been important for the rural economy since its inception but it acquired enormous significance during the pandemic since migrants returned back to their home villages and many households lost income due to a fall in remittances or a disruption in the farm economy.¹² As part of the Atmanirbhar Bharat package of May 2020 (a follow up to the PMGKY), an additional ₹40,000 crores were allocated to the programme, bringing the total budget to ₹1 lakh crore, for the financial year 2020-21.

The MGNREGA tracker launched by the People's Action for Employment Guarantee (PAEG) shows that the programme has emerged as an important avenue of employment generation in this moment of crisis (PAEG, 2020). The huge demand for work is evident from the fact that 35 lakh new job cards were made between April- June 2020 and till November 2020 over 252 crore person-days of work were generated, an increase of 43 per cent compared to previous year. Over 10 million (1 crore) more households worked in MGNREGA this year as compared to last year.

Most of this increase was concentrated in the months of May, June, and July. In June 2020, 32.2 million households were provided employment, a 50 per cent increase over June 2019. In recognition of the value of the programme, the Parliamentary Standing Committee of Labour has noted that, 'there is no better scheme than the MGNREGS to provide sustainable livelihood to the unskilled workers, including the inter-state migrant labours.'¹³ The committee also recommended an expansion in the list of permissible works.

Narayanan, Oldiges, and Saha (2020) ask whether the programme expansion was able to meet the surge in demand in districts that account for a large share of outmigrants.¹⁴ The study combines administrative data between 2018 and 2020 with district-level data on migration (2011 and 2007-08)

as well as multidimensional poverty (2015-16) to assess whether those districts that have higher shares of out-migration and poverty also saw proportionate increase in person-days generated under MGNREGA. The authors find that the top one-third of the high out-migrant districts accounted for 55 per cent of new job cards issued, which is good news. However, this increase in programme beneficiaries was still less compared to what was needed given the share of out-migrants and the poor in these districts.

As a result, the authors' emphasise that despite the significant increase in employment under the programme, there is still considerable unmet demand for MGNREGA work. The 'rationing rate' (percentage of households who demanded work but did not get it) in the May to August period was 22.7 per cent (compared to 15 per cent for the same months of 2019). Subsequently, the rationing rate came down to 13 per cent as demand also subsided (PAEG 2020). However, rationing remains much higher than average in major migrant-sending states such as Uttar Pradesh (23 per cent) and Jharkhand (25 per cent). More significantly, these rates are derived from the official programme database (Management Information System or MIS) and are possibly underestimates of the actual unmet demand. This is because demand for work is often not recorded at the panchayat level if officials know that work cannot be provided due to lack of funds or other reasons.¹⁵

Estimates of unmet demand for work are also available from Covid impact field surveys. The Azim Premji University CLIPS showed large unmet demand for MGNREGA work even as late as October-November 2020. Since April, only 55 per cent of those rural respondents who demanded work had been able to get it, that is a rationing rate of 45 per cent. Further almost everyone (98 per cent) who got work said they would like to work for more days. Thus the concept of 'unmet demand' needs to be broadened to include not

only those who were completely rationed out (got no work) but also those who wanted to work more days than they got. In this respect, the PAEG tracker also shows that, as of November 2020, the average days worked per household was only 41 days as compared to 48 last year. And only 17 lakh households had completed 100 days of employment this year, compared to 40.6 lakh last year. A much larger survey, by Gaon Connection-Lokniti (25,300 respondents in 179 districts across 20 states and three union territories) found a much lower 20 per cent of households who wanted work actually getting it during the months of June and July, i.e. a very high rationing rate of 80 per cent.¹⁶

The India Working Survey (IWS) is another window into the working of MGNREGA during the pandemic for the states of Karnataka and Rajasthan, this time for a random sample of rural households (rather than chosen purposively as is the case with most Covid surveys). First, we note that in this sample survey, in the baseline period (February 2020), there were large variations between the two states in MGNREGA awareness and use. Thirty-five per cent of rural households were not even aware of the programme in Karnataka, while this number was only two per cent in Rajasthan. Even among poor households (with BPL or Antyodaya ration cards) these proportions remained the same. Further, the proportion of those who had either worked in the programme or had a job card was just over 60 per cent in Rajasthan but only 22 per cent in Karnataka.

The second (phone) round asked the same respondents if they were able to get work under MGNREGA in the period between April and September 2020. As expected from the baseline programme performance, the difference during the pandemic is stark. In the panel sample (which is a little different from the field sample), the percentage of respondents having a job card in

Karnataka was 29 per cent compared to 72 per cent in Rajasthan. Among those having job cards, less than a quarter got work in Karnataka, whereas more than half did in Rajasthan. Amongst those who worked, the median number of days worked during this period was 15 in Karnataka as against 26 in Rajasthan. The distribution of the number of days worked is shown in Figure 7.3a. When asked how many days more would they have liked to work, the median response in Karnataka was 30 days, as compared to 90 days in Rajasthan. The distribution of the number of days of work demanded is shown in Figure 7.3b.

It is important to note that while 50 per cent of the respondents in Karnataka say that they did not have a job card and were not interested in working in MGNREGA, this does not necessarily mean that they would not work if the scheme

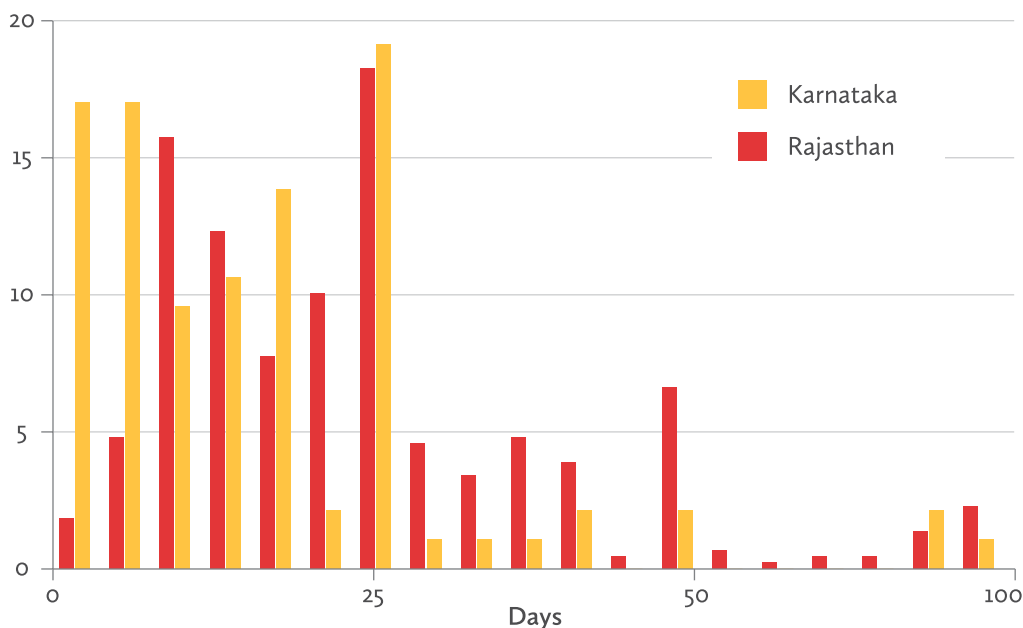
“Azim Premji University CLIPS showed large unmet demand for MGNREGA work even as late as October–November 2020.”

was functioning well. There is evidence to show that continued rationing out of workers from the scheme discourages them from demanding work (Narayanan et al. 2016).¹⁷ For example, in Bihar, where the programme has not functioned too well historically, the RCRC survey conducted in June–July 2020 (3,093 households across 12 districts) found that a mere 11 per cent of poor rural households with incomes less than ₹2,500, had availed of the programme.¹⁸

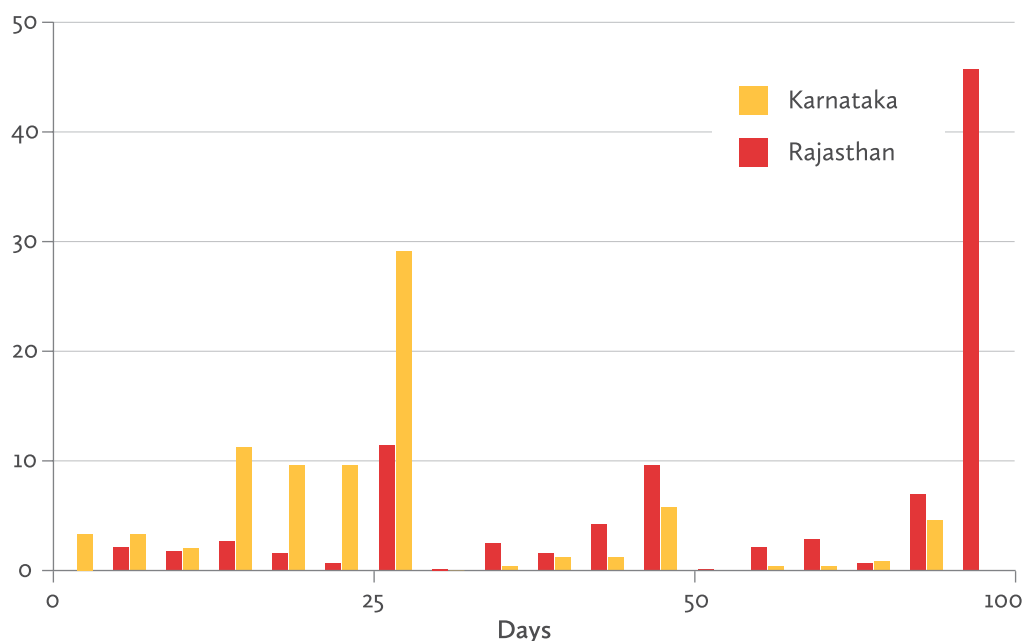
In addition to being a crucial safety net for millions of workers, including returning migrants, recent work has also shown that during the pandemic, MGNREGA was able to increase women's employment in rural areas by 8.6 percentage points. Where the programme ran well, it also drew in women previously out of the labour force.¹⁹ And strikingly, stories have even emerged during the

Figure 7.3 :
MGNREGA
performance
during the
pandemic in
Karnataka
and
Rajasthan

a. Days worked



b. Days demanded



Sources and notes: India Working Survey. See Appendix Section 4 for survey details.

pandemic of students taking to work under the programme in order to pay for examination fees and other educational expenses.²⁰

Acknowledging these roles as well as the fact that the funding, even in normal times, has been inadequate considering the demand for work, it was hoped that the 2021-22 Union Budget would provide a much needed fillip to the programme. However, that has not happened. The allocation for MGNREGA stands at ₹73,000 crore for the

current financial year – 34 percent less than the revised estimates (actual spending) of ₹1,11,500 crore for 2020-21. Further, it is only 2 percent more than what was actually spent in 2019-20, a normal year (₹71,600 crore). That is, spending in real terms has gone down from what it was in a normal pre-Covid year, even when the pandemic is not over and the effects on the labour market are likely to persist for some time to come. An indication of the programme’s need at the present juncture is that an estimated 25.7 million households worked under

MGNREGA in April 2021, the highest for that month since 2013.²¹ There is an urgent need to expand the programme and some of the calls made in May last year such as the demand for ‘a million worksites’ and other suggestions for programme improvement remain valid a year later.²²



In the most recent budget, MGNREGA spending has gone down in real terms from what it was pre-Covid.

7.2.4 / Building and other construction workers (BOCW) welfare fund

Given that most construction workers tend to rely on daily wages, in the immediate aftermath of the announcement of the lockdown, the Ministry of Labour issued an advisory to all States and Union Territories to utilize the cess fund of approximately ₹31,000 crore in their respective state construction worker welfare funds to transfer funds in the bank accounts of construction workers through DBT mode. The amount to be granted to the construction workers was to be decided by the respective State Governments. It is important to note that only those construction workers who are registered with the Construction Boards could receive these funds. There are an estimated 55 million construction workers in India (as per the Periodic Labour Force Survey, 2018-19) of which 35 million are registered.

However, data released by the Ministry of Labour and Employment show that only around 18 million workers benefited from cash transfers by state governments and approximately ₹5,000 crores (16 per cent of the total cess funds of ₹31,000 crore) had been disbursed. As of June 2020, states such as Bihar, Chhattisgarh, and Jharkhand had not done any cash transfer for over 4 million construction workers registered with them, while the highest amount of cash had been given by Uttar Pradesh,

Odisha and Tamil Nadu. The coverage of the construction workers was the lowest in Delhi, where only about 5 per cent of the estimated workers received cash.²³ More recent data on disbursements are not available at time of writing.



In Gujarat, the Self Employed Women’s Association (SEWA) filed a petition inquiring why the cess collected as part of BOCW Welfare Board to the tune of ₹250 crore was transferred to the ‘Chief Minister Welfare scheme for Poor’.

The petition noted that SEWA as a central trade union had organised 27,000 construction workers in Gujarat and it urged the Gujarat government to register the construction workers with the welfare board, renew their registration and disburse money to construction workers. It also asked that the transfer of ₹250 crore to the ‘Gujarat Mukhyamantri Garib Kalyan Yojana’ implemented by the State Government in the wake of Covid-19 pandemic, be declared a violation of the Central Construction Workers Act.²⁴

Given that a large number of workers have been unable to receive benefits for various reasons, the Ministry of Labour and Employment is undertaking a Mission Mode Project to cover all eligible construction workers and provide social security to them. Through this project, the government aims to fast-track the registration of the excluded workers, allow portability of benefits, universalisation of social security schemes on health insurance through Pradhan Mantri Jan Arogya Yojana (PM-JAY), life and disability cover through Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY) and Pradhan Mantri Suraksha Bima Yojna (PMSBY), life-long pension during old age through Pradhan Mantri Shram-Yogi Maandhan Yojna (PM-SYM) and provision of transit accommodations in large cities. It also proposes to include subsistence allowance, such as unemployment benefits, for use during the pandemic.

To enable widespread registration of workers, the government is also planning to give workers a facility to self-register or opt for renewal of their registration – through an online or missed call facility and self-declaration by submitting Aadhaar and bank account details (without the need to submit employers' data). It is also planning to offer cash incentives for registration or renewal of construction workers. The government will also push the States for better utilisation of the cess funds meant for construction workers.

Additionally, given that there is no dynamic all-India portal and every state has its individual database which may or may not be able to transfer their data from other databases, the government is proposing to issue a migration certificate to all workers once they are registered online through their mobile number. Under the proposed system, once the worker migrates to some other state, the data will be uploaded on a national portal and a new registration number will be given by the state where the worker is going to work.

7.2.5 / Employee Provident Fund system

In the foregoing we have focused primarily on programmes that pertain to the informal workforce. But before concluding this section, we briefly take stock of the ways in which the Employee Provident Fund (EPF) system was used during the crisis. Administrative data from the EPFO show that workers dipped into their retirement savings in order to tide over the crisis. As part of the relief package, the Union government allowed EPFO subscribers to withdraw savings not exceeding three months' salary. During the months of April to August 2020, the EPFO disbursed ₹35,445 crores in response to 9.4 million claims, settling 32 per cent more claims as compared to corresponding period last year.²⁵

The EPF system was also used to provide implicit wage subsidies to employers under the Atmanirbhar Bharat Rozgar Yojana (ABRY). This scheme incentivised employers to create jobs by paying both employee and employer contributions, or 24 per cent of wages for new workers. Data as of January 2021, indicate that around 4.7 lakh workers and employers benefited from this scheme.²⁶ It should be noted that this use of the EPF system to stimulate new employment by subsidising the employer contribution to the fund pre-dates the pandemic, under the name PM Rozgar Protsahan Yojana.

7.3 / State-level innovations and experiments

The policies and measures discussed thus far were all at the Government of India level. But states have been at the forefront of the struggle against the pandemic. We now briefly discuss some examples of innovative or interesting efforts by various state governments that go beyond the relief and support offered at the Central level. More details on the policies mentioned below, as well as additional policies can be seen in [Appendix Table 15](#) as well as in several online resources available on state-level responses.²⁷

Before we look at Covid support, it is worth noting that states have consistently been innovators in social policy, with several national policies being born out of earlier state-level schemes. Prominent examples include MGNREGA born out of a scheme in Maharashtra, PM-KISAN out of schemes in Odisha and Andhra Pradesh, and welfare boards in which Kerala has been a leader. Social welfare policies of states such as Tamil Nadu (e.g. universal PDS) as well as efforts at transparency by states like Rajasthan (e.g. Jan Sochna Portal) can also be mentioned in this respect.

A recent comprehensive report on state-level policy action during the pandemic by Bhan et al (2020) focuses on three areas of relief: food, cash transfer and labour protection. The report analyses 181 announcements on food (89), cash transfer (68), and labour protections (24) from various sources such as PRS Legislative, legal database Manupatra, and the citizen-run Covid-19 Government Order. Three themes are dealt with: how beneficiaries were identified, how the size and form of entitlements was determined and how entitlements were delivered.

The pandemic exposed the inadequacies of existing databases to identify vulnerable households. This meant states had to use multiple databases creatively to identify the beneficiaries. The authors note several ways of employing and augmenting databases to identify beneficiaries. The first is to use an existing database to deliver relief—for example, the provision of dry rations to the ration cardholders. Second, providing relief to those adjacent to the database—for example, people with a pending application for registration under specific schemes. Third, the expansion of an existing database by correcting for exclusions. Fourth, using an alternate database as a proxy—for example, occupational status is used as a proxy for vulnerability and addressing possible exclusions from specific social protection schemes. Some examples of such actions were noted earlier in the context of cash transfers. In addition, the Uttar Pradesh government announced free rations to MGNREGA workers and construction workers, thereby using the occupational status to deliver rations through the PDS. Fifth, creating new databases with expanded criteria—for example, the Bihar government ordered district officials to list the migrants who do not fall under the NFSA coverage or state PDS. They were asked to note down the Aadhar number of each beneficiary and the mobile number of at least one person per

household. In another instance, self-identification was used as a criterion to provide relief to wage earners by the government of Meghalaya. These attempts were made to reach the vulnerable beyond the existing databases of various social schemes.

States have consistently been innovators in social policy, with several national policies being born out of earlier state-level schemes.

Finally, there was the option of doing away with identification and providing universal support—for example, many states had set up food distribution centres where anyone in need could get food. The caveat with universal delivery is that generally, the relief on offer was not substantial. The pressing question is whether relief with substantial entitlement should be delivered universally.

7.3.1 / Augmentation of PDS and cash transfers

Free-of-cost grains and other essential food items have formed the cornerstone of Covid relief policy in the sense that the system used to deliver them has the widest reach of any social protection policy. Here states have gone beyond Central support in three crucial ways – expanding the list of beneficiaries, expanding the quantity as well as types of entitlements, and trying new methods of delivery.

As mentioned earlier, several states had expanded their lists of PDS beneficiaries beyond the NFSA guidelines even before the crisis. Tamil Nadu, for example, has had a universal PDS for many years (in fact it never moved from an initial universal to a targeted version). These states were able to reach a larger proportion of households as a result of the previous expansion efforts. During the crisis, several states expanded the list to include households with Above Poverty Line (APL) cards

as well as non-card holders (see [Appendix Table 15](#)). For example, Gujarat announced that APL card holders would receive free grains, sugar and pulses in April and May on par with BPL holders. That the crisis created a huge demand for subsidised grain is indicated by the example of Delhi where the state government launched an e-coupon system to expand PDS to non-card holders. It expected to receive around 10 lakh applications, but instead got five times that number, at 54 lakh. Bihar similarly expanded its programme to include 2.3 million new cards (reaching 10 million new beneficiaries).²⁸ In terms of the entitlements, once again, several states have, over the years, expanded the range of items provided. For example, Karnataka had already included millets in PDS. In this state, during the months of April and May, ration kits were expanded to include daal (as protein source), soap, menstrual hygiene products, and masks.²⁹ Rajasthan announced additional entitlements of 15 kg wheat and 3 kg of pulses per person for three months and 3.5 kg atta, 1/2 litre cooking oil, 1/2 kg salt, 1 kg dal, and 1 kg rice free of cost for those not covered under NFSA. Finally, for delivery, recognising the difficulties that households would likely encounter in visiting Fair Price Shops, states have also experimented with home delivery of food rations.³⁰

“ In Tamil Nadu cash support was delivered through ration shops instead of relying only on direct bank transfers. ”

We have seen earlier that cash transfers made at the national level were inadequate both at the extensive margin, leaving out perhaps as many as half of all poor households, and the intensive margin, falling far short of compensating for the decrease in incomes that majority of informal workers have experienced. As a result, several states augmented the basic Jan Dhan cash transfer with transfers of their own to targeted groups such as weavers, auto and cab drivers, migrant workers

stranded in other states, the old and the infirm, personal service workers such as barbers, dhobis (washermen and women), domestic workers and other vulnerable groups.

