



A Longitudinal Scoping Study of Migrants across 6 Indian States





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LIST OF ACRONYMS

ADB	Asian Development Bank
APL	Above Poverty Limit
BPL	Below Poverty Limit
CMID	Centre for Migration and Inclusive Development
DBT	Direct benefit transfer
GDP	Gross domestic product
GoI	Government of India
ILO	International Labour Organization
IMF	International Monetary Fund
INR	Indian Rupees
IOM	International Organization for Migration
MGNREGA/S	Mahatma Gandhi National Rural Employment Guarantee Act/Scheme
NGO	Non-governmental organization
ODA	Official development assistance
ORF	Observer Research Foundation
PDS	Public distribution system
PIB	Press Information Bureau
PMGKY	Pradhan Mantri Garib Kalyan Yojana
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Emergency Fund
USD	United States Dollars
WHO	World Health Organization

EXECUTIVE SUMMARY

The COVID-19 pandemic is proving to be humanity's greatest health, financial, social, and cultural challenge in recent history. With a death toll that exceeds 3,311,780 individuals,¹ a financial shock that is forecasted² to send the global economy into its worst recession since World War II, and an unprecedented worsening of inequalities, this pandemic has adversely affected the lives of the entire human population. The differential and disproportional impact of the pandemic, on some sections of the global population, can be attributed to existing differences in the distribution of wealth, access to facilities and the ability to recuperate from unanticipated shocks. One such community – that is witnessing devastating impacts on their health, livelihoods, employment, and education etc. - is that of informal migrant workers in India.

The closure of economic activity due to the pandemic had severe multi-domain impacts on this already vulnerable community. These ranged from sustained losses in employment to increased likelihoods of falling back in poverty and from declining food security to mass migratory movements across the country. The Government of India (GoI) – along with other administrative structures – responded by announcing immediate relief measures for migrants and for the informal enterprises where they were employed. To understand the impact of the first wave of the COVID-19 pandemic on the migrant community and to inform interventions for recovery, UNDP India conducted a longitudinal study covering migrants across six states in India.³

The major findings from this panel of 8,110 migrants, of whom 25 percent are women and a majority lived with more than five other family members during the pandemic, are:

- Around 60 percent of the respondents lost their

jobs due to the first wave of the pandemic. An additional 12 percent respondents reported closure of their businesses. Even in December 2020, nearly half of the respondents remained unemployed.

- The respondents demonstrate low levels of post (nation-wide) lockdown migration with around 58 percent individuals not migrating even after the restrictions on movement were lifted. An uptake of engagement in local economic activities and farming is recorded. Urban centres emerged as preferred destinations of those who migrated post the easing of restrictions.
- The first wave of the pandemic induced a significant loss of income across the six survey states. Forty-four percent of those surveyed reported earning nothing during the nation-wide lockdown (late March to early June 2020). However, a slow but ongoing income recovery is visible post the easing of restrictions in four of the six survey states. The impact of this loss of earning capacity is magnified considering the already low levels of income that migrants across the sample were earning prior to the pandemic.
- The losses in jobs and earnings led individuals to resort to dependence on other sources of financing such as borrowing and past savings. Around 84 percent of the individuals reported needing external financial aid in December 2020.
- Nearly 63 percent of respondents reported receiving rations during the nation-wide lockdown (April-June 2020). This kind of help – through public safety nets – continued post the easing of restrictions with 41 percent respondents receiving rations in December 2020.

¹ As reported by the WHO (World Health Organization) COVID-19 Disease Dashboard on 13 May 2020. Accessed at <https://covid19.who.int/>

² As forecasted by The World Bank. Accessed in January 2021 at <https://www.worldbank.org/en/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii>

³ Data was recorded for three time periods: pre-lockdown (before 23 March 2020), during nation-wide lockdown (between 23 March and 1 June 2020) and post lockdown (after 1 June 2020). Data was collected in two Phases: Phase I in the months of May–June 2020 and for Phase II in December 2020.

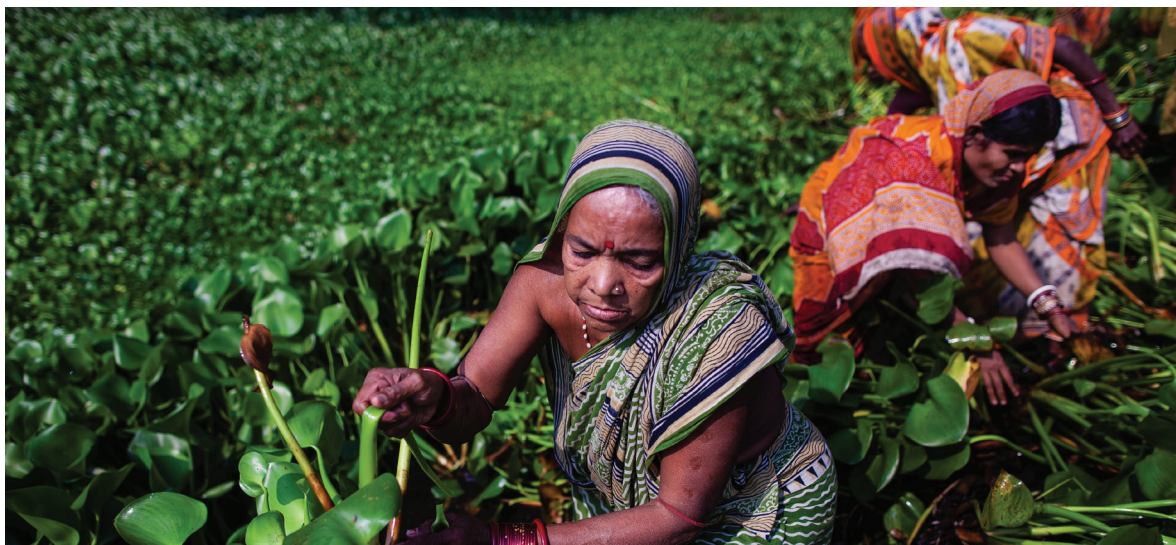
- The identification of women beneficiaries, under schemes such as the Pradhan Mantri Garib Kalyan Yojana (PMGKY), was effective and can be scaled up. Around 54 percent of the surveyed women reported receiving a direct benefit transfer during the nation-wide lockdown.

The impact of the first wave of the pandemic was found to be more severe on women. Around 43 percent of the women surveyed lost their jobs, of which only 12 percent were able to find employment once the restrictions were lifted.⁴ Women lost an average of 78 working days (out of 100), because of the first wave of the pandemic, as compared to 75 days for men. More women—as compared to men—were dependent on a combination of borrowing and savings, reported needing assistance for survival (during and after the national lockdown), reported increases in work hours post the easing of restrictions, and reported increases in the prices of essential commodities. Despite various interventions, results indicate that women remain more vulnerable as compared to men. This underscores the need to look at recovery from a gendered perspective and to put women at the heart of recovery.⁵

Finally, econometric models were developed for select outcome variables to highlight their interactions with different characteristics. Borrowing

behaviour was found to be positively associated with sickness and lower income levels while being negatively associated with the ability to procure ration during and after the nation-wide lockdown. Food security – on the other hand – displayed a changing effect over time with characteristics such as being in rural areas and being a woman. This analysis highlights the simultaneous impact channels for issues such as debt, reductions in meal consumption, deterioration of health, unemployment etc. vis-à-vis the COVID-19 pandemic. Quantifying these intertwined effects can help in the identification and efficient targeting of interventions such as social protection schemes.

The overall findings from this study are suggestive of a continuous and inclusive recovery for migrants across all dimensions. While the immediate impact of the first wave of the pandemic was acute, government and policymakers can secure and expedite the ongoing recovery by a) re-orienting resources to address the immediate needs of the migrant community such as local employment and skilling, b) strengthening existing social protection nets, improving coverage and facilitating easier access to ration and c) initiating long-term frameworks that reform the informal sector, centring it around the holistic wellbeing of workers, particularly migrant workers.



⁴ Sixteen percent had to close their businesses/shops of which only 4 percent were able to start these businesses again.

⁵ UNDP India carried out a separate study to understand the impact of the pandemic on women migrant workers across various themes. The report can be found on the UNDP India website.



CHAPTER 1 INTRODUCTION

COVID-19 was declared as a global pandemic on 11 March 2020⁶. Originating in late December 2019, the virus has now claimed the lives of millions⁷ of individuals globally. It has penetrated countries across the world and has sent global and local economies into a downward spiral. Characterized by a negative projected per capita growth for over 170 countries,⁸ the worst economic fallout since the Great Depression,⁹ the deepest global recession in decades,¹⁰ unparalleled losses in jobs and livelihoods,¹¹ increasing incidences of extreme poverty,¹² overburdening of healthcare systems across the globe, and the largest increase of the out-of-school rates for children in history,¹³ the pandemic has truly become an unprecedented crisis in modern history.

These disruptions and hardships have been – and are being – exacerbated by existing inequalities around the world. Between countries, development levels have had a significant bearing on nations’ abilities to respond to financial and health shocks. Furthermore, the availability and use of technology have also contributed to differential responses across countries,

especially in the developing world, inequalities in socioeconomic characteristics such as class, age, gender, ethnicity, residence status, sex, religion, and income status are having a strong effect on the abilities of different groups of people to cope with the pandemic. One such group, upon whom the impact of the pandemic is disproportionately high, is that of people on the move.

While the proportion of migrant population, when expressed as a share of the global population, has not changed much since the 1970, the absolute number of migrants have increased drastically over the years: from 84 million in 1970 to 173 million in 2000 to 271 million in 2019.¹⁴ The impact of COVID-19 on this large segment of population can be characterized by three simultaneous crises:¹⁵ a) a health crisis compromising access to health due to legal, linguistic, cultural, and other barriers; b) a socioeconomic crisis exacerbating the impact on those who work in the informal sector across the globe with minimal security; and c) a protection crisis curbing the movement of migrants on accounts of border closures, threat of deportation, xenophobia, racism, and stigmatization.