For example, Delhi announced ₹5,000 one-time transfer to transport service providers, and an equivalent amount to those registered with the BoCW. Karnataka announced a variety of one-time transfers - ₹1,000 for BoCW workers, ₹5,000 for washermen, barbers, auto and taxi drivers, ₹2,000 for handloom weavers, and ₹2,000 for artists and writers. Tamil Nadu announced ₹1,000 for all ration cardholders, ₹1,000 to construction workers, small vendors, and auto drivers registered with their respective welfare boards, a ₹1,000 for members of the 14 state welfare boards. The beneficiaries include sanitation workers, firecracker workers, cine workers, fishermen, and transgender people. Overall the aim was to ensure that every poor household receives at least ₹1,000 cash transfer. Further the government decided to hand out cash directly to the beneficiaries relying on its robust network of ration shops (PDS distribution centres) instead of relying on direct bank transfers, which has several challenges in terms of last-mile accessibility, as discussed earlier. Andhra Pradesh also experimented with home delivery of cash

for those who were not able to reach banks, ATMs or Common Service Points (CSPs). A related measure is direct purchase of goods from microenterprises, such as Karnataka government’s plan to purchase saris from struggling weavers.³¹

However, no systematic data are available on what proportion of the target groups have actually received the transfers in any given state.

7.3.2 / Urban employment generation programmes

Of the World Bank's list of 621 measures across 173 countries compiled by Gentilini, Almenfi, and Dale (2020), half were cash-based. Most of the rest related to food assistance (23 per cent) or waiver/postponement of financial obligations (25 per cent). Only 2 per cent related to public works, a clear indication of the popularity of cash transfers over public works for income support, perhaps in part due to concerns over physical distancing during the pandemic.



Several states experimented with urban employment programmes during the pandemic.

But in India, as we saw earlier, the existence of MGNREGA proved to be an essential way in which income support could be delivered to vulnerable households via self-targeting. In places where MGNREGA work was not attractive to returning migrants who had been doing relatively more skilled jobs in their destination towns and cities, local communities also innovated. In Karnataka 3.6 lakh returning migrants were listed by panchayats and work was created for them in painting of schools and other such activities which are typically not part of MGNREGA.³²

While MGNREGA existed in the rural areas, there was no such safety net available to urban informal workers.³³ Taking this into account, several states experimented with such programmes during the pandemic. These include Odisha's Urban Wage Employment Initiative (UWEI), Himachal Pradesh's Mukhyamantri Shahri Aajeevika Guarantee Yojana and Jharkhand's Mukhyamantri Shramik Yojana. In addition, Kerala's Ayyankali Urban Employment Guarantee Scheme has been running for a few years already and can provide some lessons for the way forward at the national level (Chathukulam et al. 2021). Box 7.1 summarizes the key features of the new programmes as well as of the Ayyankali scheme.



A national level programme is still worth considering because the state-level schemes, even when they have been billed as job guarantees (such as in Himachal, Jharkhand, and Kerala), remain quite limited in their budgetary allocations and hence are unlikely to be true guarantees. Moreover, the state of state finances during the pandemic also make it difficult for these programmes to be expanded.³⁴ A possible shape for a national urban employment guarantee programme has also been outlined in Basole et al (2019). We discuss this and other proposals for urban public works in Chapter Eight.

Box 7.1 : State-level urban employment guarantee schemes

Odisha: Urban Wage Employment Initiative (now Mukhyamantri Karma Tatpara Abhiyan)

- Date of Operationalisation: 18th April, 2020.
- Objective: Urban poor largely in the informal sector to get immediate wages by execution of labour-intensive projects.
- Budget: Rs 100 Crore; 70:30 between wage and material cost components.

- State Agency (planning, coordination and monitoring): Housing and Urban Development Department.
- Local Agency (implementation and operations): Urban Local Bodies (ULBs) with SHGs, SHG federations and Slum Dwellers Associations.
- Work days provision in a financial year: no maximum limit.

- Eligibility Criteria: Workers of the local area will be given preference while work allocation. Workers have to at least be from the ULB concerned.
 - Implementation architecture and entitlements of workers
 1. Every ULB has a Ward Level Committee to prepare a “List of Projects”. Ward Level Committee consists of representatives from Government (AE/JE), SHGs, Slum Dwellers Association.
 2. Suggested list of projects prepared by the Ward Level Committee to be finalized by ULB Level Committee. This Committee will consist of representatives from Government and SHGs.
 3. Implementing agency of works will be SHG/ Slum Dwellers Association if the project costs less than ₹1 lakh. If estimated cost is greater than ₹1 lakh, the implementing Agency will be the ULB.
 4. Assistant Engineer/Junior Engineer is responsible for preparing the plan and estimate of projects.
 5. Final list of projects with plan and estimate shall be placed in the Council for administrative approval.
 6. List of final projects in the public domain.
 7. Once a work has the required approvals, Muster Rolls will be issued for the work. Muster Rolls will be maintained by the implementing agency. Wages and Material expenses due will be credited to the implementing agency, who in turn will credit it to workers and vendors.
 8. Implementing agencies will be paid a ‘supervising charge’ of 7.5 per cent of the project cost.
 - Payment of Wages: Minimum wages to be notified by the Labour or ESI ministry. A DBT will be made to the beneficiary’s account on a weekly basis.
 - Types of Jobs: Focus on monsoon preparedness and creation of public assets and maintenance in ULBs, storm water drainage, rainwater harvesting structures in public places, development of new water bodies, parks/playgrounds based on local needs and vacant government land availability, Increase in green cover and beautification, sanitation, building community centres and open space development which include micro centres for SHG, Involving local artisans for beautifying cities through wall paintings and murals
 - Other components include- a well-defined SOP, Workers’ rights around basic worksite facilities in terms of clean drinking water, support for child-care etc. Quality control mechanism through technology solutions for geo tagging works, performance monitoring, as well as enhanced transparency and accountability.
 - Update: Original programme ended September 30th. In January 2021 expanded into Mukhyamantri Karma Tatpara Abhiyan described as ‘an urban equivalent of NREGS and wages of workers would be credited to their bank account through Direct Benefit Transfer’.³⁵
- Himachal Pradesh: Mukhya Mantri Shahri Ajeevika Guarantee Yojana (MMSAGY)**
- Date of Operationalisation: 16th May, 2020.
 - Objective: Enhance livelihood security in urban areas by providing guaranteed wage employment to every household.
 - Budget: New funding NOT made available; program sanctioned for the current financial year (employment to be provided in on-going works/ contracts).
 - State Agency (planning, coordination and monitoring): Department of Urban Development.
 - Local Agency (implementation and operations): Urban Local Bodies and Cantonment Boards.
 - Work days provision in a financial year: 120 days per household (guarantee as well as maximum).
 - Eligibility criteria: A local resident of the ULB (home-owner or renter) aged below 65 years.
 - Implementation architecture and entitlements of workers-
 1. Beneficiaries will also be provided with skill training under DDU-NULM
 2. Eligible beneficiaries can apply to be registered with their ULB

3. After due verification, ULB will issue a job card within 7 days of registration request
 4. Employment to be given to a person seeking it within 15 days of him/her demanding it. If not, ULB will pay a daily unemployment allowance of Rs 75 per day
 5. All accounts and information pertaining to the scheme will be in the public domain
- Payment of Wages:
 1. Minimum wage notified by the state government
 2. Equal wages for male and female workers
 3. DBT on fortnightly basis not later than 7 days after completion of 15 days employment
 4. To be paid after due verification of the attendance by the Junior Engineer or any other official authorized by the ULB
 5. In case of an external implementing agency contracted for work, payment made to the beneficiary will be adjusted/deducted from the bills of the implementing agency before making its payment
 - Types of Jobs: Any ongoing or new admissible work under GoHP and Gol scheme for which funds are available at ULBs, Any admissible work under 15th FC or 5th State FC for which grant-in-aid is provided to the ULBs 3. Sanitation works/ services as admissible under SWM Rules 2016 and Swachh Bharat Mission

Kerala: Ayyankali Urban Employment Guarantee Scheme (AUEGS)

- Date of Operationalisation: 2011
 - Objective: Enhancing the livelihood Security of people in urban area by guaranteeing wage employment to urban household whose adult members are willing to do unskilled manual work.
 - Budget: ₹100 Crore (2020-21) vis-à-vis ₹30 Crore allocated for 2019-20 financial year.
 - State Agency (planning, coordination and monitoring): The Local Self Government Department, the State Urban Employment Guarantee Council and the State Urban Employment Guarantee Mission.
- Local Agency (implementation and operations): District Planning Committee, ULBs and Ward Sabha/Ward Committees.
 - Work days provision in a financial year: 100 days per household
 - Eligibility Criteria: Resident of the ULB, 18+ years of age and willing to do unskilled work.
 - Implementation architecture and entitlements of workers-
 1. Applications for registration received and verified by ULB
 2. Households registered: Job-cards provided to each registered household
 3. Households having job cards registering demand for work with ULB
 4. Dated acknowledgement slip provided for each demand for work application
 5. Work to be provided within 15 days of demand for application being submitted
 6. If work not provided within 15 days of being sought- applicant eligible for unemployment allowance as per Payment of Wages Act
 7. Workers to be provided work within a radius of 5km from residence
 8. Worksite facilities to include water, child care and first aid facilities
 9. Men and Women workers paid equally
 10. Wages to be paid within 15 days
 - Payment of Wages-
 1. All workers (men and women) are entitled to the notified wage rate of ₹271 (increase to ₹300 is pending approval)
 2. Wages should be paid within a week or fifteen days at the most through DBT
 3. Funds released to ULB in advance to implement
 - Types of Jobs: Solid waste management and sanitation works, water conservation and water harvesting for enhanced water Security (recharge pits, well construction, recharging), land development, drought-proofing and flood management, afforestation, construction works under various state and central housing schemes, works around livestock management, fisheries, irrigation of canals, micro irrigation and rural

road construction, coastal area works such as construction of fish drying yards, Anganwadi buildings.

- Other components: (A) Strong workers' rights (B) Quality control mechanism both through social audits at ward levels as well as monitoring of works at ULB, regional, and state level (monitoring of 100 per cent, 10 per cent, and per cent works respectively) (C) Well-defined SOP (D) Phase-wise disbursement of funds to ULBs based on set milestones of expenditure

Jharkhand: Mukhyamantri Shramik (Shahri Rozgar Manjuri For Kamgar) Yojna

- Date of Operationalisation: 2nd October, 2020
- Objective: To provide 100 days of guaranteed employment to families residing in urban areas and willing to do unskilled manual work.
- Budget: Rs 10 crore (2021-22).
- State Agency (planning, coordination and monitoring): Urban Development Department
- Local Agency (implementation and operations): Urban Local Bodies.
- Work days provision in a financial year: 100 days per households.
- Eligibility Criteria: Workers living in urban areas since 2015, workers who have been living in shelter homes since three years, workers should not be having a MGNREGA job card.
- Implementation architecture and entitlements of workers-
 1. Implementing agency is Urban Development Department and the head of the civic body will be the nodal officer
 2. Every ward to prepare an "Integrated Annual Labour Plan/Scheme" by January of every year
 3. It will be the responsibility of the implementing agency to provide information related to ongoing schemes in wards and person-days of work required per scheme with the ward
 4. Shelf of works to be provided for every ward. This shall have to be discussed and endorsed by the Ward Sabha
 5. Once the works are approved by the Ward Sabha, it will have to be endorsed by the civic body concerned
- 6. One "Community Resource Person" will be appointed for 2 wards to demand registration of work, provide information pertaining to work allocation, and receive grievances by workers.
- 7. A transaction based MIS will govern the implementation of the programme, and it shall be public
- 8. Ward will be responsible for identifying all eligible families/workers and ensure that they are provided with a job card, bank account and to help them in accessing benefits from other schemes that they are eligible for
- 9. Workers can demand for work, individually and as a group, in writing or orally and have a right to receive a dated acknowledgement slip
- 10. All worksites should have the following facilities: water, first-aid, creche, shade
- 11. Work should be provided within the ward that the worker resides in. If not the same ward, the worker has to be allocated to work at a worksite within 2km of the place of residence and travel allowance up to 10% of the wage is payable
- Payment of Wages-
 1. Workers are entitled to state minimum wage to be credited to their bank accounts within 15 days of completion of work.
 2. Unemployment allowance to workers for not receiving work within 15 days of demanding it.
 3. If wages are delayed, the worker is entitled to compensation which is recovered from the official found to be the cause of delay.
- Types of Jobs: Cleaning of drains, roads, parks, market, bus stands, public toilets, rain water harvesting activities, afforestation, construction repair, road repair, painting, laying of cables, restoration of footpaths and cycle paths, protecting drinking water source, surveying work, caregiving for ill and elderly, caregiving in shelter homes, juvenile justice homes and women's cells.

We thank Rakshita Swamy for compiling the information provided in this box.

7.4 / Private sector relief efforts

The unprecedented scale of the Covid crisis has meant that private citizens and organisations have stepped up alongside public institutions, to offer relief and support. In this report while we focus primarily on public policy, it is important to take note of private sector efforts.

Official data on spending by the private sector towards Covid-relief are not available at one place. This is an attempt to highlight key efforts, curated from various sources. The private sector was incentivised by the government to spend towards Covid relief by making such spending eligible for mandatory Corporate Social Responsibility (CSR) spending (2 per cent of annual profits).

From data available via Invest India³⁶ (September 2020) and Sattva Consulting³⁷ (a CSR consulting firm; September 2020), total CSR spending in 2019-20 was approximately ₹18,600 crores (by around 20,000 companies), of which the private sector contributed 80 per cent and Central Public Sector Enterprises (CPSEs) contributed the remaining 20 per cent. Two-thirds of this was contributed by around 300 companies. Based on a survey of 39 organisations and secondary data on around 300 others, Sattva estimates that more than 50 per cent of estimated CSR spending for 2020-21, projected at ₹15,000 crores, has been diverted to Covid relief. Of this more than two-thirds has gone towards the PM-CARES fund (more than four-fifths to PM-CARES in the case of CPSEs). An analysis of announcements by Sattva of top 300 companies (groups) points to ₹5,300 crores of commitment to PM-CARES and ₹2,500 crores to other forms of COVID relief.

While there is an overlap in spending and it is difficult to separate philanthropic initiatives from efforts carried out via the CSR route, it is

worth mentioning the contributions of leading businesspersons in areas requiring immediate as well as medium term attention. According to the EdelGive Hurun India Philanthropy List 2020 (released in November 2020) which analysed annual reports and announcements made in 2020 of contributions by the top business owners in India pegs the contribution of top ten donors towards philanthropic initiatives of close to Rs. 10,300 crores.³⁸

The Confederation of Indian Industry (CII) through its newsletters and blogs has published aggregated and detailed data on relief work carried out collectively by itself and affiliated organisations.³⁹ The industry body claims to have helped around 80 lakh beneficiaries through the efforts of its corporate members. Sixty six lakh hygiene materials were provided which included around 24 lakh masks, 13 lakh gloves, 1.4 lakh PPEs and 28 lakh sanitizers and soaps. They also provided food related support to 70 lakh people which included 24 lakh cooked meals, 20 lakh ration kits and distribution of 1700 tonnes of food grain. Beneficiaries included daily wage earners, migrants, people with disabilities, marginal farmers, elderly, children, women workers and nomadic tribes etc. Similar work was carried out by other industry bodies such as FICCI⁴⁰ and NASSCOM Foundation.⁴¹ Qualitatively speaking, in addition to food related relief, the private sector also funded setting up of Covid-19 testing kiosks,⁴² patient help-desks at various hospitals, helpline for counselling the impacted⁴³ and skills training for the unemployed.

In addition to CSR spending by corporates, some others have formed collaboratives to pool funds and expertise for Covid relief. One such collaborative is the Action Covid-19 Team (ACT) with a commitment of ₹100 crores of relief spending by a few venture capital and private equity firms in India. Various well-funded and early stage disruptive/platform businesses such as Zomato⁴⁴ have also

Class, caste, ethnic or linguistic identity, and lack of stable residence as well as political voice render casual wage migrants in industries such as construction, the most precarious and hard to reach with social protection policies.

been reported in various sections of the media to have run crowdfunding platforms on their websites for their associates (gig workers) but little is known about their direct funding of relief efforts.

7.5 / Migrant workers as a test-case for social protection systems

As India struggles with the second wave of Covid infections in April 2021, we are seeing disturbing echoes of events from the national lockdown in April and May 2020 which are seared on the public consciousness; workers and their families walking thousands of kilometers in the summer heat, trying to reach their rural destinations in the hope of surviving without an income. In fact, every stage of the pandemic has been characterized by different types of distress faced by migrant workers. In the first two stages of the lockdown the primary need of stranded migrants was food and some money to buy basic essentials. While they were struggling to meet food and cash needs, their woes were compounded by the chaos created by the lack of clear and consistent policy vis-a-vis travel back to home states. Eventually, for those who were able to return to their villages, MGNREGA works did offer a temporary reprieve but both the number of days that work was available as well as the wage rate left a lot to be desired. By July and August workers started returning back to destination cities resulting in a second wave of migration within a few months.

7.5.1 / Multiple vulnerabilities

Due to the specific combination of vulnerabilities they face, migrant workers have proved to be a hard case for effective social protection policy. Conventionally migration

is categorized into three broad groups- permanent, semi-permanent or long-term circular migration, and short-term seasonal or circular migration (Srivastava and Sasikumar 2005; Srivastava 2011a; 2011b). Migration can result in the permanent relocation of an individual or household and this is referred to as permanent migration. Since such workers and households usually have domicile papers and status as full citizens in the destination state, their situation is not as precarious when it comes to social protection. Semi-permanent or long term circular migrants, on the other hand, are those who migrate leaving their families, and land and property in the area of origin, often with the intention of returning to the area of origin. As compared to permanent migrants, semi-permanent migrants lack a strong civic identity and citizenship status at destination. They also participate in the labour market in less favourable ways than non-migrants because of debt-interlocking, involvement in subcontracting chains, greater isolation, fragmentation, and segmentation. They have much weaker social networks than non-migrants (although these are usually the most important resource that they do have).

Seasonal or short duration circular migrants are those who migrate for temporary periods, either moving from place to place or to a fixed destination, returning to their place of origin after brief periods, at the most, after a few months (De 2020). Most reside at work-sites or in the open, while a small percentage live in crowded tenanted places. Seasonal migrants usually belong to poorer and landless groups than long term circular migrants. India Human Development Surveys (IHDS) data show that almost half of all short duration circular

migrants enter the migrant labour market through contractors/middlemen from whom they have taken an advance and are therefore more likely to be involved in debt-interlocked migration cycles.

Seasonal migrants are the most vulnerable and their conditions of work and living (two thirds of seasonal migrants live on worksites) severely constrain their ability to access social protection. Not only do they find it difficult to establish their bonafides and identity in the destination areas, but their entitlements and claims even in their areas of origin are much weaker. This includes lack of access to the PDS and, in many cases, even to the banking system (Srivastava 2020). The combination of vulnerabilities (class, caste, ethnic or linguistic identity, and lack of stable residence as well as political voice) render casual wage migrants in industries such as construction, the most precarious and hard to reach with social protection policies.

7.5.2 / Estimating the migrant workforce

There are no precise statistics on the number of migrant workers in India or on the number of migrants who went back to their villages. Though official estimates place the number of 'reverse migrants' at 10 million, the actual number is likely to be much higher. Not only the extent of reverse migration, but also the number of migrant workers in general, is uncertain. The Government of India stated in its affidavit to the Supreme Court on 31st March 2020 that India had 41.4 million migrant workers. This figure comes from the 2011 Census and accounts for only those who had given employment as a reason for the change in their usual place of residence. But this is likely to be an underestimate because as per the same 2011 census, among the 450 million internal migrants, 195 million were workers. In addition, many migrants (particularly women) do not give employment as a reason for migration; they instead cite other associational reasons like moving with family (e.g. due to marriage). The Census is also not designed to measure short-term circular migration.

A second source of data on the number of migrant workers are the NSS Employment-Unemployment and Migration Surveys in 1999-00 (55th Round) and 2007-08 (64th Round), but even these may not capture the magnitude of short term seasonal or circular migrants (Srivastava, 2011a, 2012a). Srivastava (2020) estimates short-term circular and vulnerable long-term circular migrants in the urban workforce at 44 million and 67 million respectively (2017-18). Thus the total vulnerable migrant workforce is estimated at 111 million in 2017-18. As a percentage of all vulnerable workers in urban areas, this works out to 65 percent of the total vulnerable urban workforce in urban areas. These figures not only highlight the significant presence of circular migrants in the urban economy but also the fact that these workers account for a disproportionately large share of the urban vulnerable workforce.

In this context of the uncertainty around numbers, we note that the Ministry of Labour has recently commissioned five special surveys to be conducted by the Labour Bureau, one of which is focused on migrant workers.⁴⁵ The lack of data on migrant workers clearly emerged as a confounding factor in delivering relief and rehabilitation services with the Centre itself clearly admitting the non-availability of any data on the number of migrants across the country.⁴⁶ As Gulzar, a SWAN fellow notes in their interview with us:

We are called mazdoor because we work. There should be a registry of the labour, so if someone has left from Jharkhand to go to Goa, then Goa should know that these people are coming. Because if something happens to us, no one takes any responsibility. Wherever anyone goes, it should be noted in the registry. So, if something happens to me, I should be able to fill out a form which will reach my home state and then it can be resolved. So, if the contractor mistreats someone then action can be taken against them. There should be some laws that protect us when we are not in our home state.

7.5.3 / Impact of the pandemic and reach of protection measures

Circular migrants are likely to have borne the harshest impact of the Covid-19 shock. Several Covid impact surveys have gathered data on migrant workers. In addition three reports released by the Stranded Workers Action Network (SWAN), are a valuable source of information on the situation facing these workers during the lockdown in April and May 2020. One such report, 'To Leave or not to Leave: Lockdown, Migrant Workers and their Journeys Home', carries the findings of a phone survey of 1,963 migrant workers, who had reached out to SWAN for assistance in April and May. It was found that 67 per cent of migrants were still stuck in the same place since the lockdown was announced. Of those who were stuck, 55 per cent (out of 1,166 persons) want to go home immediately. The figure was lower (33 per cent) when the same set of workers were asked this question earlier at the end of April, indicating that their situation grew worse over time. 75 per cent of workers said they were still stuck in places they had migrated to for work, and they did not have any employment.

81% migrants lost employment in the lockdown compared to 64% non-migrants. 31% reported not being able to access rations compared to 15% non-migrants.

Out of 1,559 workers, about 80 per cent had taken loans during the lockdown period and about 15 per cent had borrowed more than ₹8,000. SWAN data show that 84 per cent of the migrant workers surveyed did not get their wages. And another 12 per cent received only partial wages. Many lost worksite shelters, and those residing in rented accommodation were evicted because of failure to pay rent.

Sima Kumari, a SWAN fellow, highlights the basic demands of migrant workers in an her interview with us:

Workers should get some accommodation, food services near their workplace. Only that can ensure that people will stay where they are. If they close the factory where we work, where will we go? So, they should be allowed to stay where they are, and they should also look after the workers' health in case they fall sick

In terms of access to relief, the SWAN report, '32 Days and Counting: Covid-19 Lockdown, Migrant Workers, and the Inadequacy of Welfare Measures in India' found that even a month after the Finance Minister announced free rations (5 kg of grain and 1 kg of dal per person) for migrants, the level of distress remained high. About 50 per cent of the workers had rations left for less than one day. It increased to about 54 per cent for a few days after April 14 but has been steady around the halfway mark throughout the period. About 72 per cent of the workers said their rations would finish in two days. Four out of five workers who reached out to SWAN did not have access to government rations while 68 per cent did have access to cooked food. Further, 64 per cent reported have less than ₹100 left with them. More than 97 per cent (out of 10,383) had not received any cash relief from the government. As noted, entitlements were not portable, and migrant workers were not entitled to PDS grain in their places of work even if their names were on ration cards back home.⁴⁷

The first round of Azim Premji University CLIPS interviewed about 755 migrants during the months of April and May 2020. More than half (57 per cent) were intra-state migrants, i.e. working in their native state, but in a different district, and the majority (65 per cent) were working in urban areas. These migrants workers were more likely to have lost employment during the lockdown. Eighty-one per cent migrants lost employment compared to 64 per cent employment loss among non-migrants. Notably, more than double the proportion of

migrants reported not being able to access rations during the lockdown compared to non-migrants (31 per cent as compared to 15 per cent for non-migrants). Urban migrants access to rations was even more difficult with 42 per cent not able to access rations during the lockdown. Only 27 per cent of migrants had got the first Jan Dhan transfer at time of interview, whereas 34 per cent of non-migrants had got it.

Kerala affords an example of migrant-sensitive policy wherein the provision of food and health care was de-linked from registration or identity. With the announcement of the lockdown in Kerala, ‘camps’ were set up for those guest workers (the Kerala terms for migrant workers) who had lost their jobs and income. The camps tied up with the local community kitchen organisations, led primarily by the state-led women’s self help group Kudumbashree to provide food and water to the workers. Besides addressing the basic needs of the approximately four lakh workers housed in around 20,000 camps across the state, workers were also provided with some recreational facilities in the camps.

Kerala’s response to the immediate needs of the migrant workers benefited from a pre-existing infrastructure directed towards migrant workers in the state and the active role of community institutions. After the floods and landslides that devastated large parts of the state in 2018 and 2019, the government had undertaken an assessment to understand the ways in which migrant workers had been excluded from relief and rehabilitation measures. This assessment went a long way in informing the responses during the pandemic including disseminating public announcements in multilingual messages, having health responses (tests and vaccinations) targeted specifically towards the migrants, and working closely with local self government institutions. Despite this, there is more that can be done to improve responses targeted towards the migrant population

including better coordination with employers and contractors and further development of existing registration of such workers (Peter, Sanghvi, and Narendran 2020).

Over the last few years gradual reforms have been carried out with the aim of eventually having “one nation, one ration card.” It should be noted that seven states — Haryana, Jharkhand, Karnataka, Kerala, Punjab, Rajasthan and Tripura — provide ‘intra-portability’, allowing people to avail their quota from any fair-price shop located within the state. And as of January 2020, in addition to these seven, Gujarat, Maharashtra, Andhra Pradesh and Telangana, together have been piloting inter-state portability. This means that subsidised grains can be availed by a person who has a ration card based in any of these 11 states in any of the other states. This can considerably reduce the exclusion of migrant workers from availing in-kind transfers.

7.6 / Conclusion

The foregoing evidence reveals a classic ‘glass half full’ scenario when it comes to the performance of social protection policies during the pandemic. PDS, MGNREGA, NSAP, and Jan Dhan, which together account for almost the entirety of the Government of India’s additional fiscal response, formed a crucial safety net and prevented extreme distress. But the net excluded roughly half the vulnerable households along with extremely precarious groups such as inter-state migrant workers in casual wage work who suffered the most. If India is not to let its people down so badly again in the future, a much stronger and more comprehensive system of social protection must be put in place over the next few years. We conclude this report with the next chapter which proposes some policy measures for the road ahead.

Endnotes

¹ The chapter draws extensively on Kapoor and Basole (2020).

² This section draws on Basole (2021) and on <https://www.thehindu.com/opinion/op-ed/the-covid-19-fiscal-response-and-indias-standing/article32154153.ece>

³ See Agarwal et al (2020) for details on as well as shortcomings of PMGKY: https://www.idfcinstitute.org/site/assets/files/15623/final_white_paper_pmgky-2-1.pdf

⁴ In addition to the fiscal measures, there were significant monetary measures, such as the Emergency Credit Loan Guarantee Scheme (ECLGS) for MSMEs and the RBI's liquidity response. The estimated size of all the measures combined was around ₹30 lakh crores or 15 percent of GDP. Here we focus mainly on the fiscal measures, the monetary response is outside the scope of our analysis. See thehindubusinessline.com/data-stories/data-focus/whats-influencing-the-size-of-indias-covid-19-relief-stimulus/article33171458.ece. See <https://prsindia.org/policy/report-summaries/analysis-aatma-nirbhar-bharat-abhiyaan> for more details on the entire Atmanirbhar Bharat package.

⁵ The size of India's fiscal response as recorded in the International Monetary Fund's Covid-19 policy tracker is much higher at 3.2 per cent of GDP. This includes capital expenditures announced in the 2020-21 budget as well as longer term spending such as the Production Linked Incentives (PLI) scheme and credit-based support to businesses. See <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#l>

⁶ <https://impactsofcovid.in/data-dashboard>

⁷ On average 9.8 kgs of rice/wheat and 0.9 kgs of pulses per member were received. However, only 49 per cent received pulses along with cereals. And this also varied widely across states being as high as 95 per cent in Karnataka and Kerala (where pulses have been a part of the PDS prior to the crisis) and

as low as 2 per cent in West Bengal and 14 per cent in Madhya Pradesh.

⁸ <https://www.thehindu.com/news/national/govt-to-provide-free-food-grains-to-poor-under-pm-garib-kalyan-ann-yojana-in-may-june/article34392466.ece>

⁹ <https://www.ideasforindia.in/topics/poverty-inequality/Covid-19-relief-are-women-jan-dhan-accounts-the-right-choice-for-cash-transfers.html>

¹⁰ The report describes it thus: "During the COVID-19 lockdown in India, more than 1 million users called into the platforms during the first two months of the lockdown itself, and over 20,000 voice reports were left by the people, describing their experiences or reporting grievances or asking for assistance to access social protection schemes. The primary data of audio recordings used to fulfil this research objective was obtained through Gram Vaani's community media platforms." (p. 15).

¹¹ <https://www.rcrc.in/>

¹² We do not focus on the effect on agricultural supply chains and the farm economy in general. The reader is referred to the following studies: <http://www.networkideas.org/featured-themes/2020/04/agricultural-supply-chains-during-the-covid-19-lock-down-a-study-of-market-arrivals-of-seven-key-food-commodities-in-india/>, (Ramakumar 2020; Narayanan and Saha 2020)

¹³ <https://www.telegraphindia.com/india/house-praise-for-employment-scheme-modi-panned/cid/1806621>

¹⁴ See this article for a summary of the research paper: <https://www.ideasforindia.in/topics/poverty-inequality/does-workfare-work-mnrega-during-covid-19.html>

¹⁵ https://www.business-standard.com/article/economy-policy/govt-uses-off-record-whatsapp-instructing-states-to-cut-back-work-for-mnrega-116102400673_1.html

¹⁶ <https://www.bloombergquint.com/economy-finance/only-20-surveyed-found-jobs-under-mgnrega-during-lockdown-gaon-connection>

¹⁷ The relative functioning of MGNREGA in these two states has been similar in the past years as well. Dutta et al. (2012) document the implementation of MGNREGA in different states using NSSO data from 2009-10. They found that Karnataka had a rationing rate (share of rural households who wanted work but did not get it) of 65 per cent in 2009-10, as compared to Rajasthan with only 16 per cent.

¹⁸ <https://www.ideasforindia.in/topics/poverty-inequality/covid-19-how-well-are-government-schemes-supporting-bihar-s-vulnerable-populations.html>

¹⁹ <https://thewire.in/labour/mnrega-cushion-job-losses-during-the-pandemic-covid-19-crisis>

²⁰ <https://www.thehindu.com/news/cities/bangalore/students-enrol-in-mgnrega-programme-to-pay-for-higher-education/article33999396.ece>

²¹ <https://www.thehindu.com/news/national/demand-for-mgnrega-work-spikes/article34453439.ece>

²² <https://www.thehindu.com/opinion/lead/the-need-for-a-million-worksites-now/article31665949.ece>, <https://thewire.in/rights/covid-19-lockdown-nrega-centre-boost-budget>

²³ https://www.business-standard.com/article/economy-policy/covid-19-govt-directs-states-to-transfer-cash-to-construction-workers-120032400746_1.html, <https://www.deccanherald.com/business/2-crore-construction-workers-get-nearly-rs-5000-crore-cash-aid-in-lockdown-852839.html>

²⁴ Consultation with Reema Nanavaty, SEWA

²⁵ https://www.business-standard.com/article/news-cm/epfo-settles-94-41-lakh-claims-during-pandemic-disburses-rs-35445-crores-during-april-august-2020-120090900530_1.htm

²⁶ <https://economictimes.indiatimes.com/news/economy/finance/epfo-settles-60-88-lakh-covid-19-advance-claims-releases-rs-15255-crore-till-jan-31/articleshow/80753157.cms>

²⁷ E.g. see <https://www.dvara.com/research/resources/notes/interventions-of-states-in-response-to-covid-19-outbreak/> and <https://prindia.org/covid-19/notifications>

²⁸ <https://www.dailyo.in/politics/nitish-kumar-bihar-cm-pds-ration-card/story/1/33319.html>

²⁹ Consultation with Uma Mahadevan Principal Secretary, Panchayat Raj, Dept. of Rural Development and Panchayat Raj, Government of Karnataka, and Head of the Covid Task Force consisting of government and civil society members.

³⁰ For e.g. see the controversy over Delhi's recent Mukhya Mantri Ghar Ghar Ration Yojana' (MMGGRY).

³¹ <https://www.thehindu.com/news/national/karnataka/govt-promises-to-purchase-saris-to-help-weavers/article32575414.ece>

³² Consultation with Uma Mahadevan Principal Secretary, Ministry of Rural Development, Government of Karnataka, and Head of the Covid Task Force consisting of government and civil society members.

³³ There were news reports of an urban employment guarantee programme being under discussion at the Central level but no such programme has yet been announced. See <https://www.livemint.com/news/india/the-growing-clamour-for-an-urban-jobs-scheme-11601903485203.html>

³⁴ <https://www.livemint.com/news/india/the-great-financial-crunch-how-the-pandemic-sank-indian-states-11616664043231.html>

³⁵ <https://www.hindustantimes.com/india-news/odisha-govt-plans-to-launch-employment-scheme-for-urban-poor-101611422573713.html>

³⁶ <https://www.investindia.gov.in/siru/changing-landscape-csr-india-during-covid-19>

³⁷ <https://www.sattva.co.in/publication/research-domestic-institutional-philanthropy-in-india/#:~:text=Key%20Findings&text=67%25%20of%20INR%2018.6k,funds%20committed%20to%20PM%20CARES.>

³⁸ According to this report (available here: <https://www.hurunindia.net/edelve-hurun-india-philanthropy-l>), Azim Premji Foundation (and other related institutions as well as Mr. Azim Premji in his personal capacity) contributed approximately Rs 8,000 crores (with education as the primary cause supported; within this Rs 1,125 directly towards Covid relief). Other prominent contributors include Mr. Shiv Nadar (Rs. 795 crores) followed by Mr. Mukesh Ambani (Rs. 458 crores).

³⁹ <https://www.ciicovid19update.in/blog>. Affiliated and other organisations include: Young Indians, CII Foundation, Indian Women Network, CII Membership, Society of Indian Automobile Manufacturers and Automotive Component Manufacturers Association of India.

⁴⁰ <http://ficci.in/sector/report/20588/COVID-19-Interventions-by-Companies.pdf>

⁴¹ <https://nasscomfoundation.org/fight-against-covid-19/#:~:text=NASSCOM%20Foundation%20can%20help%20you,solutions%20to%20tackle%20COVID%2D19>

⁴² <https://www.thehindu.com/news/national/karnataka/15-smart-kiosks-to-be-set-up-for-covid-19-testing/article31687900.ece>

⁴³ [https://jan-sahas-website.s3.ap-south-1.amazonaws.com/COVID-19+Report+\(100+days\).pdf](https://jan-sahas-website.s3.ap-south-1.amazonaws.com/COVID-19+Report+(100+days).pdf)

⁴⁴ <https://www.zomato.com/blog/covid-19-initiatives>

⁴⁵ A large sample survey of 300,000 households is planned over six months by the Labour Bureau. <https://www.livemint.com/news/india/govt-to-track-3l-migrant-households-1-5l-cos-to-assess-covid-19-impact-on-jobs-11617192386437.html>, <https://pib.gov.in/PressReleasePage.aspx?PRID=1709013>

⁴⁶ <https://www.thehindu.com/news/national/govt-has-no-data-of-migrant-workers-death-loss-of-job/article32600637.ece>

⁴⁷ It is worth noting here that even during normal times, inter-state migrants have not been able to avail of subsidised grains in their destination states. And even for intra-state migrants, it is often not possible to avail of their entitlement where they work. Not only that but within-town migration can be a problem for the system as well, since the urban poor often move to different locations in a city, and may end up several kilometers from their regular fair-price shop. An extension of this problem is faced by intra-state migrants. These are typically urban problems. Hence the system generally works much better in rural areas where mobility is less and local-level institutions function better.

8

Policy recommendations for the short and medium term

8

Policy recommendations for the short and medium term

As India contends with a much more serious second wave of the Coronavirus, it is imperative that we learn lessons from the first wave. A policy roadmap is needed to address the short-run challenge of supporting vulnerable livelihoods over the next few months, as well as the medium-run objective of reviving employment and incomes over the next few years.

In the foregoing chapters we have outlined the nature and extent of the impact of one year of the pandemic on employment, incomes, and household welfare. We have also discussed the existing social security architecture and how it has been deployed during the past few months. Based on this analysis, in this final chapter, we propose a set of short-run (few months) and medium-run (few years) policy measures.¹

Before we begin, let us hear from three workers who are also Fellows working with the Stranded Workers Action Network (SWAN). There is a general demand to allow work to continue while following safety and distancing protocols so that livelihoods are not threatened. And, in the event of a lockdown where work is stopped, there is a demand for compensation in terms of food and the provision of a health safety net.

My entire district is closed. There are signs of lockdown here. Everyone is scared, you can see the worry on everyone's faces, what will we do, how we will live, what will we eat. We have not yet recovered from the previous lockdown, we have not been able to pay the debts from the previous lockdown, what are we to do? While maintaining

distance, while keeping safe one can go somewhere and work, if the safety of travel and provision of food and water is given by the government then we will not bear the brunt of the lockdown as much. Workers should get some accommodation, food services near their workplace. Only that can ensure that people will stay where they are. If they close the factory where we work, where will we go? So, they should be allowed to stay where they are, and they should also look after the workers' health in case they fall sick.

- Sima Kumari

I am quite sure there will be a lockdown. If they do announce a lockdown, they should let us work, then we don't have to worry about our sustenance. If they do announce a lockdown, they should tell people that you can go home at least a week in advance.

- Gulzar

I think there will definitely be a lockdown. Ideally, there should not be a lockdown, last time we faced so much difficulty. For some people it is okay, they can stay at home, what about poor people; they face so many problems. Let us socially distance and continue to work, so that my income is taken care of.

- Raunaq Parveen

8.1 / Making up for the first wave and meeting the challenge of the second wave

Fiscal support is urgently needed now for two reasons - compensating for the losses sustained during the first year of the pandemic and offering a safety net for the months (or years) to come. We have seen that the bottom decile of households lost over two months of income completely during 2020. In addition, a majority of workers sustained a loss in earnings, either due to job losses or due to a shift to relatively more precarious and informal forms of work. As a result 230 million additional individuals slipped below the poverty line defined by the national floor minimum wage (₹375 a day). We also presented evidence from Covid impact surveys, showing large increases in indebtedness as well as distress sale of assets and reduction in food intake that persisted at least into November 2020. More recent evidence from the RCRC survey also points to continued nutritional distress into January 2021.²

In addition to these short term impacts, Covid-19 is expected to have sustained long term impacts on poverty and inequality. It is worth recalling that India was already a highly unequal country before the pandemic hit. As per the World Inequality Database (WID) the share of the top 10 per cent in India's national income was 56 per cent, much higher than in comparable countries like Indonesia (41 per cent), Vietnam (42 per cent) and even China (41 per cent).³ Research on prior pandemics has shown that inequality increases significantly in the aftermath and the recovery among poorer households is slower because they are forced to sell productive assets and/or become indebted to survive the crisis.⁴ Unless decisive policy action is taken, India will likely experience widening income disparities since it has been much more severely

affected, both in terms of the disease burden and the extent of economic contraction.