⁶ World Health Organization (WHO). Accessed in January 2021 at <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--11-march-2020>

⁷ Data from the WHO COVID-19 Disease (COVID 19-19) Dashboard, World Health Organization. Accessed in January 2021 at <https://covid19.who.int/>

⁸ IMF, 2020e and IMF 2020a.

⁹ Remarks by the Economic Counsellor and Director of the Research Department, International Monetary Fund. Accessed in January 2021 at <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/>.

¹⁰ Global Outlook report titled “Pandemic, Recession: The Global Economy in Crisis” published by the World Bank in June 2020. Accessed in January 2021 at <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>

¹¹ ILO Monitor: COVID-19 and the world of work (fifth edition). Accessed in January 2021 at https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_749399/lang-en/index.htm

¹² Sumner, Hoy, and Ortiz-Juarez (2020).

¹³ United Nations 2020 Development Perspectives report titled “COVID-19 and Human Development: Assessing the Crisis, Envisioning the Recovery”. Accessed in January 2021 at <http://hdr.undp.org/en/hdp-covid>

¹⁴ World Migration Report 2020 by International Organization of Migration, UN Migration. Accessed in January 2021 at <https://www.iom.int/wmr/>

¹⁵ The Secretary General Policy Brief on COVID 19 and People on the Move, United Nations, June 2020. Accessed in January 2021 at https://www.un.org/sites/un2.un.org/files/sg_policy_brief_on_people_on_the_move.pdf

Remittances, both across and within national boundaries, are a major financial and economic component related to migration. These transfers (globally) were estimated to be around USD 689 billion¹⁶ in 2018 forming a substantial part of the GDPs of many countries (especially developing countries). The World Bank has projected that global remittances will decline sharply¹⁷ by about 20 percent in 2020 alone because of the pandemic. An independent United Nations report¹⁸ also indicates that COVID-19 is projected to result in a decline in remittances of USD 109 billion which is equivalent to 72 per cent of the total official development assistance in 2019. These declines are likely to cause hardships for approximately 800 million people in low and middle-income countries.

India is currently witnessing devastating impacts of the COVID-19 pandemic. The second wave of infections has put immense pressure on its healthcare system. As a result, high number of cases and deaths are being recorded¹⁹. Health is, however, not the only impacted domain by the pandemic. The first wave of infections had led to a 23 percent decline²⁰ in GDP growth of the country. Continuing disturbances in educational attainment²¹, fluctuating employment trends²², and reversal in lifting individuals out of poverty²³ are among some of the effects that have defined the pandemic across the nation.

Migrant populations within the country have been one of the most vulnerable sections in terms of access to health facilities and technology, uncertainty in earning livelihoods, lack of education, and variability in patterns of consumption and borrowing etc. The impact of the pandemic on this community has been disproportionately high. A systematic review of studies assessing this impact is presented later.

Swathes of reports and numerous accounts of migrants moving back to their hometowns (a phenomenon that was referred to as a mass exodus) because of the first wave of the pandemic have been documented across the nation. Dhandekar and Ghai (2020) estimated the number of migrants that travelled back to their homes (during the first wave) being between 120 and 140 million. This reverse migration is also associated with health concerns and with disruptions in livelihoods. Mukra, Krishnan and Kanchan (2020) highlighted that many migrants including “infants, pregnant women and the elderly” walked thousands of kilometres barefoot without food and money to reach their villages. Many of these migrants were left stranded midway, facing starvation, misery, and a few even died before they could reach their destination.

¹⁶ World Migration Report 2020 by International Organization of Migration, UN Migration. Accessed in January 2021 at <https://www.iom.int/wmr/>

¹⁷ World Bank Press Release, April 22, 2020. This decline is noted to be the sharpest of its kind in recent history. Accessed in January 2021 at <https://www.worldbank.org/en/news/press-release/2020/04/22/world-bank-predicts-sharpest-decline-of-remittances-in-recent-history>

¹⁸ The Secretary General Policy Brief on COVID-19 and People on the Move, United Nations, June 2020. Accessed January 2021 at https://www.un.org/sites/un2.un.org/files/sg_policy_brief_on_people_on_the_move.pdf

¹⁹ See article by BBC News. Accessed May 2021 at <https://www.bbc.com/news/world-asia-india-56826645>

²⁰ See press note by PIB (Press Information Bureau) dated August 31, 2020. Accessed May 2021 at https://static.pib.gov.in/WriteReadData/userfiles/PRESS_NOTE-Q1_2020-21.pdf

²¹ See press release by UNICEF dated March 10, 2021. Accessed May 2021 at <https://www.unicef.org/india/press-releases/covid-19-schools-more-168-million-children-globally-have-been-completely-closed>

²² See report by ILO and ADB titled ‘Tackling the COVID-19 youth employment crisis in Asia and the Pacific’. Accessed May 2021 at https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_753369.pdf.

Also see article by Financial Express dated April 2021. Accessed May 2021 at <https://www.financialexpress.com/jobs/covid-19-impact-coronavirus-led-to-a-volatile-employment-trend-throughout-2020/2224185/>

²³ See report by Pew Research Centre dated March 18, 2021. Accessed May 2021 at <https://www.pewresearch.org/fact-tank/2021/03/18/in-the-pandemic-indias-middle-class-shrinks-and-poverty-spreads-while-china-sees-smaller-changes/>



According to the World Migration Report (2020), India was noted to be the top remittance-receiving country with an in-coming amount of USD 78.6 billion. However, this is estimated to decrease sharply owing to return of international migrants to India and of internal migrants to their homes which has left them jobless.²⁴ This reduction in household income, coupled with lost productivity and time has had – and continues to have – significant impacts on the physical, economic, social, and mental welfare of migrants. This study explores the multi-domain impact of the first wave of the COVID-19 pandemic on migrant populations in India. It also aims to assist the design and implementation of programmatic interventions to arrest this and future impacts.

The report is structured as follows: Chapter 1 introduced the various facets of the COVID-19 pandemic – both globally and in India. Chapter 2 builds on this to present a

literature review of existing assessments that have quantified the impact of the pandemic on migrant populations in India. Chapter 3 presents the results from a longitudinal scoping study conducted by UNDP India. It highlights the baseline findings along with evolving dynamics by various themes: sampling and demographic (3.1), migration (3.2), employment and livelihoods (3.3), financial patterns and social protection (3.4), health and food consumption (3.5) and work condition and skilling (3.6). Differentials associated with gender and state are highlighted and discussed across the chapters. A comprehensive summary of findings is then presented in Chapter 4. Chapter 5 presents results from an econometric exercise linking individual characteristics to select strategic outcomes. Policy aspects and concluding remarks are presented in Chapter 6. The appendix hosts supplementary and additional results along with other study details.

²⁴ Bhagat et al., April 2020. Accessed January 2021.

CHAPTER 2 LITERATURE

Migrant workers and their contributions to various aspects of (local and national) development remain largely undocumented owing to the informal nature of their work. It is estimated that India's 2.87 trillion-dollar economy is fuelled by around 518 million workers; 20 percent of whom are migrants working mostly by the informal sector. In a job setting where contracts are unofficial and unprotected, tracing and tracking migrants has been a long-standing challenge (especially in India). The absence of quality data, which has adverse impacts on resource allocation and policy development²⁵ for the welfare of migrant workers, has become a key issue during the pandemic.

To overcome this data deficiency and to act as intermittent instruments, various state governments and non-governmental organizations (NGOs) initiated rapid assessments of migrant populations at the onset of the national lockdown in March 2020. These exercises were largely aimed at capturing the hardships of migrant workers (across domains such as health, consumption, social protection, livelihoods, employment, purchasing power, movement patterns, borrowing practices, etc.) and to inform various levels of interventions in providing immediate relief. Some studies were also directed towards outlining a roadmap for a long-term recovery of livelihoods. Select publicly available assessments have been reviewed below to set the context for this study.

These assessments can be classified into two broad categories: short-term cross-sectional assessments and medium-term panel assessments. While the former includes surveys capturing one-time short-term impacts, the latter

tracks migrants across multiple time periods to capture their evolving dynamics. It is important to note that each of these exercises are different with respect to sampling methodology, sample sizes, timings of data collection, construction of questionnaires, definition of objectives and level of analysis. The aim, therefore, is not to compare them, but to provide an overall view of the state of migrants vis-à-vis the first wave of the COVID-19 pandemic in India.

2.1: Cross-sectional assessments

2.1.1. Azim Premji University, in collaboration with 10 civil society organizations, conducted a telephonic survey of 5,000 respondents between 13 April and 20 May 2020. The findings highlighted that more than 8 in 10 migrants had lost their jobs during the nation-wide lockdown, 83 percent of urban migrants reported consuming less food as compared to pre-lockdown, and that 7 in 10 migrants did not have enough money for a week's worth of essentials. Eighty-eight percent of migrants reported being unable to pay the next month's rent and more than a third (36 percent) of the respondents reported taking loans to cover their expenses during the nation-wide lockdown.²⁶

2.1.2. In a telephonic survey (carried out between 27–29 March 2020) of more than 3,000 migrants from north and central India, the NGO Jan Sahas highlighted that most migrants in their sample were daily wage earners and that at the time of nation-wide lockdown: a) 42 percent were left with no rations, b) 33 percent had no access to food, water and money, and c) 94 percent did not have worker identity cards,²⁷ which would allow them access to basic supplies²⁸.