The pandemic could also lead to long-term increase in inequality through its impact on nutrition and education. Data from the National Family Health Survey 2019-20 (NFHS-5) reveal that important child nutrition indicators saw no improvement between 2015-16 and 2019-20. In seven out of ten major states, where the survey was conducted, proportion of underweight children increased, and stunting increased in six states.⁵ The increased food insecurity during 2020 reported in several Covid impact surveys (discussed in Chapter Five) can have long-term negative impacts on children's cognitive and physical development, productive capacity and health. Similarly, lack of access to online learning resources among the majority of children, as documented by the Azim Premji Foundation survey discussed in Chapter Five, is expected to lead to decrease in learning levels and widening educational inequalities (Azim Premji Foundation 2021).

8.1.1 / Policy Measures in the short and medium-run to strengthen vulnerable households

Taking all these findings into account, there is a need to re-launch support measures that were undertaken in 2020 and that came to an end with the culmination of the financial year. As discussed earlier, the Union Budget for 2021-22 did not make any provisions for expanded PDS, MGNREGA, cash transfers or other relief measures (Basole 2021a). But seeing the current situation, the Union government announced, on April 23, 2021, that the PM Garib Kalyan Anna Yojana, providing an additional five kgs of grain free of cost to priority households, will be restarted for the months of May and June.⁶ Much more can be done, however, in the immediate future including:

- Extending free rations under the PDS beyond June 2021 until the pandemic is brought under control.
- Cash transfer of ₹5,000 for three months to as many households as can be reached with the existing digital infrastructure, including but not limited to Jan Dhan accounts.
- Expansion of MGNREGA entitlement to 150 days and revising programme wages upwards to state minimum wages. Expanding the programme budget to at least ₹1.75 lakh crores.⁷
- Launching a pilot urban employment programme in the worst hit districts, possibly focused on women workers.
- Increasing the central contribution in old-age pensions to at least ₹500.
- Automatically enrolling all MGNREGA workers who do construction work for a stipulated period as registered workers under the Building and Other Construction Workers (BoCW) Act so that workers can access the social security benefits available to the latter.
- A Covid hardship allowance to 2.5 million Anganwadi and ASHA workers of ₹30,000 (5,000 per month for six months).

The above measures, of course, have implications for the fiscal deficit and the debt-GDP ratio which are currently at historic highs. We discuss this issue in the final section of this chapter. We now elaborate the first four points mentioned above.

“ *Two clear policy priorities have emerged from the crisis, allowing inter-state portability of entitlements and at least a temporary universalisation of PDS by eliminating targeting.* ”

a. Strengthening PDS

As we saw in Chapter Seven, the PDS has provided crucial support during the Covid crisis to prevent widespread hunger and starvation. Conversely,

those who have been left out of the system, either because of targeting problems or due to lack of portability of benefits, have suffered greatly. Two clear policy priorities have emerged from the crisis, allowing inter-state portability of entitlements and at least a temporary universalisation of the system by eliminating targeting.

The argument for allowing beneficiaries to avail of their entitlements wherever they work or reside currently, and not only in the towns or villages where they are domiciled, is clear and has been emphatically underlined by the migrant worker crisis. This process is underway with the One Nation One Ration Card policy which now includes 17 states.⁸ But a more significant step in the direction of improving food security is a move from a targeted to a universal programme. This demand, though of old provenance, has been renewed with force in the current juncture.⁹ As we observed in Chapter Six, nearly 90 million poor households are estimated to be left out of the NFSA list. As a result, during the pandemic, several states extended their beneficiaries list as well as commodities provided, beyond the scope of the NFSA. A leading example here is Tamil Nadu, which has a universal system and also provides pulses in addition to cereals.

The principal objections to a uniform universal system (where entitlements remain the same regardless of the level of household income) are

its overall cost and the subsidy accruing to households who do not need it. On the other hand, a targeted system in a data-poor ecosystem such as India's can cause significant exclusion errors. The practical solution to this dilemma has been to move to a

‘quasi-universal’ PDS where 80 per cent or more of the population is covered even if the official poverty numbers are far lower (e.g. Andhra Pradesh). Another possible solution is a differentiated

universal system in which all households are part of the system but receive different entitlements in a graduated fashion (e.g. Pondicherry). The option to self-exclude or opt out of the entitlements is also worth considering, as has been tried recently for the LPG subsidy.¹⁰ Such a system can sidestep the problems of arbitrary thresholds that end up excluding deserving households entirely.



In addition to increasing enrollment under the PM Jan Dhan Yojana, the use of databases from existing programs (MGNREGA rolls, pension schemes, Ujjawala databases, ration cards, vendor ID card, licenses) must be explored to deliver cash.



b. Enhancing Direct Income Support

Cash transfers, via Jan Dhan accounts, were an important part of the PMGKY package. But as we have shown in this report, the coverage was low and the quantum was vastly inadequate compared to the magnitude of the shock. Larger transfers delivered to a larger proportion of vulnerable households, are urgently needed.

As noted in previous chapters, the case for larger cash transfers is also strengthened by looking at what has happened in other developing countries. For India, with a per capita GDP of approximately ₹13,000 per month, a cash transfer of ₹6,000 would be equivalent with what has been undertaken in other lower-middle income countries. While this would not compensate households for the entirety of lost income, it is still better than what has been done so far.

There are, of course, several challenges in the implementation of direct cash transfers as we have discussed earlier (Drèze and Khera 2020). The most urgent need is to expand the net. In addition to increasing enrollment under the PM Jan Dhan Yojana, the use of databases from existing programs

is a strategy worth exploring given the urgency. These can include MGNREGA rolls, pension schemes, Ujjawala databases, ration cards, and possibly even ID cards or licenses such as those issued to drivers or street-vendors. Bank accounts will already be verified and linked to Aadhar for many of these beneficiaries.

It is worth remembering that there are many who may have had incomes that place them well above any poverty line, but who have lost employment or have witnessed a sharp decline in their incomes. They too will need income support till economic activity resumes some degree of normalcy. Some may have drawn

upon PF savings or other formal mechanisms to tide over the crisis, but this option is not available to all such workers. Identifying such individuals is no doubt a large task, but creative ways of reaching out to them need to be thought through quickly. The principle is to ensure as wide an infrastructure as possible to deliver cash relief.

c. Strengthening MGNREGA

We have seen in previous sections, that MGNREGA has proved to be a vital safety net in rural areas, in particular for migrants returning to their homes. An important aspect of the programme is that it overcomes the problem of targeting and reaching the relevant population through its self-targeting mechanism of beneficiary selection. Going forward, with mobility restrictions back in force, many firms still facing bankruptcies, and reverse migration once again occurring on a large scale, strengthening the functioning of MGNREGA and introducing an urban employment guarantee programme should both be made policy priorities. Physical distancing forms and other precautions will, of course, need to be put in place for worksites to function safely.

Expansion of MGNREGA can be thought of in different ways - as an increase in the per household entitlement from 100 to 150 days per year, an increase in the programme wages, linking the availability of number of working days to individuals and not households, increasing the number of worksites (e.g. one in each panchayat¹¹) and so on. All of these entail an increase in the programme budget, by some estimates to at least ₹1.75 lakh crores.¹²

Concomitantly, there is a need for expanding the list of permissible works, hiring more gram rozgar sevaks (employment assistants), simplifying the implementation process and mobilising para-teachers for work application drives. In particular, it has been pointed out that at present, unlike in the past, where workers could directly come to the worksite and enrol, now no one can be employed unless his or her name has been entered in advance in the e-muster rolls. Without assistance, most workers find it difficult to submit work applications.¹³ To simplify the process, it would be useful to allow workers to enroll at worksites as opposed to entering their names in e-muster rolls in advance. It might also be worth considering the option of a return to cash payment for the duration of the crisis to ensure timely and reliable payment of wages. This is especially relevant given the limited coverage of bank infrastructure in rural areas and the difficulties faced by workers in reaching bank accounts, discussed in earlier chapters.

Another important issue that merits attention pertains to wage rates paid under MGNREGA. The MGNREGA Act allows for determining wages in two ways. Workers are either paid the state minimum wage for agricultural labourers or the central government notifies separate wage rates for MGNREGA. Till 2008, MGNREGA wages were fixed by the former alternative. However, it was argued that as the entire wage burden of the Act is borne by the Centre, state governments have an incentive to inflate minimum wages. Consequently, in 2009,

the government shifted to the second option and MGNREGA wage rates were set separately from minimum wages. And, it is largely the case that programme wages have been set lower than minimum wages of the state. Aggarwal and Paikra (2020) find that wage rates of at least 17 of the 21 major states are lower than the state minimum wage for agriculture and the shortfall is in the range of 33 per cent of the minimum wage. This is the case even after the increase in MGNREGA wages to ₹202 announced in the PMGKY package in April 2020. In this regard, it is worth revisiting the recommendations of the Mahendra Dev Committee (Ministry of Rural Development 2015) which was constituted by the Central Government to advise on the matter of programme wage revision. The report of the Committee noted that the baseline for wage indexation should be the current minimum wage rate for agricultural labourers, or the current MGNREGA wage rate, whichever is higher.

Finally, as the response to the pandemic has highlighted the importance of decentralised governance, the decentralized nature of the MGNREGA needs to be further strengthened. This is particularly important in the backdrop of the fact that, over the last few years, financial resources for the programme have been capped. Consequently, several state governments have begun to implement MGNREGA as a supply-driven scheme, instead of running it like a demand-based guarantee as conceptualized by the Act. As noted in Chapter Seven, the programme allocation stands at ₹73,000 crore for the current financial year which is only two per cent more than what was actually spent in 2019-20, a normal year (₹71,600 crore). This was inadequate even without the second wave, and is all the more so now.

d. Introducing Urban Employment Guarantee (UEG)

The pandemic revealed that India's rural safety net is far more effective than its urban net. Both

PDS and Jan Dhan have a wider penetration in rural areas and MGNREGA only exists in the countryside. Three states have introduced limited urban wage employment programmes since April 2020, to provide informal workers with a safety net during the pandemic. These are Odisha, Himachal Pradesh and Jharkhand. Kerala already had a small functioning programme since 2011 (see [Chapter Seven](#) for details). Another proposal for an urban public works programme, called the Decentralised Urban Employment and Training (DUET) scheme has been proposed by Jean Drèze.¹⁴ Here we present a brief outline of a possible programme drawing on Basole et al. (2019). We also flag some important issues that arise when we consider the urban labour market (a detailed discussion is outside the scope of this report).¹⁵

“ MGNREGA allocation stands at ₹73,000 crore for 2021-22, only two per cent more than what was actually spent in 2019-20, a normal year. This was inadequate even without the second wave, and all the more so now. ”

The UEG proposed in Basole et al. (2019) is a national level, demand-driven, public works programme which provides a statutory right to employment at specified wage rates for a given number of days, with a grievance redressal and social accountability structure similar to MGNREGA. It is targeted towards small and medium-sized towns and aims to provide a legal right to employment while improving the quality of urban infrastructure and services, restoring urban commons and ecology, skilling youth, and increasing the financial and human capacity of Urban Local Bodies. In addition to 100 days of employment on traditional public works projects, a large variety of works that require a range of education and skills are proposed. These include building and maintenance of roads, footpaths, and bridges; creation, rejuvenation, and monitoring of urban commons like water bodies, forest land, wetlands,

and parks; provisioning of care for children and the elderly; and monitoring, evaluation, and surveying of environmental quality as well as apprenticeship in municipal offices, public schools, and health centres. The last two types of work are specifically proposed for educated youth to gain skills and real-world experience in the form of 150 contiguous days of training and apprenticeship. The relevant Urban Local Body (ULB), such as the Nagar Panchayat, Municipal Council, or Municipal Corporation is envisioned to be the principal authority responsible for administering this programme. This involves identifying projects, preparing annual works plans and implementing the programme in a participatory manner by involving the ward committees and ward sabhas. The programme needs a set of dedicated staff starting from the level of the Ward.

The disproportionately high impact that the Covid crisis has had on the livelihoods and earnings of the urban poor prompted the civil society group People’s Action for Employment Guarantee (PAEG) to undertake a public campaign for the introduction of a UEG. A few key issues that have arisen during the consultations are:

- Eligibility criteria for workers to be a part of the programme: should the programme be open to migrant workers or only local urban residents?
- Coverage of the UEG in terms of geography: should it be limited to smaller towns where underemployment is more likely to be a problem than the metros?
- Nature of works: Can the types of works be expanded taking into account the more diversified nature of the urban economy?
- Role of Urban Local Bodies: unlike Panchayati Raj Institutions, the ULB system is not as responsive to local needs. Ward committees often do not exist and municipal elections do not command the attention that panchayat elections in villages do.

- Role of private contractors: public works in most towns and cities are undertaken via private contractors. ULBs rarely have the capacity to undertake works on their own. MGNREGA prohibits contractors from operating, but is this feasible in the urban programme?

Given the complexity of the above issues, it is worth considering the introduction of a pilot programme where these can be worked through. A programme could be started in a phased manner with the worst affected urban districts. It could also be envisioned as a programme for women workers only. If, eventually, around half of all urban casual workers across the country are covered, we estimate that a programme offering a wage of ₹275 per day and 100 days per year of work would cost around ₹54,000 crores.



A UEG programme could be started in a phased manner with the worst affected urban districts and with women workers only. We estimate that a national programme covering half of all urban casual wage workers would cost around ₹54,000 crores.

8.2 / A National Employment Policy

Difficult as it is to see right now, the pandemic will, one day, be behind us, and the task of rebuilding the economy will have to be taken up in earnest. The legacy problems of weak structural transformation and slow employment generation, discussed in Chapter Two, will remain with us. Over the past few decades, the inability of the Indian economy to create an adequate number of non-farm jobs in the formal or organised sector has been the topic of much research (Kannan and Raveendran 2009; Kapoor and Krishnapriya 2017;

Azim Premji University et al. 2018; Mehrotra 2018). In the past decade, the employment elasticity of output reached a low of 0.1 per cent. This is partly due to the fact that, the sectors that have driven growth (such as finance and IT-BPO) are not large employers, and large employers (with the exception of construction) have not shown rapid output growth (e.g. informal retail, textiles, transport).¹⁶ In the aftermath of the Covid-19 crisis, the employment challenge will acquire even more urgency.

A comprehensive National Employment Policy is the need of our times. Such a policy will need to bring together various supply and demand-side dimensions of the labour market and speak coherently to existing trade and industrial policy regimes. Here we offer a conceptual framework within which such a policy could be imagined.



8.2.1 / Framework for the policy

Table 8.1 lays out the framework. A first broad distinction is made between demand-side of the labour market, i.e. policy interventions aimed at raising the demand for

labour and improving the quality of work, versus measures on the supply-side that aim to improve the quantity and quality of supply of labour. Under both heads, a further distinction can be made between direct job creation by governments on the one hand and promoting as well as regulating private sector employment on the other hand.

The dimensions along which interventions can be made are discussed under two heads - quantity of employment and quality of employment. On the quantity aspect, three sub-dimensions are identified - increasing the scale of production, creating employment in labour surplus (migrant-sending) states, and improving participation of women in paid work. On the quality aspect, again, three

sub-dimensions are discussed – raising productivity, promoting wage growth, and providing social security.

Table 8.1 also lists key policy interventions under each category. Needless to say, these are only indicative and not exhaustive. Some of them are elaborated in this section.

A few key dichotomies have traditionally structured policy thinking on growth and employment. These include, public sector versus private sector, import protection versus export promotion, domestic demand versus export demand, manufacturing versus services, and labour flexibility versus job quality. To the extent that the same public resources cannot be devoted to two goals simultaneously, these choices and trade-offs are

	Demand Side		Supply Side	
	Public Sector	Private Sector	Public Sector	Private Sector
Quantity of employment				
Scale	Infrastructure development, USENET	USENET, Ease of Doing Business, MGNREGA, UEG		
Geography	UEG, UBS	Cluster development in smaller towns, FPOs	UBS	Skill creation in under-served areas
Gender	MGNREGA, UEG, UBS	Gender-focused incentives for firms	UBS	Tackling social norms around unpaid domestic work
Sectors		Trade-industrial policy, identifying key industries		Skill mapping and matching
Quality of employment				
Productivity	Infrastructure development, USENET	USENET	UBS	On-the-job training and apprenticeships, Recognition of prior learning (RPL), skill upgradation
Wages		Effective minimum wage legislation, collective bargaining		
Social security	Effective social security floor and unorganised sector board			

Sources and notes: USENET -Udyog Sahayak Network, UEG -Urban Employment Guarantee, UBS -Universal Basic Services

real. But complementarities also exist, as we discuss below.

a. The importance of public employment

A well-understood example is the crowding-in of private investment on the back of public investment. This can happen via the supply-side of the product market by improving infrastructure as well as by shoring up aggregate demand. In the first case, public employment produces public goods and services that enhance the productivity of private investment and enables growth as well as job creation in the private sector. Typical examples are irrigation, roads, and power supply, but also human capital generation (health and education) and enterprise support – all of which require public sector workers to produce and deliver the goods and services. The Covid crisis has highlighted the necessity of adequate, good quality public health infrastructure.

Infrastructural goods and services, particularly at the local and regional levels remain a key bottleneck on the supply-side of the product market. Public investment in the building and maintenance of such infrastructure is thus necessary from the point of view of alleviating bottlenecks. Such investment is also a key demand-side intervention in the labour market because it directly creates jobs as well as stimulates private job creation by enabling firm growth. MSME entrepreneurs, in particular, often emphasise that if quality infrastructure in the form of power, roads, internet and so on, were to be made available, the need for subsidies would be considerably reduced.¹⁷ Furthermore, firms attracted by subsidies and tax holidays can just as easily leave after these have run out, while those attracted by good infrastructure are more likely to stay.

The public demand for labour results in the production of vital public goods and services such as infrastructure, governance, public safety, and

Public employment produces public goods and services that enhance the productivity of private investment and enables growth as well as job creation in the private sector.

law and order without which no economy can prosper. Such public action also acts on the supply side of the labour market via provisioning of health, education, nutrition and food security that result in a healthy and educated workforce. Despite important advances in health and education infrastructure, the levels of public investment in these sectors remain well below other comparable developing countries. Due to decades of under-investment in local infrastructure and governance, as well as last mile delivery problems in the provision of quality basic healthcare and education, India remains plagued by high out-of-pocket expenditure on these vital services (Abraham et al. 2019).

On the supply-side of the labour markets, another well-studied and long-standing weakness is the continued low participation of women in paid employment. Even when under-reporting of women's work is addressed with the use of detailed questionnaires relying on self-reported responses (see [Appendix to Chapter Three](#)), India's female labour force participation rate (LFPR) is a low 40 per cent. Factors such as continued asymmetric burden of housework, cultural norms around women's work, as well as unsafe working environment and lack of mobility are key factors, as is the lack of employment opportunities for women. It is worth stressing this last point, because, in the absence of a strong increase in labour demand, an increased supply of labour in the form of women entering the labour force will only increase unemployment and/or drive down wages. Public employment has a key role to play in all of the above (e.g. delivering childcare and old-age care services, creating public safety, public transport, and labour demand for women's work).

b. Promoting private sector employment

While the public demand for labour for production of public goods is necessary, it can by no means be a sufficient solution to the challenge of decent work and employment. The private sector plays a far bigger role in quantitative terms. Historically, small and medium sized firms have played a crucial role in creating non-farm jobs in most countries that have managed a structural transformation from agrarian to industrialised economies. In India, the supply-side constraints on firm growth (mainly lack of infrastructure and enabling regulatory climate) have had profound consequences for labour demand in the economy and the scale of production remains small or even micro, with the average firm employing less than three workers, and the majority employing no workers other than the owner and their family members (Basole and Chandy 2019). The proliferation of dwarf firms creates conditions for continued informality (precarity), lack of regulation and low productivity. The lack of adequate non-farm jobs has contributed to the crisis in the agrarian economy, which in turn has compounded the problem of low aggregate demand.

Coming to sectoral considerations, rather than focusing on the manufacturing-services dichotomy, the more substantive point, from a job creation perspective, is the tradability or non-tradability of goods and services. Tradable services like IT-BPO and other business support activities, as well as hospitality and tourism can play an important role in the process of structural change because they enjoy a far bigger potential market. With rapid advances in information and communication technology, more and more services are becoming tradable. Of course, the debate over whether such service-led growth can result in a structural transformation of the economy, is far from settled (Ghani and O'Connell 2014; Amirapu and Subramanian 2015; Dasgupta and Singh 2005). The

key question is, do service industries possess the attributes necessary to drive structural change, the way manufacturing industries have done in the past? These attributes are the ability to achieve high levels and growth rates of productivity, domestic as well as international convergence, expansion of a sector in its use of inputs, comparative advantage and exportability.¹⁸



The relevant question is not 'should India return to the pre-1991 policy regime', but rather, what lessons can be learned from the policy failures and success of both the periods.



c. Openness and industrial policy

After decades of being out of fashion, the phrase 'industrial policy' is once again finding favour in international policy circles. At the same time, the Covid-19 crisis has inspired a vigorous debate in policy circles as well as in the public domain on whether India should remain on the path of achieving greater openness in trade and financial flows or embrace some form of import substitution and de-globalisation in the pursuit of 'atmanirbharta' or self-reliance. Taken together with de-globalisation in the advanced industrial economies, there is a sense that there may be a return to the export pessimism and the dirigiste policy climate of the 1950s through the 1970s (Chatterjee and Subramanian 2020).

However, there is little controversy that the pre-1991 industrial and trade policy regime was flawed in serious ways and failed to deliver efficiency gains (Chibber 2006). The political alliance between the bureaucracy and the corporate sector (public and private) ensured monopoly rents for a few but did not serve either consumers or the majority of workers who were left out of the formal system for want of adequate job opportunities.

Hence, the relevant question is not ‘should India return to the pre-1991 policy regime’, but rather, what lessons can be learned from the policy failures and success of both the periods (1950 to 1991 and 1991 to today). A detailed answer to this question is outside the scope of this report. But we emphasise that this answer, rather than polemical pro- or anti-1991 reform rhetoric, will hold important insights for the future.

Substituting imports and promoting exports can go together, as the experiences of the East Asian economies like Korea and Taiwan have shown (Amsden 2001; Wade 1988; Chang 2007). What is needed is a coherent trade-industrial policy framework with what Alice Amsden has called ‘control system’ that ensure performance standards in exchange for subsidies, avoidance of impediments such as inverted duty structures, a favourable external climate for trade, a reduction in the compliance burden particularly for MSMEs, and investment in crucial public goods. This is easier said than done given that hard political economy considerations give rise to cross-purposes and conflicted policy.

As regards protection from imports and stimulating exports, the standard liberal prescription is to prefer subsidies to tariff changes, and exchange rate interventions to subsidies; to minimize bureaucratic discretion, and focus on creating a learning culture that improves efficiency over time (on the latter see Noman and Stiglitz (2017)). While these are good principles, once again the actual experience of later industrialisers like Korea, Taiwan, China or even Vietnam, is a great deal messier. Governments have indeed picked winners and losers. The systems of reciprocity and the ‘carrot-and-stick’ approach followed by developmental states of East Asia has been well-documented. The fact that the government needs to discipline not only workers but also capital-owners, stands out clearly. Capital must not remain locked in non-performing firms, and there must be consequences to lack of

performance. But equally crucial as the knowledge of how to help, is to know how and when to get out of the way.

Closer home, India’s IT-BPO story is at least partially a story of the success of the balance between active industrial policy and a permissive regulatory climate. As Mehrotra (2021) argues, it was directed public policy that created the infrastructure that enabled the integration of Indian IT firms to global standards before the general telecom revolution took off in India. Second, government policy enabled the industry to import duty-free hardware and software, and incentivised exports. Finally, and most often emphasized, the industry benefited from highly subsidised human capital created by public investments in scientific and technical education. All these offer insights to the potential for industrial policy.

Recently, Chatterjee and Subramanian (2020) have intervened in the ‘atmanirbharta debate’ and argued that India’s growth has been export-led to a much greater degree than generally appreciated, and hence export pessimism is unwarranted. The related debate over which to focus on – India’s domestic market or the world market, has also led to too many dead-ends. The truth of course, is that both are important. Only when Indian firms become competitive in the world market (export-orientation) will they be able to deliver quality goods to the Indian consumer and eventually compete with foreign firms for the local market (since protection will not last forever). But there is a trade-off too. From a welfare perspective, a weak domestic market points to stagnating standards of living. Export promotion can help to an extent, via job creation and rising incomes, but it cannot substitute for active public policy that strengthens purchasing power in the domestic market.

d. Job creation versus job quality

Last, but not least, there is the dichotomy of the quantity versus the quality of employment being

generated. Here the relevant parameters are wage level and growth, non-wage benefits, social security, and right to collective action (the list is not exhaustive). Labour flexibility needed for job creation, and good quality of work, have been looked upon as inherently opposed entities. To an extent the trade-off is obvious and real. But complementarities also exist. For example, if we can move from a dual labour market where 10 per cent of the workforce receives multiple benefits and protections whereas 90 per cent receives hardly any at all, to a single one, where every worker receives a non-negotiable social protection floor, this would improve the overall quality of work while also improving labour flexibility.

“ We should move from a scheme-based to a legal entitlement-based approach that provides a universal social protection floor for the unorganised sector as envisaged in the second draft version of the Social Security Code Bill.

Such a process does create winners and losers since it means a reduction in job security for some workers, and is therefore politically fraught. But this can be more than compensated for by an increase in quality of work for others, who are many times the former in number, and in welfare terms much worse off. We must beware, however, of taking a path wherein existing protections are taken away for some workers and no improvements are made for others, resulting in a net loss of social security. Such a lose-lose reform can deliver flexibility in the short-run but only at the cost of hardship for those who can least afford it. In the long-run, lack of competitiveness resulting from organisational problems, institutional corruption, and lack of infrastructure cannot be made up by making labour more precarious.

The long standing policy objective of a universal social security floor has acquired a special significance in the context of the pandemic. While it cannot be part of the immediate or short-term support package, it can and should form a key element of a new National Employment Policy. Rather than viewing the social safety net as providing a subsistence level of assistance to the poor, it must be seen as a way to ensure a dignified existence to workers, who in most cases, have spent their entire lives working in difficult conditions. (Drèze and Khera 2017) note that the transition to the modern welfare state in the advanced industrialised societies was associated with a rejection of the poor law mindset. Concomitantly,

a social consensus was built to accept higher and progressive taxes to finance social assistance. While this cannot be achieved all at once, progress can be made by starting with a programme for universal social security for all workers.

“ One possible approach to this objective is the formation of national and state-level welfare boards for unorganised sector workers as proposed in the 2008 Unorganised Sector Social Security Act. The most recent version of this idea is found in the Social Security Code Bill that was debated in the Parliamentary Standing Committee on Labour. Unfortunately, this idea did not find its way into the Act passed by Parliament last year.

The deliberations surrounding the Social Security Code (2019) in the Parliamentary Standing Committee, make for interesting reading in this context. Various stakeholders and domain experts stressed the imperative need for Universalisation of Social Security to cover the last worker. The principal objection to the language in the Code is that provisions continue to be framed as recommendations instead of being mandatory.

Second, there is no clarity on the overarching funding structure for unorganised sector social security where no formal employer-employee relationships exist. Petitioners have also noted that the relevant sections of the Code that deal with unorganised sector social security (Clause 109) only list welfare schemes which the Central and State Governments may undertake through executive action. Many of these schemes (such as provision of central and state welfare boards) were also in the Unorganized Worker Social Security Act (UWSSA) 2008. But coverage has not expanded much in the intervening 12 years with only six percent of unorganized workers being covered.

The main suggestion here is to move from a scheme-based to legal entitlement- based approach that provides a rights-based universal social protection floor for the unorganised sector as envisaged in the second draft version of the Social Security Code Bill (which was withdrawn for unknown reasons after soliciting public comments in 2018). We discuss a few key features of such a social security architecture. The reader is referred to Mehrotra (2020) for details.

i. National system of central and state-level boards

A merging of disparate central and state boards has been proposed several times (including in the 2008 Act). The goal is a National Board for Unorganised Workers. The 2008 Act provides for the constitution of a National Social Security Board, chaired by the Labour Minister as well as State Boards, with representation of both workers and employers in the unorganised sector. But the crucial consideration here is that such a merger should not roll back the achievements of existing boards that are operating well, such as the Mathadi board discussed in Chapter Six. Rather the new system should build on the best operating boards.

ii. Contributory structure

The contributory structure of the social security system needs to be sensitive to the huge diversity

in employment relations as well as incomes. Those below the poverty line should not be expected to contribute until incomes rise beyond a threshold. At the other end, organized sector workers already form a part of the contributory system of social security (ESIC and EPFO), where both employer and employee contribute. Unorganized workers who are from households above the poverty line can be expected to contribute towards their social security alongside the government (both State and Centre). The public contribution can decrease as we move towards workers with higher incomes. Employers should also be brought into the contributory structure, even in case of unorganised sector workers.

iii. Benefits

The key benefits associated with social insurance, viz. pension, death/disability benefits, and maternity benefits, must be covered. Currently, not all welfare boards provide all these benefits.

iv. Database and registration

The central challenge in ensuring effective social protection coverage for informal workers is that the vast majority are either self-employed or casual wage labour, or even if regular wage, then working in establishments with less than ten workers who are not required to register formally. A registration of establishments as well as a registration of workers are thus both required. There are an estimated 65 million establishments in India (registered and unregistered) as per ASI, NSSO, and Economic Census data. Of these 43 million are not registered under any Act. The digital infrastructure needed for a national database of unorganised workers exists now with increasing Aadhar penetration. The 2008 Act provides for an identity card for unorganised workers (those working in enterprises employing less than 10 workers) by the district administration.

8.2.2 / Select policy interventions

We now outline a few interventions in more detail. For each intervention, we draw attention to the dimensions along which it is expected to act (quantity, quality, supply-side, demand-side etc).

a. Udyog Sahayak Enterprise Network (USENET) for micro-enterprise¹⁹

A key aspect of increasing labour demand in the private sector is enabling the scale-up of microenterprises. Muralidharan, Paul, and Basole (2021) have proposed a national entrepreneurial system to improve ease of doing business (EDB) and assist scale-up of micro-enterprises. Micro and Small Enterprises (MSEs) can create a large number of jobs, across India, for workers with a wide range of skills and education, provided they can scale-up their operations. Out of a total of just over 63 million enterprises in the MSME sector, 62 million are informal micro and very small enterprises (MSEs). Of these, single worker firms (own-account) are 40 million, firms with 2 to 5 workers – are 22 million and firms with more than 5 but less than 10 are estimated at 1 million. 107.6 million workers (97 per cent of all employment in the MSME sector) are in the micro and small segment.

While fostering start-ups remains important to the economy, an equally if not more important policy aim should be to enable scale-up of existing MSEs. Scaling up at the micro level is not a matter of easing compliances or regulatory burden, since these firms are not registered with any entity as firms. Rather we have to look at avenues such as integration with digital platforms, securing of licenses (so that businesses can stop paying bribes), better access to formal finance and government schemes, and so on.

Thus, the MSME sector is extremely diverse and policy interventions need to be carefully tailored by firm size since the challenges faced are very different at different scales. For small and

medium firms who are likely to have more than 20 workers and a turnover greater than 5 crores, the policy focus ought to be on improving ease of doing business via simplification, rationalisation, and digitisation of compliances. But for microenterprises which have less than 20 but more than 5 workers, with turnover greater than 50 lakhs, the emphasis should be on enabling growth by easing them into the formal system. The key here is that entrepreneurs should not be incentivised to stay tiny and expand via creation of more micro informal firms. Rather, they should see value in formalising.

While fostering start-ups remains important to the economy, an equally if not more important policy aim should be to enable scale-up of existing micro-enterprises.

For nano-enterprises with less than 5 workers and turnover of a few lakhs per annum (survivalist enterprises), the emphasis should be on skilling workers and placing them into larger firms as well as on enabling growth in-situ. The relevant policy levers here are matching informal workers to potential formal employers, better access to formal finance, better information on government schemes, licensing to prevent harassment by local officials, digitisation for market access and so on.

This can be done by creating a support system which will make MSEs go digital, find markets, secure credit, avail of government schemes, and meet compliances. The proposed Udyog Sahayak Enterprise Network (USENET) is that support system. The authors propose the creation of 18 lakh Udyog Sahayak Enterprises (USEs) to be created over 5 years as part of USENET project: 5 lakh in Year 1, 6 lakh more by Year 3 and 7 lakh more by Year 5 - with the aim of scaling up these MSEs and also improving the Ease of Doing Business (EDB) for millions of MSEs.

USENET is an entrepreneurship model, with the Government of India catalysing the enablement of the factors that would lead to self-sustenance of the USEs. It is envisaged as a service/transaction oriented model with a large bouquet of services made available to the MSEs at their doorstep such as digitisation and formalisation, availing of government loans, subsidies or other benefits, ensuring compliance with local, regional, and national regulation, aiding partnership with digital marketing platforms and digital payment platforms, etc.

USEs will be supported by a National Digital Ecosystem for MSMEs (NDEM) that will be built on the principle of technology as a public good. It will operate with the help of a single window access to enterprise support services and schemes of Central and State governments.

Udyog Sahayaks Entrepreneurs will be educated youth with 12th pass or graduate degrees who will be trained by the existing skilling ecosystem of the Skill Ministry. Thus the programme creates sustainable livelihoods for 18 lakh educated youth, in addition to enabling MSE growth and indirect job creation and consequent economic growth.

The support system provided by USENET will free up the micro-entrepreneur's time to focus on enterprise growth. The resulting increase in value-added growth can create more jobs. Moreover, if the USENET system is able to assist firms in finding and hiring workers, employment elasticity in this sector can also increase.

The revenue model is that each USE works with a fixed set of client MSEs. Each Micro entrepreneur pays a modest monthly fee to the USE for their services of which 50 per cent can be reimbursed by the government. This reimbursement will be withdrawn after six years. USE will also get paid commission for providing banking services like a Banking Correspondent (BC) and will also get a

commission from the private parties for enabling MSEs use their digital products. At the end of 5 years, income of the Udyog Sahayak entrepreneur is expected to be ₹1,33,000 per year. Lessons from Common Service Centre (village level entrepreneur), BC, and Anganwadi models indicates that a sustainable flow of income of at least ₹12,000 per month is key to the success of the model.

Each USE will require a capex of ₹1,14,000 of which 50 per cent is a grant from the government. Eighty per cent of working capital requirements will come in the form of a MUDRA loan. Youth will invest 50 per cent of the initial investment required and also 20 per cent of the margin money required for working capital loan from MUDRA bank. In the proposed model, the total government pay-out in Year 1 is ₹4,200 crores, and average over 5 years is ₹6,000 crores per year. Government spending per job created falls from ₹84,000 in Year One to ₹27,000 in Year Two to ₹3,000 in Year Ten.

The authors estimate that an additional 1 crore (10.3 million) jobs can be created over five years going up to nearly 6 crores (56.9 million) over 10 years. Based on GVA per worker observed in this sector, and assuming a 12 per cent nominal rate of growth in GVA, these jobs represent an additional economic value of ₹2,16,000 crores at the end of five years and over ₹19 lakh crores at the end of ten years. At the end of five years, government investment shows a return of 712 per cent over 5 years and nearly 30 times over ten years.

b. Universal basic services²⁰

A key public sector intervention that operates on the demand side as well as the supply side of the labour market, is effective spending on health and education. On the demand side, such spending creates employment in the delivery of these crucial services. On the supply side, it improves the quality of the labour force. Abraham et al (2019) propose the creation of a Universal Basic Services (UBS) programme that will expand the current public

system of delivering key services creating millions of good jobs in the process.

India continues to under-invest public resources on health and education relative not only to its richer peers such as Brazil, Russia, China and South Africa (BRICS countries), but also compared to some of its South Asian neighbours as well as sub-Saharan African countries. Since 2000, public expenditure on health and education as a percentage of GDP has stagnated. As a result, as demand for these services has increased, out-of-pocket expenditure has risen and is now higher in India than in many other countries of the world, many of which are poorer or have grown slower. There have been calls to increase the health budget from around 1 per cent to 3 per cent of GDP, and the education budget from 4 to 6 per cent of GDP. This will make enough resources available to eliminate existing shortfalls, expand capacity, and create decent jobs for millions of workers across the education and health spectrum.

The Covid crisis has demonstrated how much we rely on front-line health as well as education workers to rapidly adapt to circumstances, and in the case of the former, put lives at risk. This includes Accredited Social Health Assistants (ASHA) who are considered volunteers and are paid far below the minimum wage (see Box 8.1). It is imperative that these frontline workers are adequately compensated for the immense amount of work they do under difficult conditions. A long-standing demand in this respect is a monthly honorarium of ₹12,000.²¹

While the human capital returns to such investment are obvious and proven multiple times over in many countries, a relatively under-emphasised aspect of such an expansion of public service provisioning is that it can generate a large number of good quality jobs requiring a range of skills and education levels. These jobs are hard to mechanise because they

involve human interaction and are also hard to substitute with imports. If Anganwadi and ASHA workers are regularised and paid a salary, such investment has the potential to be repaid many times over, not only due to increased demand and multiplier effects, but also because such investments will increase productivity, and more importantly the quality of life in India's villages and cities.

Abraham et al (2019) also show based on state-level analyses, that states with relatively higher public spending per capita also tend to have lower out-of-pocket expenses in private health facilities. They identify states that have performed relatively well in delivering public services controlling for per capita income, as well as states which provide public education that delivers outcomes on par with the private system and at a fraction of the cost to the household.

It is imperative that ASHA and Anganwadi workers are adequately compensated for the immense amount of work they do under difficult conditions.

On the employment front, they find that a modest expansion of the current system, that consists of filling vacancies and eliminating shortfall in infrastructure in the health and education systems, can create more than 2 million jobs, which is around 15 per cent of the current workforce in these two sectors. Regularising the employment of anganwadi workers, ASHAs, helpers, and other contractual employees in the public health and education system can create good jobs for another 3 million workers.

Box 8.1 : India's frontline workers

The SWI 2021 background paper by Sinha, Gupta, and Shriyan (2021) presents powerful testimonies from women frontline workers and quantitative data based on surveys conducted in Bihar and Telangana. The paper is based on data collected as part of a larger study on women workers in frontline public employment before the pandemic as well as data collected through phone surveys during lockdown.

The Integrated Child Development Programme (ICDS), a scheme of the Ministry of Women and Child Development, Government of India, was launched in 1975. It has since been universalised and its implementation got a fillip with Supreme Court orders in 2006. ICDS offers (a) supplementary nutrition (b) pre-school non-formal education (c) nutrition and health education (d) immunisation (e) health check-up and (f) referral services. These services are provided through Anganwadi centres (AWC) across the country. At present, there are about 1.4 million AWCs employing nearly 1.28 million Anganwadi Workers (AWWs) and about 1.16 million Anganwadi Helpers (AWHs). From 2005, under the National Rural Health Mission (NRHM), Accredited Social Health Activists (ASHA) workers have been recruited to act as the link between communities and the primary health care system. According to a response in the parliament¹ in March, 2020, there are about 1.1 million ASHA workers in India selected from the local community they belong to. Importantly, all the AWWs, AWHs and ASHA workers are women.