²⁵ See article by The Wire dated 05 August 2020. Accessed January 2021 at <https://thewire.in/labour/india-migrant-workers-covid-19-crisis-socio-economic-status>

²⁶ See report by titled "COVID-19 Livelihoods Survey" (2020). Accessed January 2021 at https://cse.azimpremjiuniversity.edu.in/wp-content/uploads/2020/06/Compilation-of-findings-APU-COVID-19-Livelihoods-Survey_Final.pdf

²⁷ The sample for this study comprised only of migrant construction workers. The worker identity cards refer to 'Building and Construction' Workers (BOCW) identity cards which, according to the report, are essential to access benefits from the Rs. 32,000 crores state funds.

²⁸ See report titled "Voices of the Invisible Citizens" (2020). Accessed January 2021 at <https://drive.google.com/file/d/1StGUyB2SsTYSbmYBL3-hwxjvVMNLSnlB/view>



Figure 1 Summary of cross-sectional surveys on migrants in India vis-à-vis first wave of COVID-19



2.1.3. Das and Farooque carried out a telephonic survey²⁹ of 310 migrant families in June 2020, covering 1,586 individuals. Their findings indicate that over 80 percent of families reported having zero income between April and May 2020, while 87 percent of respondents reported that their future income in the next six months was “extremely uncertain.” More than 70 percent of families did not receive any money in their Jan Dhan accounts, and 90 percent of households said they had not received any free gas cylinders even after three months of the announcement under the PMGKY.

2.1.4. According to another survey of 142 migrants from Goa, conducted by Tandem Research³⁰ (from 19–29 May 2020), 90 percent respondents did not have access to the public distribution system (PDS) due to them not being registered in that state. Seventy-three percent of the respondents did not receive any help from their employers, approximately 90 percent individuals stopped receiving any wages, and most respondents did not have any information about any schemes that were announced for their protection by the government.

2.1.5. Bhopal-based NGO Vikas Samvad interviewed 30 migrants from the state of Madhya Pradesh³¹ and found that more than 80 percent of returnee migrants reported being caught in a web of debt, unemployment, and hunger. It was also noted that the wages of nearly 95 percent of the migrant laborers were less than INR 500 a day and that the sudden nation-wide lockdown left 47 percent of laborers either fully or partially unpaid.

2.2: Panel surveys

2.2.1. Action Aid Association conducted a panel study³² between 23 August and 8 September 2020. In the second phase of the survey, they revisited 4,504 respondents (of the 11,530 workers that they contacted in Phase 1). The report highlights that 48 percent of the migrants remained unemployed even after the nation-wide lockdown was lifted. Amongst those employed, 42 percent reported being only partially employed. Food sufficiency³³, the report indicates, had gone up from 18.5 percent during the nation-wide lockdown to 32.1 percent post lockdown. Savings sufficiency³⁴ also moved from 5.3 percent during the nation-wide lockdown to 12.2 percent after it.

The report also states that access to food grains, received through the PDS, had increased with 78.9 percent of respondents reported having received the stipulated food grains during the unlock phase as compared to 45.3 percent during the nation-wide lockdown. Within the wages/income domain, almost 24 percent of respondents had zero income, 19 percent of workers had wages less than INR 2,000 per month, 30 percent received wages between INR 2,000 and INR 5,000 per month, and about 19 percent received wages between INR 5,000 and INR 10,000 per month during the study period. Moreover, over 64 percent of the respondents asserted that they had not received the wages which were due to them at the time of the nation-wide lockdown.

²⁹ See article at News Click dated 30 June 2020. Accessed January 2021 at <https://www.newsclick.in/Bihar-Migrant-Workers-Delhi-NCR-COVID-19-Lockdown-Zero-Income-Unemployment>

³⁰ Mawii and Eckstein, June 2020.

³¹ See article at News Click dated 27 May 2020. Accessed January 2021 at <https://www.newsclick.in/Madhya-Pradesh-Survey-54%25-Migrant-Labourers-Don%27t-Want-to-Go-Back-COVID-19-Lockdown>

³² See report titled “Workers in the time of COVID-19” (2020). Accessed January 2021 at https://www.actionaidindia.org/wp-content/uploads/2020/10/Workers-in-the-time-of-Covid-19_Survey-Round-II-V8-29-Oct-20.pdf

³³ Food sufficiency is “a subjective estimate based on what each respondent reported as ‘sufficient’ for their consumption”.

³⁴ Savings sufficiency is defined similarly to food sufficiency by the report.



2.2.2. Aga Khan Foundation, in collaboration with Action for Social Advancement and other organizations, conducted a study³⁵ in which 4,835 households across 48 districts in 11 states were surveyed for the second time. They found that only 29 percent of migrants who had left for villages during the nation-wide lockdown are now back in cities. The report also highlights that more than 80 percent of returnee migrants have engaged primarily in manual labour, while more

than one in four individuals is still looking for work in their respective villages. The report also highlighted a “marked improvement” in food intake post lockdown when compared to the nation-wide lockdown period. In terms of borrowing, the study reports that nearly 10 percent of households had borrowed money from their extended families, while 7 percent had borrowed from money lenders.

Figure 2 Summary of panel surveys on migrants in India vis-à-vis first wave of COVID-19

Action Aid Association
23 August To 8
September 2020
4,505 individuals
revisited

- Food sufficiency increased from 18.47 percent during nation-wide lockdown to 32.06 percent post lockdown,
- Savings sufficiency increased to 12.22 percent from during the unlock phase from 5.29 percent during the lockdown phase,
- Access to food grains, received through the PDS, increased with 78.94 percent of respondents reporting having received the stipulated food grains during the unlock phase as compared to 45.3 percent during the lockdown.

Aga Khan Foundation
24 June to 8 July 2020
4,835 households
across 48 districts in 11
states revisited

- 29 percent of migrants who had left for villages during the nation-wide lockdown are now back in cities, and 45 percent of those remaining plan to return soon,
- More than 80 percent of returnee migrants have engaged primarily in manual labour,
- More than 1 in 4 individuals are still looking for work in their villages,
- A “marked improvement” in food intake was noted in the post-lockdown period as compared to the nation-wide lockdown period.

2.2.3. Gram Vikas, in association with the Centre for Migration and Inclusive Development (CMID), carried out two early surveys: the first one in February 2020 and a follow-up survey from 26 March to 6 April 2020. These formed a representative random sample of 95 migrants from 440 households across 22 villages in the

Thuamul Rampur Community Development Block. Their findings indicate that 10 percent of the sample did not have access to any food, only 9 percent knew about the symptoms of COVID-19, and only 12.5 percent had any knowledge about preventive measures³⁶.

³⁵ See article by Financial Express dated 03 August 2020. Accessed January 2021 at <https://www.financialexpress.com/industry/two-thirds-of-migrants-have-returned-to-cities-or-wish-to-do-so-survey/2043586/>

³⁶ See report titled “Impact of COVID-19 Lockdown on Migrant Labourers from Kalahandi, Odisha” (2020). Accessed January 2021 at https://www.gramvikas.org/wp-content/uploads/2020/04/Impact-of-COVID-19-Lockdown-on-Migrant-Labourers-from-Kalahandi-Odisha-Gram-Vikas-CMID-Web.pdf?utm_source=newsletter&utm_medium=email&utm_campaign=gotta_keep_on_movin_april_2020_migrants_in_lockdown_imn_initiatives&utm_term=2020-04-13.

Overall, the existing assessments visibly quantify the severity of the impact of the first wave of the pandemic on the migrant population in India (in the short term). Cross-sectional surveys highlight the depth of immediate losses in employment, decrease in food consumption and increased borrowing behaviour. Panel assessments, on the other hand, hint of a slow but ongoing recovery in terms of migration, re-employment, increasing

meal intake and stabilizing expenditure patterns.

With this context in place, the report now presents results from a longitudinal scoping study of migrant workers across six Indian states conducted by UNDP India. Survey attributes are described first. Findings are then presented and discussed by thematic groupings.



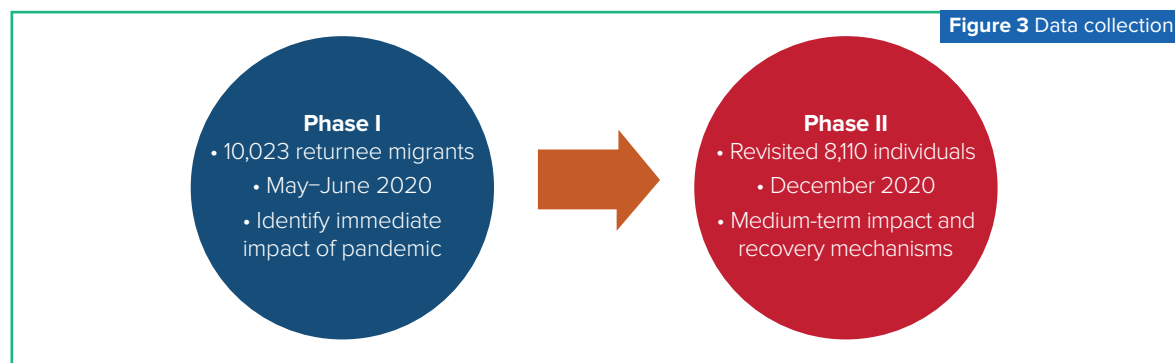
CHAPTER 3 UNDP'S SOCIO-ECONOMIC ANALYSIS OF MIGRANT WORKERS

UNDP India undertook a longitudinal socioeconomic study aimed at analysing the situation of migrant workers along various dimensions such as migration patterns, employment and livelihoods, financial patterns and social protection, health and consumption patterns and work condition and skilling with respect to the first wave of the COVID-19 pandemic in India.

Data collection was carried out in two phases: the first questionnaire (for which data was collected in May and June 2020) captured the immediate impact of the pandemic on the migrant population. The sample for this phase was collected with the following inclusion criterion: the individual had to be a migrant (inter- or intrastate) in the pre-lockdown

period (before 23 March) and had to have returned to his/her respective hometown during the nationwide lockdown (between 23 March and 1 June 2020).

The second questionnaire was developed to investigate the condition of the same set of migrants in the medium term. This included follow-ups on certain themes from the first questionnaire as well as capturing information about new themes. This was administered in December 2020. All data capturing exercises were carried out by independent agencies over telecommunication ensuring minimal physical contact.



Findings from both the questionnaires are presented thematically. Chapter 3.1 describes the sampling technique, highlights the geographical spread of the sample, and presents demographic information. Chapter 3.2 focuses on exploring trends and patterns of migration. The impact of the first wave of the COVID-19 pandemic on employment, livelihoods and income is presented in Chapter 3.3. This is followed by

Chapter 3.4 which highlights the evolving dynamics of financial patterns and various aspects related to social protection. Indicators on health and food consumption are analyzed in Chapter 3.5. Finally, Chapter 3.6 presents some findings related to work condition, satisfaction, and skilling. A comprehensive summary of all the findings is presented in Chapter 4.

Note: Findings presented here-on correspond to three time periods: pre-pandemic³⁷ (which refers to time before the announcement of the nation-wide lockdown, i.e., before 23 March 2020); during nation-wide restrictions (which refers to the time during the nation-wide lockdown period, i.e., between 23 March and 1 June 2020) and post easing of nation-wide restrictions (which refers to

the time after the nation-wide lockdown was lifted, i.e., after 1 June 2020). Phase I (number of respondents = 10,023) and Phase II (n = 8,110) results are presented and discussed simultaneously for each theme. Appropriate panel comparisons³⁸ are highlighted within text in addition to gender³⁹ and state differentials. Some additional results can be found in the appendix.

3.1: Sampling and demographic characteristics

The top six migrant sending states of India (Assam, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, and Uttar Pradesh) were selected as the focus of this study. Based on the out-migration patterns according to the 2011 Census,⁴⁰ these states sent out the most migrants to other places. It follows then

that these states were more likely to receive large number of returnee migrants due to the first wave of the COVID-19 pandemic after the announcement of the nation-wide lockdown (in late March – April 2020).



³⁷ Data was captured retrospectively for this time frame.

³⁸ Panel comparisons are made on the same set of migrants only. In other words, the initial sample of 10,023 returnee migrants is reduced to include only the 8,110 individuals who were interviewed for Phase II. This reduction allows a comparative interpretation of the findings.

³⁹ UNDP India also carried out a study on the impact of the pandemic on women migrants across various themes. The report can be found on the UNDP India website.

⁴⁰ See migration tables from Census 2011. Accessed January 2021 at <https://censusindia.gov.in/2011census/migration.html>



Phase I questionnaire was administered to 10,023 returnee migrants across 161 districts in these six states. Phase II questionnaire, which was designed to reach out to the same set of

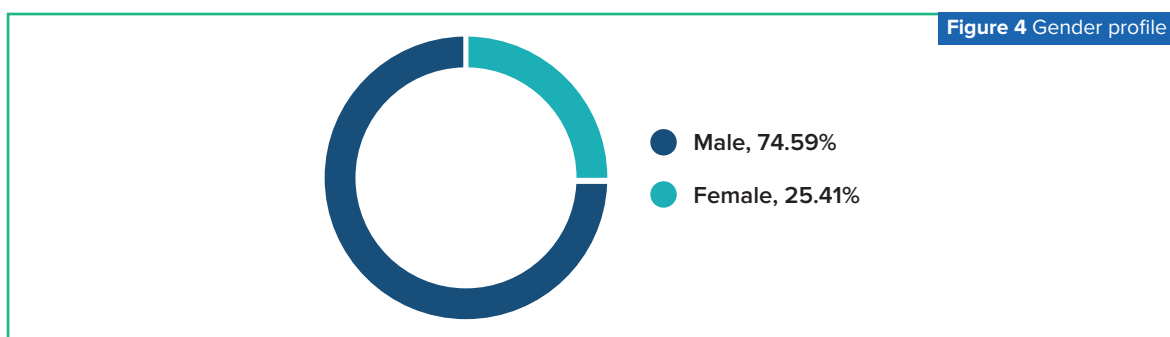
migrants, collected data for 8,110 of these individuals.⁴¹ Table 1 highlights the state wise frequency of respondents along with their geographical spread.⁴²

Table 1 Sample coverage for Phase I and Phase II					
Survey State	Districts	Phase 1		Phase 2	
		Frequency	Percent	Frequency	Percent
Assam	30	1501	14.98	1108	13.66
Madhya Pradesh	9	2000	19.95	1546	19.06
Odisha	5	1500	14.97	1379	17.00
Jharkhand	24	1500	14.97	1220	15.04
Maharashtra	21	1510	15.07	1199	14.78
Uttar Pradesh	72	2012	20.07	1658	20.44
Total	161	10023	100	8110	100

Source: Authors' calculations based on survey data

The gender composition of the sample respondents remained similar across the two phases. As figure 4 highlights, males constitute 75 percent of the sample while only 1 in 4 survey respondents is a woman. However, a closer look at the state-wise differences in gender composition⁴³ reveals that this disparity is not

evenly distributed among all the survey states. While a greater proportion of migrant men are represented in samples from states such as Assam, Jharkhand and Uttar Pradesh, data collected from states such as Madhya Pradesh and Maharashtra is comprised of proportionally greater migrant women.



Source: Authors' calculations based on survey data

The age composition of the sample respondents highlights that most of the sample lies between the ages of 15 and 30 years. Figure 5 indicates

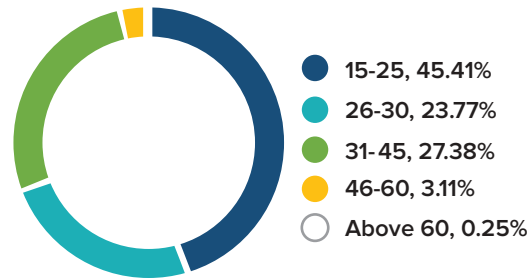
proportions of individuals falling under each age bracket. This composition is similar across the two phases of data collection.

⁴¹ Attrition rate between the two phases was 20 percent.

⁴² At the district level.

⁴³ A chart illustrating these state-wise differences in gender can be found in the appendix.

Figure 5 Age profile

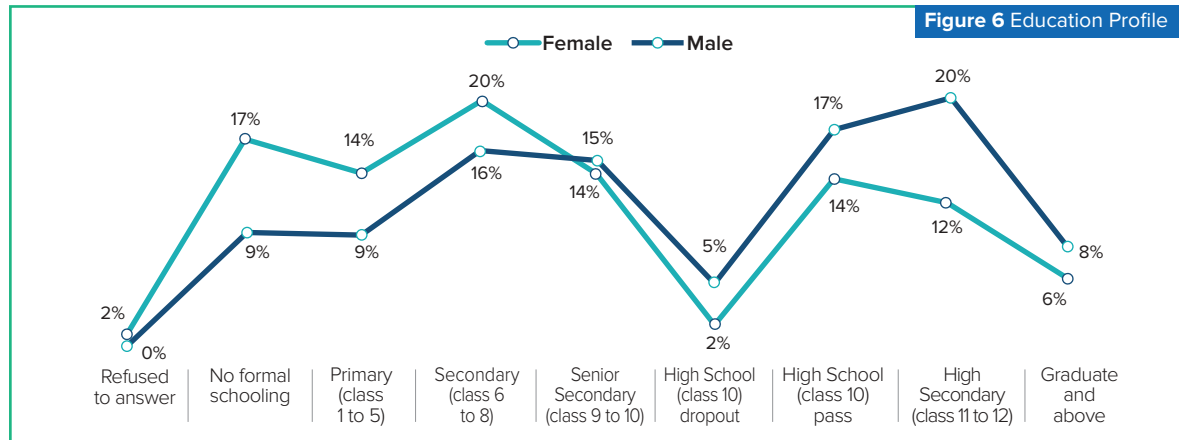


Source: Authors' calculations based on survey data

In terms of education, 11 percent of the individuals⁴⁴ surveyed reported having no formal education. On the other hand, 7.5 percent report having graduated from a college or holding further degrees. Other educational brackets such as secondary (classes 6–8), senior secondary

(classes 9–10) and higher secondary (classes 11–12) are also represented in the sample. A higher proportion of women are concentrated lower education levels as compared to men. This trend is reversed for higher levels of education as can be observed in figure 6.

Figure 6 Education Profile



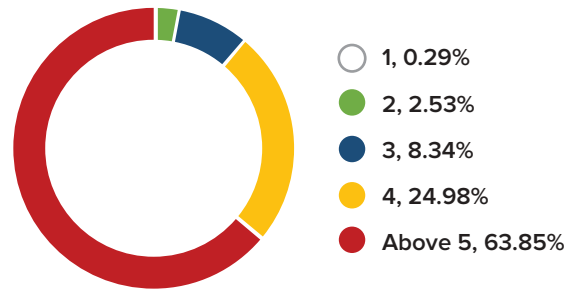
Source: Authors' calculations based on survey data

The size of the household, as denoted by the number of people living under the same roof during nation-wide lockdown, was captured during Phase I. This indicator is a proxy for household dependency which informs about the number of earning members of the household and the number of non-earning dependants on them. Results highlight that more than half of the sample respondents (who were working migrants before the first wave of the COVID-19 pandemic) reported living with five other members under the same roof during the nation-wide lockdown. This finding, as represented in figure 7, carries considerable concern given two factors.

First, medical evidence establishes that a higher population density is linked positively with the increased risk of spread of COVID-19. Migrants in the sample, who are already among the most vulnerable communities vis-à-vis the pandemic, face additional medical risk owing to this higher population density. Second, a higher dependency has been noted to have impacts on the welfare and development of non-earners in the family (especially children) who rely heavily on remittances. Supporting a higher number of dependents – that too during a pandemic – emerges as a worrying theme for the collected sample of migrant workers.