Taken together AWW, AWH and ASHA workers form the triad of frontline workers who play complex multiple roles from being nutrition counsellors, community mobilisers, preschool teachers to being the face of the healthcare systems in rural India. For example Rama (AWW, Telangana), describing her work says,

We do surveys based on areas. Based on my population, I have to take a survey of the number and details of pregnant women, details of newborn, details of children from seven months to three years, details of adolescent girls, deliveries and deaths. I have to also give them food. Post-registration till delivery these pregnant women have to come to the centre for food. We serve food here at the centre. All this comes under Arogya Laxmi program, wherein we give them lunch every afternoon at the centre. We give children between seven months and three years, ration to take home and Balamrutham powder at their homes. We also maintain a record of deaths. There is a register for children. We make children do preschool activities. They gave us a mobile last year to update reports on it every day. In that we have to update it based on our daily door to door surveys. We have to also give them advice and suggestions on what foods to eat and how to eat. We also make note on high-risk pregnancies and advise them to go for regular check-ups. Before lockdown, I used to work from nine to four at the anganwadi centre. Then four to six pm, I do house visits. Morning, before going to the centre sometimes, I finish my house visits. It's proper full day work! (sighs) Medikonda is a very big Gram Panchayat. It has a population of 6,500.

Despite the monumental role played by AWCs in community development, nearly a quarter of them do not have drinking water facilities and about 36 per cent of them do not have toilets.² Moreover the work and the contributions of AWWs and AWHs have largely remained invisible. They are not regular, salaried employees of the government. As per norms of the Seventh Central Pay Commission, the minimum monthly wages for a government employee must be ₹18,000. But, for instance, the AWWs, on average, are paid an honorarium (not a salary) of ₹5,000 per month and the honorarium of AWHs are even lower. As volunteers, they are out

of the ambit of minimum wage laws of the country. ASHA workers are entitled to task-based incentives whose nature and amount vary from state to state. On average, they earn about ₹6,000 per month and put in about 10 hours of work a day. The abysmally low wages and practically non-existent social security has meant that many ASHA workers have been regularly going on strike demanding higher wages and better working conditions. These have been the precarious circumstances of such a large female frontline workforce before the pandemic.

The pandemic worsened their insecurity, exposing them to higher risks and vulnerabilities without any recognition of dignified employment and fair remuneration. Immediately after the lockdown, these women frontline workers became the primary agency for COVID relief work in rural India. Overnight, in addition to their pre-existing set of tasks, the frontline workers were now in-charge of additional work such as curbing the infection spread, conducting door-to-door surveys, assisting with contact tracing, testing and spreading awareness.

The study outlines two major dimensions of hardships each of which have further subdivisions of hardship categories. First, all the frontline workers are unequivocally overworked. Second, they are undervalued which is not only exemplified by workers getting subsistence wages but also illustrated through several of them facing multiple forms of indignities. The woes of underpayment get further compounded by irregular payment cycles and routine delays in receiving payments. For example, nearly one in five respondents had not received the previous month's salaries. Given the hard work put in by them, such delays in wage payments have a discouraging effect on the workers to pursue this line of work. For example, Sameena (AWW, Bihar) said,

We do important work for the community, meet with a lot of women, that feels nice. Sometimes

when there are delays in payments and things, it becomes a problem. Right now, we haven't been paid a salary for the last eight months. Even during lockdown we didn't get paid. The extra money we were supposed to get has also not come. We brought it up in the meetings. Let's see what they do. What's worse is I still have not got paid for some months in 2016.

On most occasions, reimbursements for travel expenses get delayed by six months and on many occasions, even the paltry travel allowance of ₹200 per month is seldom paid. These get further magnified as the frontline workers receive scant support and training for their work owing to massive vacancies in block level functionaries. In response to a Right to Information (RTI) query, the authors point out that 30 per cent of the block level offices of ICDS are vacant. As per official norms, there should be one supervisor for every 25 AWCs. However, there is a 37 per cent shortfall of Anganwadi supervisors.

The story is not much different for ASHA workers and several positions of ASHA Facilitators continue to be vacant. During the pandemic, ASHA workers were entitled to an incentive of ₹1,000 per month for COVID related work but none of the respondents in the two states surveyed by the authors received that amount at the time of the survey in July-August, 2020. Overall, about 42 per cent reported 'more work than usual' during the pandemic and this was in addition to the increased work on the home front.

Based on telephonic survey of respondents in Delhi and Bihar, Thorat et al. (2021), in their SWI 2021 Background Paper find that Anganwadi or ASHA workers were not available to assist young children, pregnant women, and nursing mothers in their health and nutritional needs. Rather, many of these workers were now engaged in gathering data about household members. On speaking with an ASHA worker in Sasaram district of Bihar, the

authors found that the workers received no specific instructions from higher authorities for the care of new-born children, pregnant women, or lactating mothers under such extraordinary circumstances. She also responded negatively when asked if they took any special care or any other measures to ensure safe delivery for pregnant women. She further added that they worked in such a condition without proper masks, gloves, sanitisers, or other essential equipment.

AWWs, AWHs and ASHA workers are the most fundamental force working to improve nutrition parameters among rural children and women. It is therefore imperative to improve their work

conditions, regularise their employment, increase their salaries and improve social protection measures. In addition, there is an urgent need to not just fill vacant positions but recruit more AWWs and AWHs per village. This will have the twin effect of aggressively working towards improving nutrition parameters while boosting the female Workforce Participation Rate (WPR).

¹ <http://164.100.24.220/loksabhaquestions/annex/173/AU3418.pdf>

² <https://indianexpress.com/article/opinion/columns/the-smart-anganwadi-7098591/>

c. A multisectoral focus on culture, heritage, and tourism²²

India's multi-century, multi-cultural heritage in art, architecture, agriculture and light manufacturing is globally recognised. This cultural legacy transcends sectoral boundaries. Agricultural products, manufactured commodities (food and beverages, textiles, garments, leather, metal, wood, gems and jewellery) and services (tourism, arts, heritage building restoration and maintenance) come together to produce this immense heritage. With respect to employment there are two big challenges here. First, increasing productivity and reforming institutions in existing clusters to ensure an improvement in livelihoods for artisans and other workers. Second, creating or reviving clusters to generate new employment. Several potential tourism opportunities lie unexploited all across the country, and many manufacturing clusters are declining. Despite policy attention afforded to it since Independence, it is fair to say that the sector is still not adequately leveraged particularly given its immense potential to create productive, decent, and well-paying jobs. Thus, a concerted and coordinated policy focus on Culture, Heritage and Tourism (CHAT) can reap rich rewards.

The CHAT sector is dominated by MSMEs, it is labour-intensive, skill-intensive, and it is present in every part of the country, unlike large-scale manufacturing and modern services which are geographically concentrated. At the time of writing, more than 400 distinct Geographical Indications have been awarded to agricultural and manufactured goods, and thousands more can be added to the list. The 'handicrafts' sector consists of hundreds more clusters (large and small) and employs an estimated seven million people (though estimates vary widely). Artisanal industrial clusters in textiles, leather, footwear, food, metals, and many other areas, continue to employ millions of workers and contribute to exports despite facing severe infrastructural constraints, lack of lobbying power, and legacy issues such as exploitative value chains and trust deficits.

The export potential is also large. India's share of global handmade exports was a mere 1.2 per cent in 2012, as against China's 30 per cent. Countries such as Korea have been successful in developing their tourism sector around cultural heritage. Similar examples abound in south-east Asia (e.g. Laos and Vietnam). Despite its rich history, India's

performance in cultural tourism has been far behind what even much smaller countries have been able to achieve. Inbound tourism as well as domestic tourism, to a large extent, has been restricted to a handful of sites and states.

The tourism industry has, of course, been devastated by the Covid-19 pandemic. But, no doubt, it will revive in due course. In the meantime, a coordinated CHAT policy can be developed with the following core components:

1. A clear multi-sectoral focus that recognises the links between local manufacturing and architectural heritage, tourism, and other services (such as hotels and restaurants, retail) to offer the consumer a complete experience. Such linkages and spillovers are already exploited informally as evidenced by myriad local shops selling artefacts that greet the tourist in most large locations. But a policy focus will enable up-scaling and formalisation.
2. A bottom-up approach to capacity building, skill and technology upgradation and infrastructural support driven by consultations with workers and producers. There is a vast store of production and entrepreneurial talent in the informal economy that can be leveraged (see next section).
3. Strong collaboration between Central, State and local governments. The latter's role, together with local producers' associations in enabling cluster growth is well-documented.

In addition to dispersed development that this sector can deliver, it can also enable a long-standing policy aim, that of generating non-farm employment in rural areas. India's One District, One Product schemes (inspired by One Village One Product in Japan and One Tambon One Product in Thailand) is a good beginning, but in fact, a district often has more than one product with potential to be developed for national and international markets. Chinese 'market platforms' connecting traditional clusters to domestic and global markets

are examples to look at in this regard. Closer home, organisations such as SEWA have been carrying out interesting experiments in village and eco-tourism by partnering with digital platforms such as Airbnb. There is also a large policy and academic literature that catalogues why previous policy attempts have failed to introduce dynamism in and scale-up clusters. This can form an input into the designing of the new comprehensive policy. The following employment-intensive sectors are likely to receive a boost if such a concerted policy is undertaken: light manufacturing – food products, textiles, garments, leather and footwear, gems and jewelry, metal products, construction (including heritage structure restoration), and services - food and beverages, hotels, tourism and transport.

8.3 / The fiscal situation and the road ahead

We conclude this report by returning to the question of a fiscal support package and implications for the debt-GDP ratio. In the short-run, the measures discussed towards the beginning of this chapter will certainly result in an increase in both. For example, the extension of the PM Garib Kalyan Anna Yojana that has been announced for the months of May and June 2021 is expected to cost ₹26,000 crores. This means that an extension till the end of the year (a further six months) would cost an additional ₹78,000 crores. Bringing the MGNREGA budget to ₹1.75 lakh crores means an additional ₹1 lakh crores of spending beyond the current programme allocation. This taken together with the proposed cash transfers (approximately another ₹3.1 lakh crores), an urban employment guarantee programme (around ₹50,000 crores), a Covid hardship allowance to frontline Anganwadi and ASHA workers (₹5,000 for six months to 2.5 million workers or ₹7,500 crores), and an augmentation of the Central government's portion

of the NSAP pensions²³ comes to a total of approximately ₹5.5 lakh crores or 2.7 per cent of GDP. This is larger than the amount spent in 2020 on Covid support measures (as seen in [Chapter Seven](#)).²⁴ It can go a long way in providing much needed support to households and compensating them for large losses in income that have occurred and are likely to occur in the next few months.

Thus far, given how badly the economy has been impacted, India's response has been on the conservative side. In last year's Atmanirbhar Bharat policy package, the primary instrument of counter-cyclical strategy was monetary, via liquidity expansion and expanded credit. It accounted for the bulk of the 30 lakh crore package, as discussed in chapter 7 (end note 4). However, in the current situation of high levels of joblessness, depressed demand, MSME bankruptcies, not to mention the legacy problems in the banking sector and NBFCs, it is unlikely that monetary policy will be effective. As discussed in Chapter Two, it must be kept in mind that the Indian economy was in the middle of a severe slowdown even prior to the pandemic. Under these circumstances, a strong fiscal push is required.

Taking a conservative approach today can lead to an extended weak recovery and a worsening of the debt-to-GDP ratio purely due to slower growth even if no additional spending is undertaken. In this context it should be kept in mind the GDP data capture the informal economy badly, thereby overstating the recovery. A slower recovery will also depress tax revenues in the future. The states, who are at the forefront of the pandemic response in terms of containment as well as welfare, are severely strained in their finances.²⁵ In addition the vaccine rollout efforts also seem to have been transferred to the states.²⁶ There are thus compelling reasons for the Union government to undertake additional spending now.



There are compelling reasons for the Union government to undertake additional spending now.



The central concern against increasing public spending is the debt-GDP ratio and debt sustainability. How binding are these constraints presently? At a time when all countries are registering a rise in their debt-GDP ratios, the level of debt ratio should not be an immediate constraint. In the case of G-20 countries, the extent of change in the ratio during the pandemic has been more or less proportional to the initial level, leaving the relative rankings mostly unchanged. Thus India ranks ninth among G-20 countries in terms of debt-GDP ratio for both these years. In the Indian context, as we explain below, the key concern is actually an 'impossible trinity', viz. continuing with corporate tax concessions, maintaining fiscal prudence and compensating income losses of vulnerable households.²⁷

However, eventually, debt sustainability does become a concern if the ratio continues to rise over time. In his SWI 2021 background paper, Dasgupta (2021) outlines two ways in which a chosen level of public expenditure can be financed while keeping the debt-GDP ratio constant. The first, expectedly, is to raise revenues. While this may seem a distant possibility under current conditions, it is worth recalling that even as corporate profits have grown during the pandemic year,²⁸ there has been a sharp reduction in corporate tax to GDP ratio during the same time. This is a continuation of the trend in the last decade, starting from a level of 3.7 per cent in 2011-12 to 2.7 per cent in 2019-20 to one per cent at the end of 2020. The paper shows that if the corporate tax-GDP ratio is increased from the present level of one per cent back to three per cent in 2021-22, then an additional amount of ₹2.9 lakh crores of capital expenditures and ₹8 lakh crores of primary revenue expenditures can be financed over and above the 2020-21 level.²⁹

The second mechanism proposed in the study is to increase expenditures and deficits in a manner that the level of GDP rises in proportion to the increase in debt. This is only possible if the quality of expenditure is such that multipliers are sufficiently high and additional deficits generate demand and output to the necessary extent. Using RBI's estimated expenditure multipliers, Dasgupta shows that increasing corporate tax-GDP ratio as well as the capital expenditure-GDP ratio can achieve a targeted level of non-capital primary expenditure for 2021-22 of ₹17.9 lakh crores, which includes a pandemic-related fiscal support of ₹3 lakh crores.

We are living through a once-in-a-century crisis with severe pain being inflicted on our society's weakest sections. There is an urgent need to ensure that pain is distributed according to capacity to bear it. The immediate task is to repair household balance sheets and revive growth. This requires public spending because the private sector either cannot invest due to insolvency problems or does not want to invest due to already existing excess capacity and weak demand. Good quality public spending will revive demand, create employment and generate the tax revenue necessary to keep the debt-GDP under control. On the other hand, focusing on the fiscal deficit or debt risks keeping demand low and prolonging the pandemic-induced recession.

We hope that the findings and arguments in this report contribute to the difficult journey of economic revival that lies ahead for India.

Endnotes

¹ This chapter is based on Kapoor and Basole (2020) and Basole (2021b).

² <https://www.thehindu.com/opinion/op-ed/another-wave-spells-more-nutrition-loss/article34417436.ece>. These are findings from the third round of the survey conducted in Dec 2020-Jan 2021 from 11,766 respondents across 11 states.

³ <https://wid.world/>

⁴ <https://voxeu.org/article/covid-19-will-raise-inequality-if-past-pandemics-are-guide>, <https://blogs.worldbank.org/voices/what-covid-19-can-mean-long-term-inequality-developing-countries>

⁵ <https://thewire.in/health/child-nutrition-levels-in-india-worsened-over-last-five-years-finds-nhfs-survey>

⁶ <https://economictimes.indiatimes.com/news/india/government-to-distribute-free-5-kg-foodgrain-to-poor-in-may-june/articleshow/82214159.cms?from=mdr>

⁷ Taking into account the unmet need, People's Action for Employment Guarantee, a body of civil society activists and researchers, has made these demands. <https://www.newsclick.in/NREGA-Budget-2021-22-Insufficient-Meet-Work-Demand-Say-Advocacy-Group>

⁸ The states are Andhra Pradesh, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Manipur, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttarakhand, and Uttar Pradesh. <https://www.hindustantimes.com/india-news/one-nation-one-ration-card-system-list-of-17-states-which-have-completed-implementation-10161547779670.html>

⁹ <https://www.thehindu.com/opinion/op-ed/grain-aplenty-and-the-crisis-of-hunger/article31948530.ece> and <https://www.livemint.com/opinion/columns/universalize-food-entitlements-to-avert-hunger-and-aid-growth-11592497017610.html>

¹⁰ <https://indianexpress.com/article/opinion/columns/pradhan-mantri-garib-kalyan-yojana-pm-kisan-ujjwala-jan-dhan-6502619/>

¹¹ <https://www.livemint.com/news/india/why-cash-can-save-the-rural-jobs-scheme-11590421706597.html>

¹² There have also been calls to double the entitlement to 200 days temporarily. See https://www.business-standard.com/article/economy-policy/covid-19-strengthening-rural-jobs-scheme-critical-to-address-migrant-woes-120090800253_1.html

¹³ Jean Drèze notes that except in areas where rural workers are relatively empowered, work applications (reflected in ‘e-muster rolls’) are not typically initiated by the workers themselves. Instead, they are initiated on their behalf by others, who have a stake in activating NREGA works: for instance, landowners who want some work done on their land, middlemen who take cuts at various steps, government officials who are under pressure to meet targets, and village heads who wish to please or serve their constituency. In other words, NREGA works attract the workers, and not the other way around. See <https://www.thehindu.com/opinion/lead/the-need-for-a-million-worksites-now/article31665949.ece>

¹⁴ <https://www.ideasforindia.in/topics/poverty-inequality/duet-a-proposal-for-an-urban-work-programme.html>

¹⁵ For the latter, we draw on consultations organised by a civil society group known as Peoples’ Action for Employment Guarantee (PAEG).

¹⁶ However, there are a few labour-intensive industries such as leather and footwear, plastics, and garments and knitwear, which did create jobs (Basole and Narayan 2019).

¹⁷ Consultations with MSME owners. Also see IDFC (2019).

¹⁸ See Gupta and Basole (2020) for an application of this to the IT-BPO industry.

¹⁹ Based on a report submitted by T. Muralidharan, Bino Paul, and Amit Basole as part of an Expert Group advising Group of Ministers (GoM) on Employment and Skills, September-October 2020.

²⁰ This section draws on Abraham et al (2019)

²¹ <https://www.thehindu.com/news/national/karnataka/asha-workers-protest-again/article32675765.ece>

²² This section draws on a paper in progress by Gaurav Gupta and Amit Basole on Creating Employment in India’s Cultural Economy: Heritage, Tourism, and Small-scale Manufacturing.

²³ NSAP currently covers about 34 million beneficiaries, of which the majority are the elderly (around 22 per cent of the national elderly population is covered). Even by very conservative estimates, the Centre’s contribution should be increased to at least ₹500 per month. This would mean a total allocation of ₹20,000 crores, as opposed to around 9,000 crores last year. If coverage is also expanded based on NFSA lists to vulnerable individuals, allocation would have to go up accordingly.

²⁴ This would bring the total spending over two years on Covid relief to around 4.5 per cent of GDP. This is consistent with what other developing economies in Asia such as Vietnam and Indonesia have spent despite having been less affected than India. See <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#1>

²⁵ <https://www.livemint.com/news/india/the-great-financial-crunch-how-the-pandemic-sank-indian-states-11616664043231.html>

²⁶ https://www.business-standard.com/article/current-affairs/coronavirus-crisis-states-hit-out-at-centre-over-pricing-of-vaccines-121042201422_1.html

²⁷ <https://www.hindustantimes.com/budget/the-impossible-trinity-facing-budget-202122-101611356762065.html>

²⁸ https://www.business-standard.com/article/economy-policy/corporate-profits-touch-all-time-high-in-the-september-qtr-crisil-120122100802_1.html

²⁹ There have been other proposals to raise revenue in order to finance Covid relief. See, for example, <https://scroll.in/article/959314/doing-the-maths-why-india-should-introduce-a-covid-wealth-tax-on-the-ultra-rich>



Appendix

Appendix

Section 1 / Tables and Figures

Appendix tables 1 through 15 referred to in the main text are available [here](#).

Section 2 / Construction of CMIE-CPHS datasets

The Consumer Pyramids Households Survey (CPHS) is a nationally representative survey of households conducted since 2014 by the Centre for Monitoring the Indian Economy. The survey is conducted in 'waves', with each wave lasting four months. The first wave, therefore, goes from January to April, the second from May to August and the last wave from September to December. During a wave, approximately 1,70,000 households are approached and information on 8,00,000 individuals collected. These same households are interviewed again in the second and third wave. Further, the sample of households within each month of a wave remains unchanged across waves. So, if a household is interviewed in the first month of wave one, it will be interviewed next in the first month of the second wave, and again, in the first month of the third wave.