⁴⁴ Data on education was captured only during phase II. All percentages are therefore out of a total sample of 8,110 individuals.

Figure 7 Household dependency during the first wave of the COVID-19 pandemic



Source: Authors' calculations based on survey data

Key takeaways: Data is collected from six India states covering around 160 districts with lower representation from migrant women. The age composition of the sample is concentrated among the ages 15-30 with educational representation from all levels (including no formal education). Finally, the sample respondents display a high level of household dependency which has significant impacts on migrants and their families vis-à-vis health and consumption.

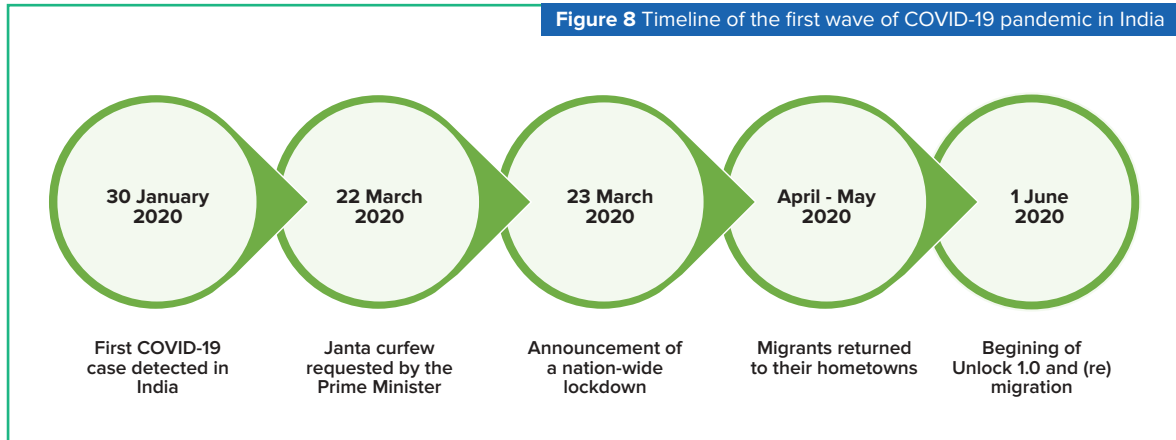
3.2: Migration characteristics

The onset of the first wave of the COVID-19 pandemic prompted a nation-wide lockdown in late March 2020. This led to the closure of economic activities and forced migrants to return to their hometowns. The lifting of restrictions (in phases) from June 2020 onwards provided the migrants with a choice to migrate once again or to remain at their

native places. This section explores the various trends and patterns of migration (inter- and intra-state) along with the evolving urban-rural composition of the sample respondents arising from these events. Figure 8 presents a timeline of the first wave of COVID-19 in India to provide context for the findings of this section.



Figure 8 Timeline of the first wave of COVID-19 pandemic in India



The sample is, as mentioned earlier, drawn from 6 outward migration states of India. Owing to the inclusion criteria for individuals for this study⁴⁵, all 10,023 individuals who were interviewed in Phase I were returnee migrants during the nation-wide lockdown. This included both inter-state (those who travelled from other states back to their respective home states) and intra-state (those who travelled within their home state boundaries back to their respective hometowns) migrants.

Maharashtra, Gujarat, and Tamil Nadu record

the highest proportion of outgoing migrants during the nation-wide lockdown. Table 2 presents a matrix of returnee migration (during the nation-wide lockdown) which records patterns of migration across all survey states. For each survey state (represented by the first entry in each row), the table lists the top five states from which migrants travelled back to the source state. For example, of all the migrants that returned to Assam during the nation-wide lockdown (row 1), 27.8 percent arrived from Tamil Nadu.

Table 2 Matrix of migration during nation-wide lockdown

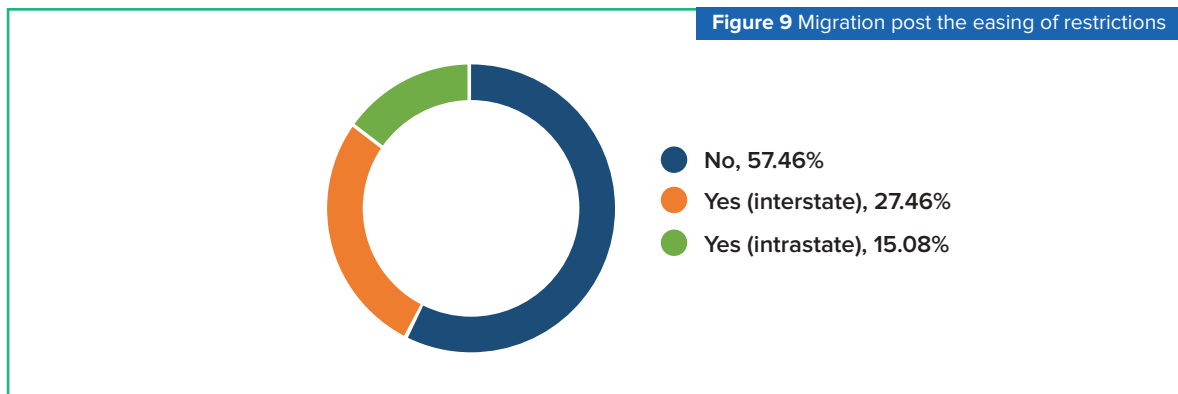
Survey state	Top 5 source states (n = 10,023)				
Assam	Tamil Nadu (27.8)	Karnataka (17.1)	Gujarat (14.1)	West Bengal (7.2)	Maharashtra (5.7)
Jharkhand	Maharashtra (22.7)	Tamil Nadu (12.5)	Karnataka (9.3)	Delhi (6.1)	Haryana (5.5)
Madhya Pradesh	Gujarat (31.6)	Madhya Pradesh (31.3)	Maharashtra (11.5)	Rajasthan (7)	Tamil Nadu (5.7)
Maharashtra	Maharashtra (97.7)				
Odisha	Andhra Pradesh (29.7)	Tamil Nadu (23.2)	Telangana (20.8)	Maharashtra (7.2)	Gujarat (6.9)
Uttar Pradesh	Maharashtra (16.2)	Delhi (16)	Gujarat (15.1)	Uttar Pradesh (14.8)	Haryana (9.6)

Source: Authors' calculations based on survey data

⁴⁵ The inclusion criteria were that the individual had to be a migrant (inter- or intrastate) in the pre-lockdown period (before 23 March) and had returned to his/her respective hometown during the nation-wide lockdown phase (between 23 March and 1 June 2020).

It can be observed (from table 2) that most respondents from the five survey state (except for Maharashtra) report crossing state boundaries to return to their hometowns. This implies a strong inter-state migration concentration in the pre-pandemic period (before March 2020) in which migrants went to other states looking for work (among other reasons). Sample respondents from Maharashtra, on the other hand, have mostly travelled back to their hometowns within the state's boundaries during the nation-wide lockdown.

The lifting of restrictions followed a phased approach from June 2020 onwards. While the announcement of the nation-wide lockdown prompted the return of migrants to their hometowns, the lifting of restriction provided migrants with a choice: to migrate again or to stay back in their respective hometowns. Data on this choice was collected in Phase II and results (as represented in figure 9; n = 8,110) indicate that only around 43 percent of the sample respondents decided to migrate post the lifting of restrictions.



Source: Authors' calculations based on survey data

A state wise breakdown of figure 9 (see appendix) reveals significant differences among survey states. For example, after the restrictions were lifted in June 2020, 53 percent sample respondents from Maharashtra migrated to other places within Maharashtra (intra-state migration) while 4 percent sample respondents crossed state boundaries (inter-state migration). On the other hand, only 8 percent individuals from Jharkhand migrated intra-state while 53 percent migrated inter-state. Respondents from the remaining states such as Assam, Madhya Pradesh, Odisha, and Uttar Pradesh also display varying levels of intra- and inter-state migration post the easing of restrictions.

On the gender front, the overall proportion of women migrating post the easing of restrictions is

similar to that of men. However, the proportion of women migrating intra-state (18.2 percent) is higher than that of men (14 percent). This result is reversed in case of inter-state migration post the easing of restriction with a lower proportion of women (24 percent) as compared to men (28.7 percent).

Table 3, similar to table 2, presents the matrix of migration post the easing of restrictions. The number of respondents has now decreased from 10,023 to 8,110. Furthermore, the interpretation of proportions (in parenthesis) is now reversed. For example, of all those that migrated from Assam post the easing of restrictions, 28 percent moved to other districts in Assam and 20 percent moved to Gujarat etc.

Table 3 Matrix of migration post easing of restrictions

Survey state	Top 5 source states (n = 8,110)				
Assam	Assam (28.3)	Gujarat (20.2)	Tamil Nadu (15.3)	Karnataka (8.4)	Maharashtra (4.6)
Jharkhand	Jharkhand (67.7)	Maharashtra (8.5)	Gujarat (3.9)	Tamil Nadu (3)	Delhi (2.6)
Madhya Pradesh	Madhya Pradesh (91.78)			Delhi (5.1)	Maharashtra (2.3)
Maharashtra	Maharashtra (97.5)				
Odisha	Odisha (80)	Tamil Nadu (5.1)	Andhra Pradesh (4.4)	Maharashtra (3.6)	Telangana (2)
Uttar Pradesh	Uttar Pradesh (40)	Delhi (31)	Gujarat (10.8)	Rajasthan (4.2)	Maharashtra (3.8)

Source: Authors' calculations based on survey data

The trend in Maharashtra (in table 3 as compared to table 2) remains the same, i.e., respondents from Maharashtra report high level of intra-state migration in both returnee migration during the nation-wide lockdown (returning home) and (re)migration after the easing of restrictions (departing from home).

The key difference between patterns of migration during the nation-wide lockdown (late March – April 2020) and that post the easing of those restrictions (June 2020 onwards) is that while inter-state migration was dominant in the former, intra-state migration is being practised in the latter. This can be observed by noting that the top destination states post the easing of nation-wide restrictions are the survey states themselves (i.e., Assam – Assam, Jharkhand – Jharkhand etc.) which is in contrast to the results from table 2.

More broadly, this highlights a shift in the patterns of migration from across state boundaries to within state boundaries indicating, in part, higher uncertainty regarding traveling long distances across state boundaries without prospects of stable and sufficient employment. In fact, as will

be expanded on in the next section, around 16.7 percent of inter-state migrants and 14.5 percent of intra-state migrants who migrated post the easing of restriction remain unemployed in December 2020.

On the other end of the choice in migrating post the easing of restrictions, 57 percent of individuals did not migrate from their hometowns (see figure 9 above). This result is significant considering that all those who did not migrate post the easing of restrictions were migrants before the pandemic.

Phase II collected data on this choice to explore the underlying reasons. Table 4 highlights these while providing a gender breakdown of the results. Data on this indicator was collected only from the intersection of those that did not migrate again (n = 4,660) and those that were not willing to migrate again in the coming months (n = 3,383). Around 30 percent did not migrate since they did not want to leave hometown, 29 percent had engaged in farm related activities and 24 percent reported that they were able to get a local job.



Table 4 Reasons for not migrating after easing of restrictions

Reason for not migrating post the easing of restrictions	Overall (percent)	Female (percent)	Male (percent)
Able to get a local job (including MGNREGA)	23.77	6.79	30.61
Started business/shop in hometown	5.08	5.66	4.85
Engaged in farm-related activities in hometown	29.2	43.21	23.56
Inadequate job (wage) opportunities outside	7.69	11.63	6.10
Do not want to leave hometown	28.91	28.81	28.95

Source: Authors' calculations based on survey data

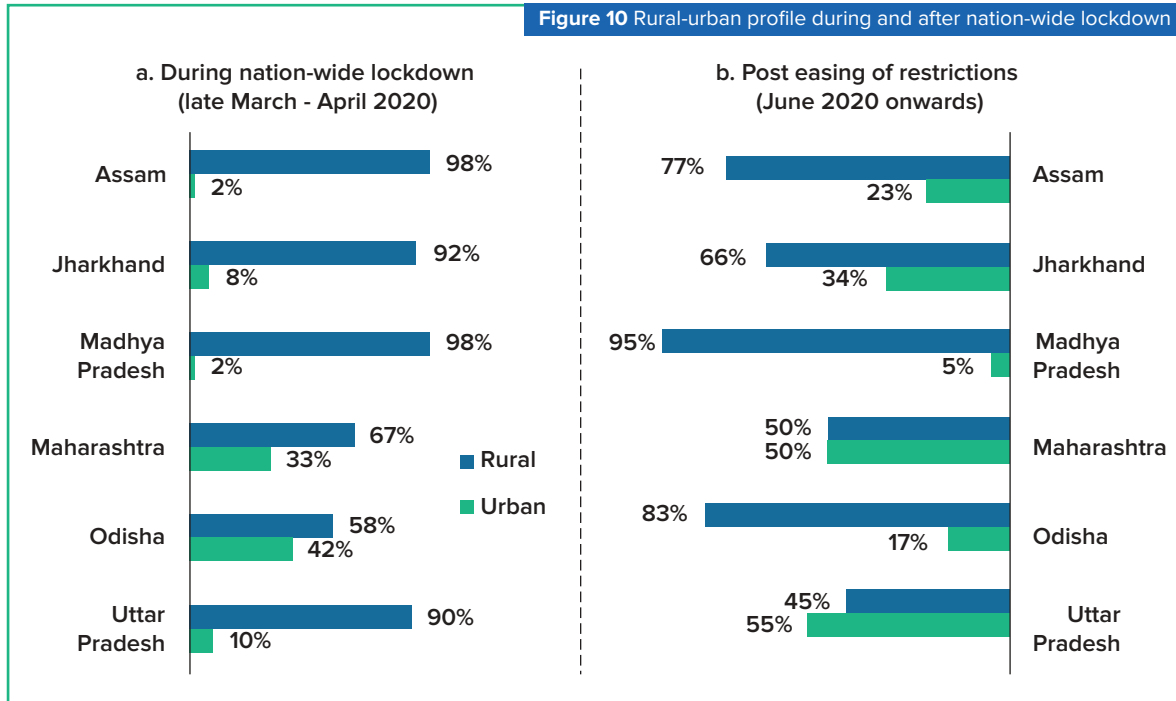
Table 4 highlights two important gender differentials. First, a lower proportion of women who stayed back post the easing of restrictions were able to get local jobs as compared to men who stayed back (6.8% v 30.6%). On the other hand, the proportion of women who engaged in farm related activities is twice that of men (43.2% v 23.6%). Second, a higher proportion of women reported that the opportunities outside were inadequate and that this prevented them from migration post the easing of restrictions. More generally, these findings highlight that women have transitioned – as a result of the first wave of the COVID-19 pandemic – from being employed as migrants to engaging in farm related activities in their respective hometowns partly due to unavailability of jobs outside their respective hometowns.

A final characteristic under the migration banner is that of the rural-urban divide. Two priors on these characteristics have been well documented: a) most migrants come from a rural

background and b) they often travel to urban centres to look for higher-paying jobs. Therefore, the expectation from the sample respondents would be to see a rise in the proportion of migrants reporting moving back to rural areas due to the nation-wide lockdown. Furthermore, a reversal of this (a shift to urban areas) for those that chose to migrate again post the easing of restrictions is also expected. Results on this front from the sample respondents are in line with these priors:

Around 85 percent of sample respondents reported that they moved back to rural areas (their hometowns) due to the nation-wide lockdown. This finding is consistent across survey states. For example, the rural composition of the sample respondents from states such as Assam, Jharkhand, Madhya Pradesh, and Uttar Pradesh during the nation-wide lockdown is above 90 percent. Figure 10 (a) highlights this result.

Figure 10 Rural-urban profile during and after nation-wide lockdown



Source: Authors' calculations based on survey data

Figure 10 (b) highlights similar results for the period after the easing of restrictions. States such as Assam and Jharkhand see a reduction in their respective rural proportion but to a limited extent. Most respondents from these states reported residing in rural areas post the easing of restrictions. Respondents from Madhya Pradesh do not display a stark change in rural proportions across the two time periods while the rural and urban proportion in Maharashtra become equal post the easing of restrictions.

The patterns of rural-urban composition of Odisha and Uttar Pradesh display two diametric shifts. A sharp increase of the rural proportion can be noted in Odisha between the two periods: an increase from 58 percent to 83 percent. On the other hand, the same proportion decreases sharply in Uttar Pradesh (from 90 percent to 45 percent) resulting in a higher urban proportion. These shifts highlight the differences in push and pull factors across states vis-a-vis migration.

Key takeaways: The entire sample is that of returnee migrants at the time of the nation-wide lockdown with migrants traveling from across state boundaries to their respective hometowns. Post the easing of restrictions, less than half of the sample respondents chose to migrate again. Reasons for not migrating include being able to get a local job, engaging in farm related activities and inadequate job opportunities outside the hometown. Finally, while there is a movement towards rural areas (migrant hometowns) during the nation-wide lockdown, a balancing movement towards urban areas can be noted for those migrating post the easing of restrictions.



3.3: Employment and livelihood characteristics

The first wave of the COVID-19 pandemic and the nation-wide lockdown that was put in place to arrest its spread led to the closure of economic activities. Subsequently, this also led to the migration of many individuals back to their hometowns often without any source of livelihood. This section documents some key results relating to employment and livelihoods. It begins by highlighting declining employment levels from before the pandemic. It then emphasizes the impact of the first wave of the COVID-19 pandemic on jobs and wages, including the disruption in working days. Re-employment trends post the easing of first wave of nation-wide restrictions are highlighted along with a three-phased comparison of average monthly individual incomes. Finally, a brief overview of the government's employment scheme is provided.

The slowing of the Indian economy, even before the first wave of the COVID-19 pandemic, has been well documented.⁴⁶ This slowing down is represented by a decline in the number of working migrants in the study sample. Sample respondents noted a

decrease in the level of employment from 92 percent in February 2020 to 84 percent in the first half of March 2020. Women in the sample were disproportionately affected (even before the first wave) with 20 percent—as compared to 14 percent of men—reporting being out of work as early as beginning of March 2020.