The survey collects demographic information on the individuals in the household, their employment status and other employment-related information, information on individual and household incomes from various sources, consumption expenditure on different items, and assets acquired and intent to acquire. The People of India module of the survey contains individual-level demographic information, employment status including type of employment, industry of employment, occupation type and so on. In more recent years, the survey also collects information on the time spent on particular activities by an individual. The earnings

from employment, and household level income are contained in a separate module - Member Income and Household Income.¹

While the People of India and Member Income modules are at the individual level (containing information on employment status and earnings and other incomes), the Household Income module is at the household level with information on households' income from various sources, including the aggregate income from members' earnings. Though separate, all these modules may be combined together using the appropriate unique household-level or member-level identifier.

Estimates from CMIE-CPHS are representative at the state or national level using the appropriate weights.² For all individual level analysis at the all-India level in this report, the weight used is the wave-level member weight for individuals above 15 years of age at the country-level with correction for non-response. For any household level analysis using monthly income data, the weights used are the month-level household weights at the country-level with correction for non-response. For all state-level analysis, the appropriate state-level weights with correction for non-response are used.

2.1 / People of India

This section discusses the details of how the People of India module has been used and the construction of the various panels used in the analyses in the report.

For every wave in CMIE-CPHS, a typical sample consists of approximately 1,70,000 households and 8,30,000 individuals. In each wave, the employment

status of the individual at the time of the survey is collected. Therefore, this gives us information on an individual's employment status at three points in the year. Within this sample, during normal, i.e. pre-Covid times when the survey was conducted in the field, there is still some level of non-response. Table 16 shows the share of responses and non-responses by households in the 2019 and 2020 waves

During a normal wave, CMIE-CPHS has a response rate of around 85 per cent. During the month of April 2020, owing to the economic lockdown and mobility restrictions, the CMIE-CPHS transitioned

from a door-to-door survey to a phone survey resulting in a significant reduction in sample size.³

In the initial waves, with the transition to the phone survey, response rate declined substantially but this has increased subsequently, and is at 70 percent in the last wave of 2020.

In the employment analysis in this report, we have relied primarily on two kinds of samples, (i) a panel tracking individuals pre-Covid from the December 2019 sample (i.e. only one month of wave 3), and following them over the subsequent waves in April 2020 (during lockdown) and in December 2020 and

Appendix
Table 16 :
Sample size
of CMIE-
CPHS for
each wave

# of households	2019			2020		
	Wave 1	Wave 2	Wave 3	Wave 1	Wave 2	Wave 3
Data Available	146,328	147,868	147,319	112,289	76,386	123,188
Data Not Available	28,077	26,537	27,086	62,116	98,019	51,217
Total	174,405	174,405	174,405	174,405	174,405	174,405
Response rate	83.9%	84.8%	84.5%	64.4%	43.8%	70.6%
# of individuals	2019			2020		
	Wave 1	Wave 2	Wave 3	Wave 1	Wave 2	Wave 3
Employed	188,247	185,998	185,107	133,892	85,737	143,420
Unemployed, not willing and not looking for a job	273,746	272,786	272,821	208,527	147,542	238,682
Unemployed, willing and looking for a job	16,854	18,023	17,993	16,530	13,407	14,554
Unemployed, willing but not looking for a job	6,253	6,120	5,663	7,426	5,390	6,966
Not Applicable	230,282	240,524	243,316	191,330	129,899	212,863
Data Not Available	131,473	125,411	126,877	296,625	472,207	243,123
Total	846,855	848,862	851,777	366,375	252,076	403,622
Response rate	84.48%	85.23%	85.10%	65.28%	44.72%	71.72%

Sources and notes: CMIE-CPHS, various waves

(ii) a panel comprising of individuals in the last pre-Covid wave, i.e. wave 3 of 2019 namely September, October, November, December 2019 and tracking them a year later, in wave 3 of 2020.

The remaining discussion in this section details the construction of each of these datasets.

(i) Trajectory sample

This sample is used for the employment trajectories analysis presented in Chapter Three. The sample is constructed by first taking those individuals who were employed in the month of December 2019, i.e. the last month of wave 3. The next interview for these individuals would have occurred in the last month of wave 1 of 2020, i.e. April, and then in August in wave 2 of 2020, and finally in December of 2020. Such a panel allows us to track workers prior to the lockdown, examine the impact on their employment during the lockdown and their recovery in later months. This panel allows us to understand first, the immediate impact of the pandemic on the pre-Covid workforce and second, their employment recovery in the subsequent months.

Table 17 shows the distribution of these workers in terms of their information available in the subsequent waves. In December 2019, the

workforce sample in CMIE-CPHS People of India comprised 45,671 individuals. In April 2020, with the sudden transition to phone survey, there is the expected drop in the sample with information on nearly two-thirds of the December workforce no longer available. As Table 17 shows, for the 45,671 workers in December 2019, employment information is available only for 14,460 (about 30 percent). This improves by the end of 2020 and about three-quarters of the December workforce has data available.

However, the construction of this trajectory panel is anchored on having been in the workforce in December 2019 and having information available in April 2020 and December 2020. Therefore, the size of the final trajectory panel is 11,008. Table 18 shows the distribution of the employment status of these workers in the subsequent waves under consideration.

The CMIE-CPHS is conducted at the wave level, but the trajectory sample takes individuals from one month in a wave and follows them over subsequent waves. To what extent is the sample from a month in a wave representative of the overall sample and what weight are used when using month-level data? We look at both these questions below.

Appendix Table 17 : Status of December 2019 workforce in subsequent months	December 2019	April 2020	December 2020
Data not available		30,916	11,836
Not applicable		295	1,333
Employed	45,671	8,498	27,627
Out of labour force		1,606	3,863
Unemployed		4,356	1,012
Total	45,671	45,671	45,671

Sources and notes: CMIE-CPHS, various waves

Appendix

Table 18 :

Trajectory
sample and
employment
status

	December 2019	April 2020	December 2020
Employed	11,008	6,509	9,367
Unemployed		3,308	358
Out of Labour Force		1,191	1,283
Total	11,008	11,008	11,008

Sources and notes: CMIE-CPHS, various waves

Since we use the data only for one month for each of these waves, the appropriate weights to use for this estimation would be the corresponding month-level weights, correcting for the observation that might be lost due to attrition. However, the People of India database provides only the wave-level weights, which is the frequency at which the data is released.⁴ For the purpose of this exercise, we have to rely on the wave-level weights offered with the People of India to generate month-level estimates. We show that estimates calculated by applying attrition-corrected wave-level weights on a monthly sample are broadly representative. We first show that the distribution of the monthly sample across various demographics, after applying the wave-level weights, are similar to their distribution in the overall wave. Second, we take the month-level estimates of unemployment rate and labour force participation rate that are published by the CMIE and compare our weighted month level estimates to show that these are similar.

First, a monthly sample in the CMIE is well-representative of the wave sample. We find that each month of the wave has a similar distribution of the sample across states and regions. Further, the distribution of individuals across other characteristics is also similar between the samples at the wave- and the month-level. The distribution is also quite similar in the sub-sample that we used to construct the panel to study the trajectory of employment (Appendix Table 19). Therefore, this provides one justification that with the use of attrition-corrected weights, the month-level panel

sample, despite being a sub-sample of the wave population, can be used to derive national level estimates.

Next, we show below that using these wave weights on monthly data closely approximates CMIE's own monthly estimates (which uses monthly weights). In Table 20 we compare our estimates of Unemployment Rate and Workforce Participation Rate using country weights corrected for attrition and non-response with the publicly available estimates provided by the CMIE using month-level weights.

Table 20 shows that estimates at the month-level using CMIE-CPHS wave level weights are broadly similar to the month-level estimates provided by the CMIE using their own internally available month-level weights.

(ii) Employment transitions analysis sample: Wave 3 (September-October-November-December) 2019 and 2020 panel

All employment analysis in Chapter Four of the report uses the last pre-Covid wave, i.e. the last wave of 2019 and follows these same individuals a year later in the same wave in 2020. Like in the earlier dataset creation, we begin with the pre-Covid (wave 3, 2019) workforce. Information for these 4.8 lakh individuals is combined with their information in wave 3 of 2020. Table 21 shows the details of the working age population from wave 3 of 2019 and their status in the same wave a year later.

Appendix
Table 19:
Comparing
sample
demographics
across the
wave, month
and trajectory
sample

	2019, Wave 3 Workforce	December 2019 Workforce	December 2019 Trajectory sample
Women	11	11	9
Rural	68	65	64
SC/ST	31	35	33
OBC	40	39	40
Intermediate Caste	9	8	7
Upper Caste	18	17	20
Hindus	86	88	90
Muslim	9	7	6
Permanent Salaried	11	11	11
Temporary Salaried	10	10	10
Daily Wage Workers	29	31	28
Self Employed	50	48	51

Sources and notes: CMIE-CPHS, various waves

Appendix
Table 20:
Comparing
estimates
of LFPR and
Unemp-
loyment
rate: CMIE
estimates
(using
month level
weights),
authors'
estimates
using
wave-level
weights.

Unemployment rate	CMIE Estimates (using monthly weights)			Estimates using wave-level country weights with non- response correction		
	India	Urban	Rural	India	Urban	Rural
May-20	21.7	23.1	21.1	19.1	17.9	19.8
Jun-20	10.2	11.7	9.5	9.8	11.4	9.1
Jul-20	7.4	9.4	6.5	7.1	9.2	6.2
Aug-20	8.4	9.8	7.7	8.1	8.7	7.7
Labourforce participation rate	India	Urban	Rural	India	Urban	Rural
May-20	38.6	35.2	40.3	38.8	35.7	40.5
Jun-20	40.3	37.5	41.7	40.5	37.2	42
Jul-20	40.6	37.7	42.1	40.5	38	41.7
Aug-20	41	38.9	42	40.9	39.6	41.7

Sources and notes: CMIE-CPHS, various waves

Appendix
Table 21:
September
– December
(wave 3)
2019 –2020
panel, and
2018–2019
baseline
panel

Employment status in 2019	Employment status in 2020					
	Employed	Unemployed	Out of workforce	Data not available	Not applicable	Total
Employed	111,175	3,626	15,174	48,290	6,234	184,499
Out of workforce	10,530	7,859	171,158	65,375	15,872	270,794
Unemployed	2,600	5,873	8,795	4,666	1,678	23,612
Total	124,305	17,358	195,127	118,331	23,784	478,905

Employment status in 2018	Employment status in 2019					
	Employed	Unemployed	Out of workforce	Data not available	Not applicable	Total
Employed	139,299	2,450	12,514	22,573	8,354	185,190
Out of workforce	12,040	8,588	196,766	33,079	18,607	269,080
Unemployed	3,674	8,472	5,220	2,662	1,954	21,982
Total	155,013	19,510	214,500	58,314	28,915	476,252

Sources and notes: CMIE-CPHS. Employment status is categorised as “Not applicable” if the individual is below 15 years of age, or if they had died or emigrated/immigrated

Information is available in 2020 wave 3 for about 75 per cent of the 2019 wave 3 workforce. This sample of 1,29,975 individuals is the sample that is used when looking at employment transitions (across employment arrangements and industries) and the movement into informality for the permanent salaried.

To ensure that seasonal factors are being considered, and to better understand the Covid effect, we compare all findings in the 2019-2020 panel with their corresponding findings in 2018-2019, the baseline year. To construct the baseline panel, we follow the same process as above. Table 21 provides the details of the baseline sample

2.2 / Income Pyramids

As mentioned earlier, the Household Income and Member income modules (called Income Pyramids) contain information on individual and household level earnings and income. This data, like in the People of India, is collected in three waves each year, i.e. each household is visited three times in a year. In each visit, information on income from various sources are asked for the previous four months. So in total, CMIE-CPHS provides income information for every month and for every individual. For individuals, information is provided for their total income, wage income, income from pension, dividend, interest payment, and fixed deposits/provident funds. At the household level income is additionally also reported under the headings of household business income, household income from rent, self-production, private and

government transfers, sale of assets, lotteries, and gambling. A point to note is that losses in business are not included in the business owner's income and treated as part of the business accounts. Consequently, CMIE-CPHS does not report negative incomes.

All income information, unless otherwise stated, is in real terms. Real incomes are calculated using state-level monthly consumer price index (CPI) for rural and urban sectors, sourced from Reserve Bank of India (RBI).⁵ All incomes are reported in constant Jan 2020 prices for all the analysis. For the months and states for which CPI was unavailable, it was replaced with the corresponding month's all-India CPI figure. Also, since state-level CPI was unavailable for the period of February to April 2020, all-India CPI was used for these months. Additionally, since no CPI information was available for May 2020 in the aforementioned source, the imputed all-India CPI for May was sourced from a Ministry of Statistics and Programme Implementation (MOSPI) document dated 13th July 2020.

The income data is used in the report to look at the impact on workers' earnings and household incomes. For the analysis of impact on workers' earnings, we use a sample that merges People of India information with income data, as detailed in (i) below. To understand the household level impacts, we use an event study method (described in section (ii)). Finally, to understand how data on income from CMIE-CPHS compares with official statistics from PLFS, we have undertaken a detailed initial analysis comparing the two data sources on broad parameters. This is detailed in section (iii).

(i) Employment and earnings analysis: September-October 2019 and 2020 panel.

The labour earnings analysis presented in Chapter Four relies on a smaller sample than in the employment analysis. This is the September and October 2019 sample followed into September-

October 2020 creating a panel of individuals with their employment information at two points in time. This sample from People of India is merged with the Member income data for the months of September and October 2019 and 2020. So, for an individual whose employment status was collected in September 2019, we take the corresponding individual income reported for that month.

Note that individual and household incomes in CMIE are collected with a lag with individuals being asked about their income in the four months before the interview, as mentioned earlier. So, an individual who is interviewed in April is asked about their incomes in the four months prior - December, January, February and March. Therefore, the information on income in September would have been collected between October and January, depending on when the household was contacted. So, the September and October incomes would have been asked to the households in our sample (i.e. those belonging to the September-October 2019 or 2020 wave) in the next January and February respectively. Thus incomes, in this case, have a four-month lag in recall as compared to employment status which pertains to the time of interview. The same applies to household incomes against the members' employment status.

The Member Income module contains information on members' earnings from wages, salaries for every month till October 2020 (at the time of writing). In the report, individual earnings for salaried and casual workers is based on this variable - members' earnings from wages and salaries. However, for self-employed workers, we use additional information. In the Household Income module, information on income from business is also collected. For any household, the income from business is apportioned equally between all self-employed members in that household. This amount is then added to the member's income from wages and salaries, if any, to arrive at the total earnings of self-employed members. This is the final variable

used to represent workers' earnings. The sample comprises of individuals who are employed in both periods and for whom income information was available. The final sample for the analysis was 3,03,105 individuals in the 2019-2020 period, and 2,97,843 for the baseline 2018-2019 period. This is the sample used to examine the impact on workers' earnings and the decomposition of earnings in terms of employment and income loss.

(ii) Household income analysis

The household income analysis presented in Chapter Five covers the months between July 2019 to October 2020. The variable used is per-capita household income. Total household income comes from the household module of the income data and is defined as follows - 'the summation of total income of every earning member and the income of the household collectively, which cannot be attributed to any individual member. This includes income received from all sources such as rent, income earned from self production, private transfers, wages, overtime, bonus, etc.'⁶ Household income data is then merged with CMIE-CPHS People of India module to get information on the size of the household. Per-capita household income is created using household size and total household income variables.

For the analysis of the impact on incomes, we rely primarily on three metrics - comparing average monthly income losses, cumulative losses over pre-Covid and Covid period, and estimates from an event study model. For everything except the average monthly losses, we have used seasonally adjusted incomes.

Seasonality adjustment factors for each month are estimated by calculating the average deviation in monthly incomes from the trendline during the 2017-2019 period. We estimate incomes for each individual month by first taking a moving average of the monthly incomes of the surrounding ten months (five months prior to the month under

consideration; five months post). The actual observed income in the month is then divided by the estimated moving average to get a ratio of the deviation from the trendline. This is done for every month's data between June 2017 and September 2019. The month-specific seasonality adjustment factor is then derived by taking an average of all the ratios for a given month over the two year period. This adjustment is done separately for rural and urban sectors. We then apply this seasonality factor for monthly incomes in 2020 to get the seasonally adjusted incomes.

For example, the corresponding ratio of rural income for January 2019 is estimated by taking an average of monthly incomes five months prior to the month (August 2018 to December 2018), five months after the month (February 2019 to June 2019). Similarly, the ratio for January 2018 is estimated. January 2019 and January 2018 ratios are then averaged to get an seasonality adjustment factor for January. This factor is then applied to January 2020 incomes. We find that incomes are more seasonal in rural areas because of lump-sum incomes obtained by farmers when they sell their harvest than in urban areas. Typically rural incomes for the months of April and October are higher. Other alternate methods to determine seasonality of incomes like X-13-ARIMA will be explored in future research.⁷

Only households for which income data is reported in the survey in all the pre-Covid months (July 2019-Feb 2020) are used to estimate the pre-Covid average monthly income and define the pre-covid percentiles, as well as to estimate income distribution. And similarly, only households for which income data is reported in all the Covid months (March 2020-October 2020) are used to estimate the average monthly per-capita income and define the percentiles in this period, and the income distribution.

For the event study analysis in the report, we look at household income between October 2019 and October 2020. We estimate the following event study model to capture the effect of the pandemic on per capita household income and individual incomes.

$$y_{it} = \sum_{\tau=-7}^{\tau^{max}} \beta_{\tau} \cdot \mathbb{1}[\tau=t-e] + \alpha_i + \varepsilon_{it}$$

wherein,

y_{it} = seasonally adjusted per capita household income for household i in month t in constant Rs.
 τ = indexed event time (time relative to the month of lockdown – March 2020)
 α_i = household fixed effects
 ε_{it} = error term (clustered at the household level)
 t = month
 e = base month (March 2020)

For the poverty analysis we estimate the number of individuals who live in households whose per capita income is below the variously defined thresholds using CMIE Income Pyramids data. We convert the defined thresholds into Jan 2020 terms using Consumer Price Index (CPI) for rural and urban areas. CMIE CPHS weights for household income are at the household level. Since poverty is estimated at the individual level, we convert the household-level poverty estimates to the individual level using per-capita equivalency scale. We do this by multiplying the household sample weights provided by CMIE with the size of the household to get household size-adjusted weights. We chose not to use CMIE provided individual weights as they are derived based on demographic characteristics which are not taken into account in per capita equivalence scales. We then apply the CPI-adjusted thresholds to household per capita income and estimate the proportion of individuals who live in households with incomes below the thresholds. We then use population estimates for 2020 (based on Ministry of Health and Family Welfare (2019)) to convert these proportions into absolute terms .

2.3 / Comparing CMIE-CPHS and PLFS income data

CMIE-CPHS is the only nationally representative data available for 2020 that maps both the pre-Covid and post-Covid periods. However, it is important to understand how similar or different income estimates from the CMIE-CPHS are from other nationally representative and official sources of data on income. The last publically available, nationally representative government survey data with information on labour earnings (including earnings from self-employment) is the Periodic Labour Force Survey (PLFS) 2018-19. We compare the estimates for incomes between the two datasets on broad parameters to establish the extent of comparability between the two. For the purpose of our analysis, we construct a variable for members' incomes using the method detailed earlier, i.e. combining wage earnings and apportioned earnings from business for self-employed workers. This is combined with the individual's employment status. Employment information is not available at the month level, but rather at the wave level, at three points in the year. This means that we use income information pertaining to the three months for which employment data is available.

Thus PLFS has information on every individual's employment status and income once a year, while CMIE-CPHS has income and employment information for each individual three times a year. We consider the CMIE-CPHS as a pooled sample, whereby the three observations pertaining to the same individual collected at three points in the year are considered as three separate entities. This is equivalent to combining the three waves and treating the sample as a pooled sample rather than a panel. The pooled sample is similar to a random sample where we pick one observation per individual in terms of the distribution of sectors, employment categories, farm-non-farm representation and gender.

In the PLFS, self-employed workers are asked about their income in the last 30 days, and regular wage and salaried workers are asked about their income in the last month. For casual wage workers, earnings per day for the seven days preceding the date of survey is asked. The total weekly earnings of casual wage workers are multiplied with four to arrive at their monthly earnings. And so, we have all earnings for all workers in PLFS at the monthly level.