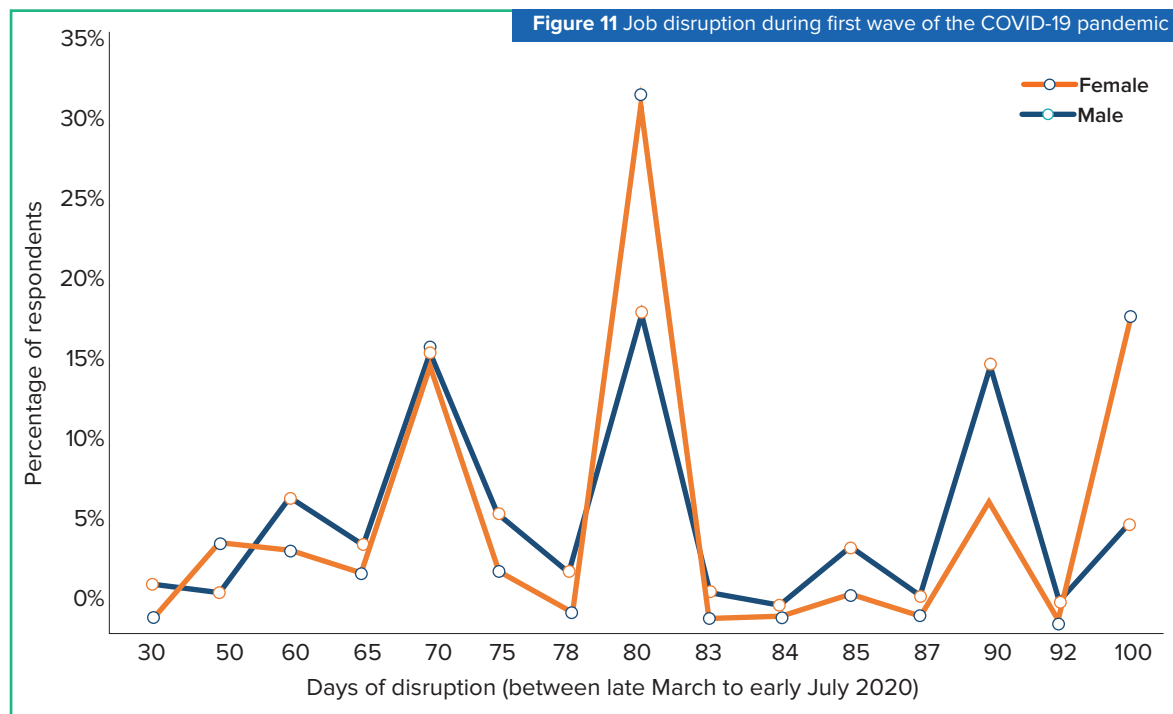
Phase I questionnaire collected data on the number of days for which employment was disrupted for all individuals from late March to early July 2020 (this time-period corresponds to the nation-wide lockdown that was put in place during the first wave of the COVID-19 pandemic). The average days of disruption of the sample was 76 (of total 100 working days) with those employed in agriculture and construction observing above average days of disruption (80 and 78 days respectively). Respondents from Madhya Pradesh recorded the highest number of average days of disruption (83 days) while those in Maharashtra noted the least (70 days).



⁴⁶ See article by *The Hindu* dated 02 September 2020. Accessed March 2021 at <https://www.thehindu.com/business/Economy/indias-gdp-was-on-a-downward-slope-even-before-covid-19-wreaked-havoc/article32502173.ece>

Women lost an average of 78 working days as compared to 75 days for men. Figure 11 depicts the gendered difference in disruption of job during the lockdown. While the trend in job losses for women is

related closely to that of men, sharp disproportionate rises can be observed for women at the 80- and 100-day marks indicating higher losses for a greater proportion of women.



Source: Authors' calculations based on survey data

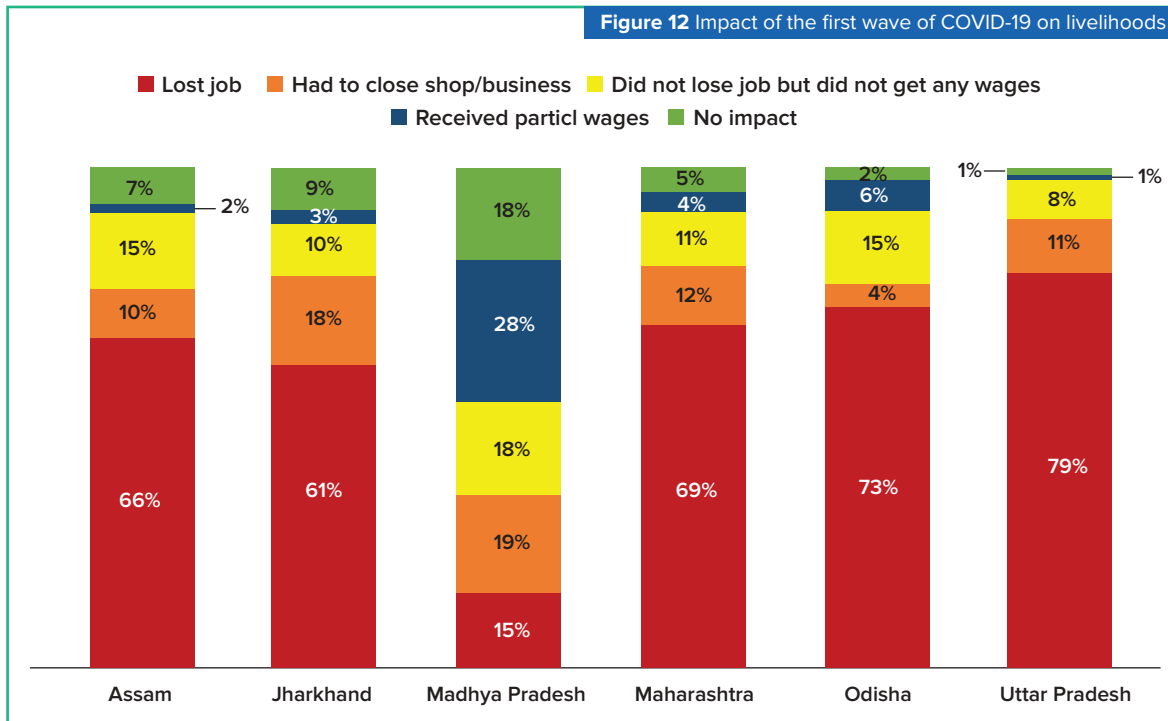
The follow-up questionnaire generalized this idea of disruption and explored the widespread impact of the first wave of the COVID-19 pandemic on livelihoods of the sample respondents (n = 8,110). Figure 12 below presents a state wise breakdown of this impact.

Around 60 percent of individuals in the sample reported losing their jobs with an additional 12 percent shutting shops/businesses during the nation-wide lockdown. These are represented by the red and orange bars in figure 12. This loss of livelihood is consistent across all survey states (except Madhya Pradesh; see case study below) with respondents from Uttar Pradesh (79 percent) reporting the highest proportion of job losses

followed by Odisha (73 percent) and Maharashtra (69 percent). Relatively higher proportion of individuals from Jharkhand (18 percent) reported closure of businesses.

Of those that remained employed during the nation-wide lockdown, around 13 percent (on average across the survey states) reported receiving no wages and 8 percent reported receiving only partial wages. With moderate state wise differences, the overall impact of the first wave of the COVID-19 pandemic on the sample respondents can be characterised by high level of job losses and business closures along with a notable proportion of sample respondents not receiving wages or only receiving partial wages.

Figure 12 Impact of the first wave of COVID-19 on livelihoods



Source: Authors' calculations based on survey data

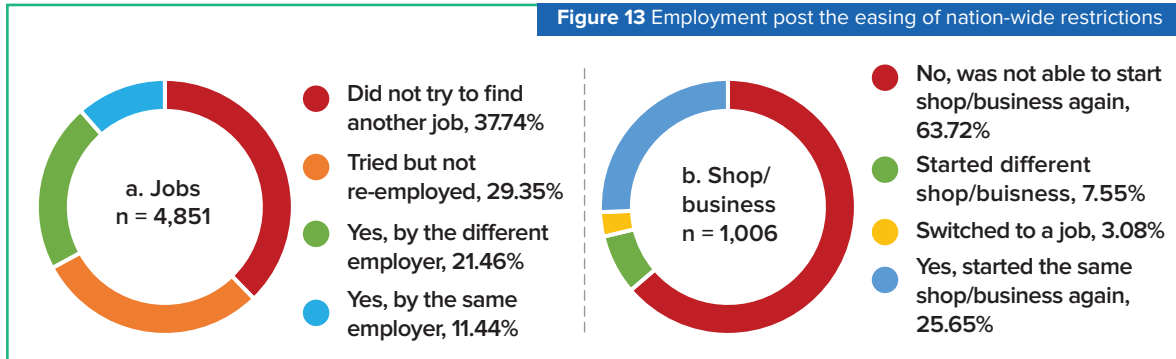
Impact of first wave of COVID-19: the case of Madhya Pradesh

Respondents from Madhya Pradesh note a divergence from other states in terms of the impact on employment. This finding is influenced by three factors. First, respondents from Madhya Pradesh reported a higher-than-average proportion of those who reported not receiving their wages and receiving only partial wages (yellow and blue bars in figure 12). This might mask some of the effect that could have been otherwise represented in the red bar (figure 12). Second, around 30 percent of the respondents from the state reported not being employed before the pandemic as compared to an average of 15 percent from the entire sample. This cohort of respondents from Madhya Pradesh might inflate the no impact category (green bar, figure 12). Finally, respondents from Madhya Pradesh also reported greater than average disruption in working days during the pandemic. This might be contributing to the higher proportion of no wages and partial wages categories (yellow and blue bars in figure 12 respectively).

The loss in employment - as discussed above - highlights a crucial link in exploring the impact of the first wave of the COVID-19 pandemic on livelihoods of migrants. An equally important aspect is the recovery in employment levels post the easing of nation-wide restrictions. On the latter, it is found that around 48 percent of sample respondents remained unemployed even in December 2020. Forty-two percent women, as compared to 50 percent men, remain unemployed with significant state wise differences (see appendix).

As noted in figure 12, job losses formed a major component of the loss in livelihoods during the nation-wide lockdown. Findings on employment post the easing of restrictions in this category highlight that around 67 percent of those who lost their jobs during the first wave of the COVID-19 pandemic remain unemployed in December 2020. Of these, 38 percent did not try to find another job after the easing of restrictions (see figure 13 a). Of those who had to shut their shops/businesses during the nation-wide lockdown, 64 percent were not able to start them again post the easing of restrictions (see figure 13 b).