We use the latest round of PLFS (2018-19) and compare it to the corresponding data from CMIE-CPHS. PLFS 2018-19 was conducted over the months of July 2018 to June 2019. For CMIE-CPHS we use income information from the closest three waves - last wave of 2018 (September-December), first wave of 2019 (January-April), and second wave of 2019 (May-August).

Below we report findings from both PLFS and CMIE-CPHS income data. For CMIE-CPHS, results are reported for data including zero incomes as well as for data excluding zero incomes. This is done to address the high proportion of zero incomes reported in CMIE-CPHS income module. The data reports zero incomes for 12 per cent of the employed sample over the period of study. This is distributed over different employment types as follows - 13 per cent for self-employed, and 11 per cent each for daily wage workers and regular wage workers. Accordingly, we examine income distribution including as well as excluding zero incomes in CMIE-CPHS.

All-India

When zero incomes are included in the average, the real monthly income in PLFS is ₹11,225, and for CMIE-CPHS it is ₹14,531. If zero incomes are excluded, the corresponding numbers are ₹11,307 and ₹17,354. Across the entire income distribution, CMIE-CPHS absolute numbers exceed that of PLFS. For the income distribution inclusive of

zeroes, the 10th percentile of the CMIE-CPHS distribution is zero ([Appendix Table 13](#)). With zero incomes, the median income in PLFS is ₹8,038, while that in CPHS is ₹10,215. Without zeros, the corresponding numbers are ₹8,095 and ₹12,155 ([Appendix Table 14](#)).

Income inequality as measured by the Gini coefficient is 0.52 for CMIE-CPHS and 0.44 for PLFS data, for the income distribution including zero incomes. For the income distribution without zeroes, the Gini coefficient is 0.42 for CMIE-CPHS, and remains 0.44 for PLFS.

Rural-Urban

Inequality in urban areas, according to official national statistics, has historically been higher than in rural areas. The Gini estimates from PLFS confirms this. However, for CMIE-CPHS, the Gini coefficient for incomes in the rural sector exceeds that for the urban sector (See Table 13 in Data Appendix). This holds for both income distributions - with and without zeroes. However, if we remove the incomes of self-employed individuals in the rural area, the pattern becomes the same as that in PLFS, with the urban Gini coefficient being higher than in rural areas.⁸

The inequality in earnings when zero incomes are included is higher in CMIE-CPHS than in PLFS. This is mostly driven by inequality differences within the rural distribution since the gap narrowed when we removed farmers from the rural sample. There are many possibilities for the difference in estimates across the two databases. Unlike PLFS, CPHS does not have a category of unpaid workers involved in household enterprise or family farm. These workers are classified as self-employed and assigned a share of the household enterprise or farm income. Additionally, losses in business are not included in the business owner's income and treated as part of the business accounts. So CPHS does not report negative incomes.

Section 3 / Azim Premji University Covid-19 Livelihoods Phone Survey (CLIPS)

The Azim Premji University Covid-19 Livelihoods Phone Survey was conducted in collaboration with various civil society organisations to understand the economic impact of the lockdown on the livelihoods of informal workers. The CSOs for the first round of the survey were Aga Khan Rural Support Programme, Centre for Advocacy and Research (CFAR), Gauri Media Trust, Paschim Banga Khet Majoor Samiti, Pradan, Samalochana, Self Employed Women's Association, Srijan and Vaagdhara. Six out of these nine organisations, namely, Centre for Advocacy and Research (CFAR), Gauri Media Trust, Paschim Banga Khet Majoor Samiti, Pradan, Samalochana and Self Employed Women's Association were part of the second round of the survey. Respondents were contacted over phone via the networks of the collaborating civil society organisations in two separate rounds of the survey.

The first round of the survey was conducted between April 13th and May 23rd, 2020 interviewing 4,942 respondents across 12 states in India. The broad objective of the first round was to understand (and quantify) the extent of the lockdown's impact on the employment and earnings of these informal workers. During the first round, the month of February 2020 was used as the baseline month to capture the respondent's primary work activity and earnings, prior to the pandemic. We then captured information about the work and earnings of the respondent during the period of lockdown, beginning from March 24, till the date of survey. A comparison of the work and earning estimates over these two periods allowed us to identify the immediate impact of the lockdown on their livelihoods.

The second round of the survey took place between October 7 and December 23, where we re-interviewed 2,778 of the 4,942 respondents

from the first round. The objective of resurveying the same respondents, six months later, was to understand what had been the nature of recovery since the unlocking of the economy and how effective state intervention had been in mitigating the economic shock brought on by the crisis. In this second round of the survey, respondents were asked about their work and earnings in either September, October or November depending on the month of the interview.

The data dashboards and other materials from both rounds are available online.⁹

Combining the data collected during the two rounds of the survey, a panel dataset of 2,778 individuals was constructed wherein employment and household information about the same individual was captured for three different time points. The first being the month of February, the second being the months of April and May and the third being the months of September, October and November (since the reference period of the second round was the last thirty days). These three time points have been referred to as *pre-lockdown*, *lockdown* and *post lockdown* respectively.

The sample of respondents in this study is purposive and non-random. We relied upon the phone databases of communities that our partner civil society organisations operate with. An alternative sampling strategy that we could have pursued was a random digit dialing (RDD) frame. However, given that our focus was on vulnerable communities working in the informal sector, we decided against pursuing random digit dialing as it does not offer the flexibility to focus on only one segment of the population. Additionally, the response rates of RDDs in developing economies are usually low - anywhere between 15 to 20 per cent.¹⁰ Attempting to carry out the survey using an RDD method would have required a considerable expansion of time and resources. Utilising the phone numbers provided by our CSOs, we managed

to achieve a higher response rate of around 74 per cent.¹¹ Even though using the CSO database makes our sample non-random, we have tried to ensure that our sample is both geographically and occupationally diverse. Overall our respondents were from 131 districts covering 12 states. Given the purposive nature of sampling, the findings presented here pertain only to the sample and are not representative of the larger population. The estimates are unweighted.

As stated above, owing to the lockdown and keeping in mind social distancing protocols, both rounds of the survey were carried out over the phone. SurveyCTO software's mobile application was used for data collection and all enumerators were trained in the software. Enumerators were CSO staff members and were trained via video-conferencing. Multiple online groups were created to provide continuous support to enumerators at all times during the survey. The survey instrument was translated into regional languages including Hindi, Kannada, Gujarati, Bengali, Marathi, Odia and Telugu.

Overall, the sample of 2,778 respondents whom we re-interviewed during the second round largely consists of those working in the informal economy. It includes farmers, agricultural labourers, self employed women, NREGA workers, construction workers, domestic help and street vendors. Table 22 presents the sample's descriptive statistics. Nearly 6 in 10 respondents were women. Urban respondents comprised 40 per cent of our sample. The average age of our respondents was around 39 years. There was a fair representation of those from socially marginalised backgrounds with SC and ST workers forming more than half of the sample. Around 84 per cent of our sample were Hindus. In terms of employment categories, the sample is dominated by casual wage workers who constitute half of the sample. Self-employed (excluding unpaid labour) form 1/4th of the sample while the share of regular wage workers was around 19 per cent. The majority of our sample hailed from low income households

whose average monthly household income prior to the lockdown (i.e. in the month of February) was around ₹10,100.¹² To put this into context, the average monthly household income as reported by respondents of nationally representative surveys such as the CMIE for the same time period is around ₹20,600.

Appendix Table 22 : Azim Premji University Covid-19 Livelihoods Phone Survey (Round 2) sample demographics

Number of Respondents (N)	2778
Female workers (%)	58
Urban workers (%)	40
Social group of workers (%)	(n=2432)
Scheduled Castes	29
Scheduled Tribes	23
Other Backward Class	31
General	16
Religion of workers (%)	(n=2576)
Hindu	84
Muslim	8
Others	8
Average age (in years)	39
Employment type (%)	(n=2600)
Self-employed (excluding unpaid)	25
Regular Wage Worker	19
Casual wage worker	50
Unpaid workers	5
Educational Status of workers (%)	(n=2598)
Not literate	36
Literate up to primary	16
Middle	16
Secondary	18
Senior secondary	7
Diploma/ Graduate and above	7
Mean monthly HH income (February)	Rs 10,102

Section 4 / India Working Survey

The India Working Survey (IWS) is a random sample survey of two states - Karnataka and Rajasthan. It is a collaborative project between researchers at Azim Premji University, the Indian Institute of Management, Bangalore (IIMB), and the University of Western Australia. It is supported by the Bill and Melinda Gates Foundation (BMGF) and the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) along with IIMB and Azim Premji University. The field survey was conducted by IFMR-LEAD during February and March 2020. The primary objective of this survey was to examine the impact of social identities on labour market outcomes in India. It aimed to capture the extent to which people's job experiences have been affected by their religion/gender/caste status as well as understand the role social networks play in influencing the kind of work people do.

Interviews were conducted till mid-March when the Covid pandemic struck and all field operations had to be stopped midway. In August-September, 2020, the survey resumed in the form of a second (or re-visit) round conducted by a team of supervisors and enumerators based at Azim Premji University. All those respondents who had been interviewed in the first round were approached again with the objective of studying the impact of the lockdown on their livelihoods. Owing to Covid-19 restrictions on movement and keeping in mind social distancing protocols, this revisit round was entirely carried out over the phone. The response rate for the phone survey was around 57 percent. In the phone survey, the respondents were asked about their employment status during two time periods - i) April i.e. during the lockdown, and ii) in the preceding week of the survey. During the earlier field survey, respondents were asked about their employment status in the preceding week, roughly covering the months of February and March, 2020. Combining the information from the phone survey with the data collected during the

field survey allows us to provide context for the impact as well as the subsequent recovery or lack thereof observed among these respondents over the months of August and September by which time most lockdown restrictions had been lifted.

4.1 / Sampling design and descriptive statistics

For the field survey, a stratified multistage design was followed leading to a representative sample at the state level. The sample size of 4,000 households in each state is comparable in number to the sample size in representative surveys such as the PLFS.¹³ There were four stages of selection starting from the district (primary stage unit), followed by the village/block (secondary stage unit), the household (tertiary stage unit) and finally the respondent (ultimate stage unit). The sampling frame used for rural households was the Population Census for Villages, 2011 while for urban households, it was the Urban Frame Survey 2012-17. At the primary stage, one predominantly urban district from each state was purposively chosen. A further 6 out of a total of 30 districts in Karnataka, and 8 out of 33 in Rajasthan were randomly selected.¹⁴ The total number of districts in each state were divided into five strata based on the district's demographic characteristics and a circular systematic sampling method was used to select the required number of districts from within each stratum.

It was decided that from each village or urban block, 25 households would be surveyed. Thus, 160 (4000/25) secondary stage units needed to be selected from each state. Within each state, the split of the secondary stage unit between villages and blocks was based on the share of the rural population in total state population according to the Census 2011. In Karnataka, the split was 98 villages and 62 blocks while in Rajasthan it was 120 villages and 40 blocks. The number of villages/blocks allocated to the selected districts was proportional to the district's share in the state's rural/urban population.

The villages were selected using probability proportional to size (PPS) circular systematic design. The 25 households were selected from each village following a two stage household selection design involving first, the selection of hamlet groups within the village and followed by the selection of households within a hamlet group. The urban areas in a district were divided into two strata and blocks within a stratum were selected according to circular design. 25 households were selected from each urban block.

From each household, two respondents were selected, one male and female respondent, each interviewed by a male and female enumerator separately. The respondents were selected randomly from the list of names in the household roster based on the information provided by any knowledgeable adult member of that household, the only criterion for their selection being that respondents should be 18 years or above and in a position to answer the survey questions.

Field enumerators were given training in both the process of household selection as well as the survey instrument itself. Enumerator training took place in Jaipur and Bengaluru during the month of January, 2020. The instrument was translated in Hindi and Kannada and the survey information was collected on the CAPI. The intended sample size of the first round was roughly around 8,000 respondents from each state.

However, owing to the pandemic we could only reach out to approximately 6,000 respondents by the time field operations were called off. These respondents were approached once again in August and September as part of the second round of phone survey. The phone survey was conducted using the SurveyCTO software's mobile application. For the phone survey, all enumerators were trained via video-conferencing during the second week of August and online groups were created to provide support to enumerators.

As stated above, the response rate of the second round was 57 percent and we managed to re-interview 3324 respondents in the phone survey. Removing those who were part of an experimental round (they were administered a slightly different questionnaire), we were left with a panel of 2987 respondents from both states. This panel consists of those who were interviewed both during the field as well as the phone survey and we have information about these individuals for three time points - before the lockdown (February-March, 2020), during the lockdown, (April, 2020) and post the lockdown (August-September, 2020). The final sample consists of respondents hailing from seven districts in Rajasthan and six districts in Karnataka. This sample is predominantly rural with 83 percent of the respondents belonging to rural areas. This is on account of the fact that our survey had covered more rural areas by the time the pandemic struck.¹⁵

Table 23 presents the rural-urban and gender breakdown for the field and phone rounds.

4.2 / Weighting the sample for comparability with PLFS

Where the IWS sample estimates are compared with PLFS estimates (of WPR, LFPR or UR), we have weighted the IWS sample to make it as similar to the PLFS as possible. To do this, we limited the PLFS sample to only those districts that were also in the IWS sample. We then created weights so as to replicate the distribution of individuals across districts within rural areas in IWS as it is in the PLFS. Similarly, for urban areas, we created weights such that the distribution of households across districts would be the same in IWS as in PLFS. Weights have been used only when comparing with PLFS. For comparisons within the IWS, we do not use any weights. The first quarter of PLFS 2018-19 is chosen for the comparison, keeping seasonality in mind.

Appendix
Table 23:
IWS Round
2, sample
demographics

	Karnataka (Rural)	Rajasthan (Rural)	Overall (Rural)
Number of Respondents (N)	1280	1202	2482
Female (%)	0.54	0.55	0.54
Social groups (%)			
Scheduled Castes	0.28	0.23	0.25
Scheduled Tribes	0.1	0.16	0.13
Other Backward Class	0.51	0.5	0.5
Forward Castes	0.08	0.12	0.1
Did not say	0.03	0	0.01
Religion (%)			
Hindu	0.95	0.98	0.96
Muslim	0.03	0.02	0.02
Others	0.02	0	0.02
Average age (in years)	39	38	39
Education status (in %)			
Not literate	0.3	0.41	0.35
Literate upto primary	0.26	0.21	0.23
Middle to higher secondary	0.39	0.31	0.35
Diploma/graduate and above	0.06	0.07	0.06

The CMIE-CPHS does not use any time-criterion to identify employment status, and instead an individual is categorised as employed if they were working on the day of or prior to the survey, or in general. For PLFS, we closely approximate this definition by identifying an individual as being employed if they worked on the 7th day or the 6th day of the week in which they were surveyed, or if they were in general employed according to their usual principal activity status. In IWS, the daily activity status for a week is not collected, and instead, individuals were asked the number of hours in any economic activity in the last week. To arrive at a definition of employment in IWS that

approximated CMIE-CPHS and PLFS, we defined an individual as employed in IWS if they worked for at least 5 hours in any economic activity in the week of the survey, or if they were employed as per their usual principal activity status.

Endnotes

¹ The CMIE-CPHS also contains an Aspirational India and Consumption Pyramids module with information on debts and assets, and consumption expenditure of households. These modules are not used in the analysis contained in this report.

² For details of construction of weights in CMIE, see Vyas M. 2020. “Weights”. Consumer Pyramid Household Surveys, Centre for Monitoring Indian Economy. Available at <https://consumerpyramidsdx.cmie.com/>

³ Typically, in any given month of a wave, information for up to 40,000 households and 1,80,000 individuals is available. During the month of April 2020, this fell to about 13,000 households and 60,000 individuals. In May 2020, although there was an increase to 15,000 households and about 75,000 individuals, this was still below the usual sample size.

⁴ The monthly weights used by the CMIE for generating monthly labour statistics estimates are not available as part of the CMIE-CPHS offering.

⁵ <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home>

⁶ Description of Indicators section on the CMIE-CPHS website available at <https://consumerpyramidsdx.cmie.com/kommon/bin/sr.php?kall=wkbquest&id=1021>

⁷ <https://www.census.gov/srd/www/x13as/> provides details of other alternate methods.

⁸ Self-employed individuals in rural areas comprised primarily farmers. As we note in Box 4.2, farm earnings are harder to estimate accurately compared to non-farm incomes, perhaps accounting for larger differences between surveys.

⁹ <https://cse.azimpremjiuniversity.edu.in/cse-surveys/covid19-livelihoods-phone-survey/>

¹⁰ <https://www.poverty-action.org/blog/what-do-we-really-know-about-phone-surveying-low-and-middle-income-countries>

¹¹ Round 2 of the survey.

¹² Taking into account only those households reporting a monthly income of at least ₹1,000 in February.

¹³ PLFS (2017-18) sampled 4,152 households in Karnataka and 4,222 in Rajasthan.

¹⁴ Districts selected (Karnataka): Bagalkot, Bengaluru Chikkaballapur, Dakshina Kannada, Davanagere, Mysore and Yadgir. Districts selected (Rajasthan): Barmer, Bikaner, Chittaurgarh, Jaipur, Jodhpur, Karauli, Pali, Pratapgarh and Sawai Madhopur.

¹⁵ The panel covers respondents from 71 villages in Rajasthan and 62 villages in Karnataka.

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Glossary

Usual Principal Status: The usual principal status of a person is that status on which the person spent a relatively long time (major time criterion) during the 365 days preceding the date of survey. An individual is identified as usual principal status employed if they spent the largest share of time in the last 365 days in employment activity.

Subsidiary Status: In addition to their usual principal activity, a person may also have a subsidiary activity status. The subsidiary activity status is determined by the economic activity pursued for 30 days or more during a reference period of 365 days preceding the date of survey.

Usual Principal and Subsidiary Status (UPSS): The UPSS definition of determining a person's economic status combines both the Usual Principal Status and the Subsidiary Status. A person can be classified as unemployed or not in the labourforce under the Usual Principal Status and still be considered employed under the Subsidiary Status. An individual will be identified as UPSS employed if they engaged in any economic activity for the majority of the year or for at least 30 days in the year.

Current Weekly Activity Status (CWS): The current weekly activity status of a person is the activity status for a person during a reference period of 7 days preceding the date of Survey. A person is considered employed under CWS if he/ she worked for at least one hour during the 7 days preceding the date of survey.

Labour Force Participation Rate (LFPR): LFPR is the percentage of persons in the labour force out of the total working age population (individuals aged 15 years and above) i.e. it includes people who were employed and those who were unemployed but were seeking work or available for work during the reference period. LFPR is calculated for both the Usual Status i.e. considering the 365 days period

preceding the survey, and the Current Weekly Status i.e. considering the 7 days period preceding the survey.

Workforce Participation Rate (WPR): WPR is defined as the percentage of employed persons in the total working age population (individuals aged 15 years and above). It is usually considered a better indicator of conditions in the labour market compared to the Unemployment Rate (UR) as UR can also fall without an increase in employment due to individuals dropping out of the labour force. WPR is calculated for both the Usual Status i.e. considering the 365 days period preceding the survey, and the Current Weekly Status i.e. considering the 7 days period preceding the survey.

Unemployment Rate (UR): UR is defined as the percentage of unemployed persons in the labour force (labour force includes those employed and those unemployed but looking for or available for work). UR is calculated for both the Usual Status i.e. considering the 365 days period preceding the survey, and the Current Weekly Status i.e. considering the 7 days period preceding the survey.

CMIE-CPHS definition of employment status: The CMIE-CPHS categorises an individual into (i) employed, (ii) unemployed, willing and looking for a job, (iii) unemployed, willing but not looking for a job, (iv) unemployed, not willing and not looking for a job.

An individual as employed if he/she "is engaged in any economic activity either on the day of the survey or on the day preceding the survey, or is generally regularly engaged in an economic activity". Individuals who were in some form of employment, but were not at work on the day of the survey due to various reasons such as illness, leave or holiday are still considered as employed when there is a reasonable surety of them going back to work.

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Small Size, Big Impact- Employment Dynamics in Microenterprises during Covid-19

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