Figure 13 Employment post the easing of nation-wide restrictions

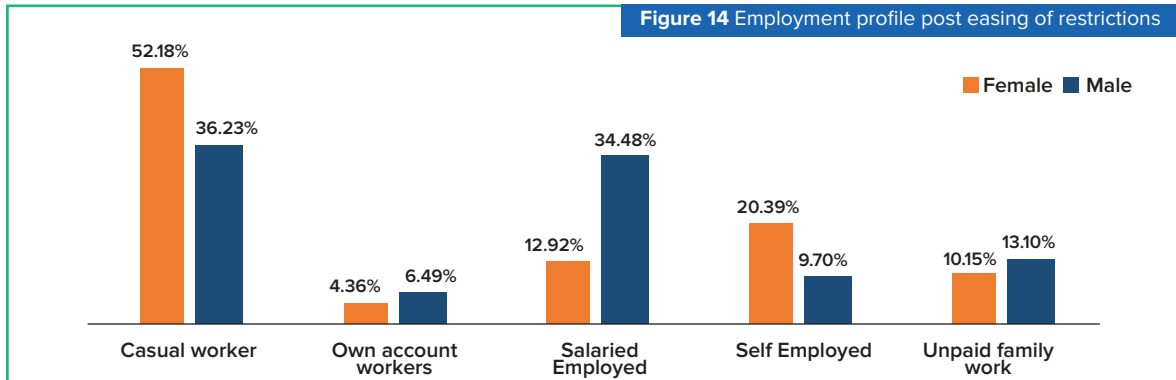


Source: Authors' calculations based on survey data

Casual employment employs a substantial number of migrant workers across India. Sample respondents mirror this broad pattern post the easing of nation-wide restrictions (see figure 14; n = 4,214). Around 41 percent sample respondents were employed in casual work (52 percent sample

respondents women as compared to 36 percent men), while 29 percent respondents reported being salaried employed (13 v 34). Approximately 12 percent reported engaging in unpaid family work (10 v 13), 6 percent as own account workers (4 v 6) and 12 percent as self-employed (20 v 10).

Figure 14 Employment profile post easing of restrictions



Source: Authors' calculations based on survey data

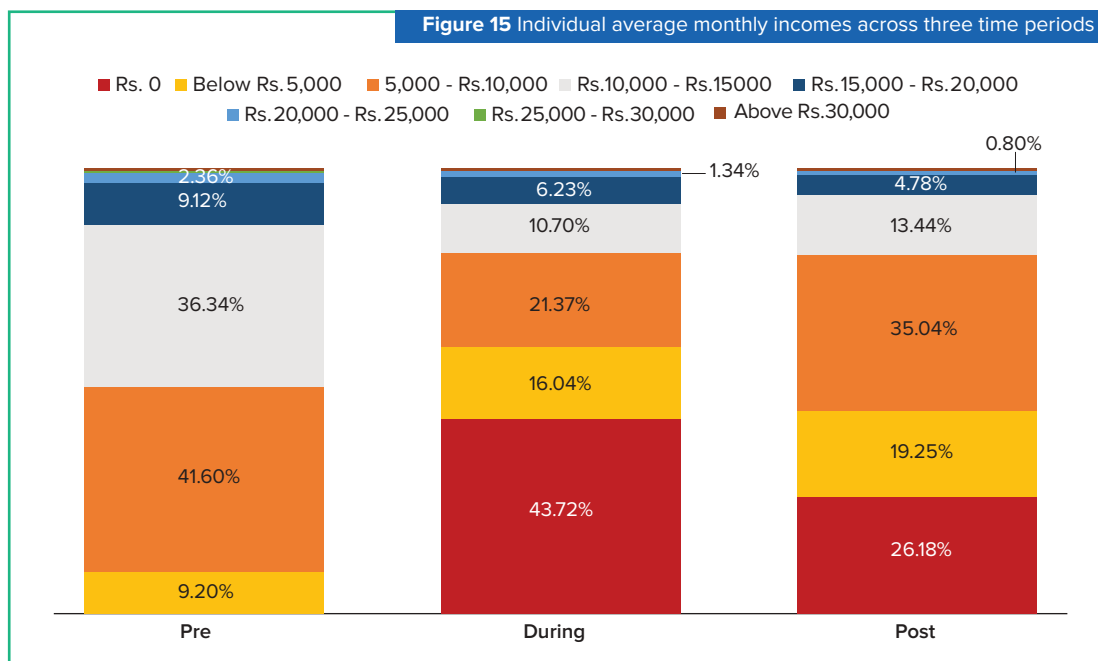
Women and self-employment

A significantly higher proportion of women in the sample reported being self-employed post the easing of restrictions as compared to men. This finding is important on two counts. One, of those women who reported losing their jobs due to the first wave of the pandemic, 6 percent reported being self-employed post the easing of restrictions. The same proportion for men was only 2 percent. This marks a higher shift from working jobs to self-employment for women as compared to men. Two, a similar difference (of 16 percent women as compared to 12 percent men) is also noted for those that reported having to shut their businesses due to the pandemic. This is indicative of proportionally higher women re-entering the workforce as independent job creators and entrepreneurs. Both these findings resonate with the argument that women's participation and independence in the workforce—the former of which has been documented to be declining within the Indian economy—is likely to be crucial to an expedited and sustained recovery from the pandemic.



Indicators reviewed above on the impact of the first wave of the COVID-19 pandemic on livelihoods and the subsequent recovery are reinforced by a comparison of three-phased data on average monthly incomes of individual migrants. Figure 15 presents a comparative description of the individual monthly incomes across the three time periods (in INR) for the entire sample (a state-wise breakdown and USD conversion is presented in the appendix).

The leftmost bar denotes the proportions of people reporting each strata of income (in INR) before the pandemic (prior to late March 2020). The middle bar represents the same variable during the nation-wide lockdown period (late March to early June 2020). Similarly, the rightmost bar indicates the income distribution for the post the easing of restrictions period (early July 2020 onwards).



Source: Authors' calculations based on survey data

Figure 15 highlights three sample characteristics. First, relatively fewer proportion of respondents are in the higher income brackets even before the pandemic. A higher concentration can be observed in the Rs. 5,000 to Rs. 10,000 bracket (41.6 percent; orange portion in the leftmost bar in figure 15) and in the Rs. 10,000 to Rs. 15,000 bracket (36.3 percent; grey portion in the leftmost bar). This reflects the well-documented accounts of migrant workers being employed in the informal sector with low pay, inadequate job security and high uncertainty.

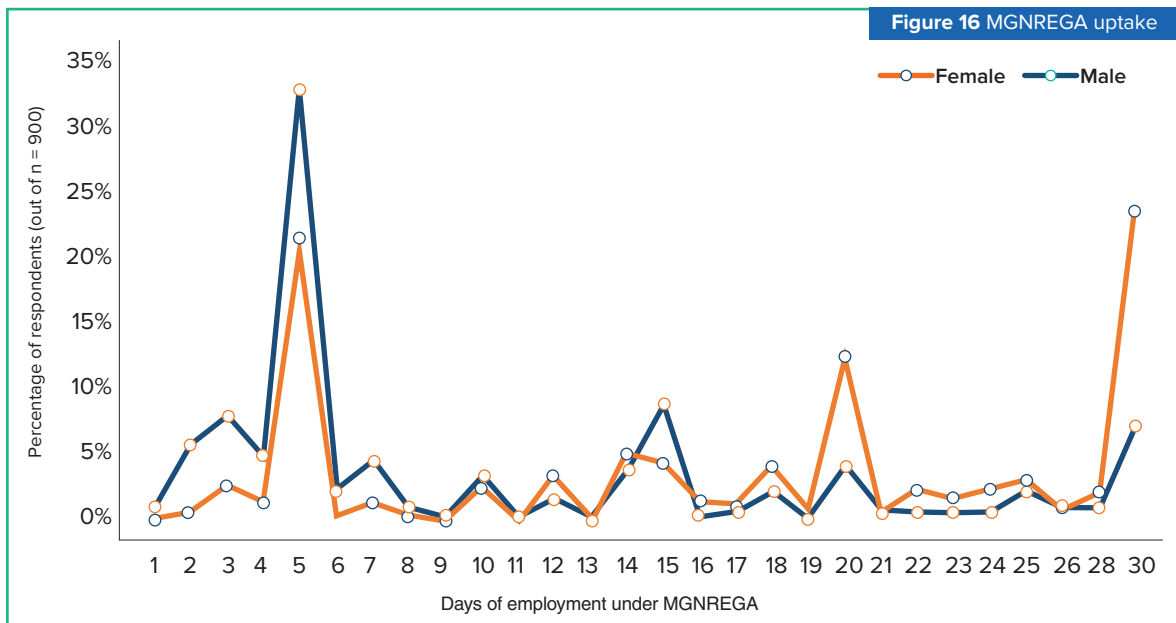
Second, there is a significant increase in the length of the red bar (43.7 percent; middle bar in figure 15) denoting the proportion of individuals reporting no monthly income during the nation-wide lockdown. This sharp increase quantifies the loss of livelihoods (as noted earlier) and provides a quantifiable measure of the impact of the first wave of the COVID-19 pandemic on incomes of the sample respondents. This increase in the lowest rung of the income ladder is accompanied by a corresponding shrinking of higher income brackets (middle bar in figure 15) indicating an overall suppression of incomes during the nation-wide lockdown.

Finally, the rightmost bar in figure 15 – which represents the proportion of individual in each income bracket post the easing of restrictions – displays a reversal in earnings as compared to that during

the nation-wide lockdown. While the proportion of sample respondents earning Rs. 0 per month reduces from 43.7 percent during the nation-wide lockdown to 26.2 percent post the easing of those restrictions, the latter is still higher as compared to the pre-pandemic proportion. Overall, this indicates an ongoing recovery in the incomes of sample respondents reflecting the return of individuals to income generating opportunities post the easing of nation-wide restrictions.

The return of migrant workers to their respective hometowns during the nation-wide lockdown coupled with the losses in livelihoods and incomes generated a high level of demand for local work. This demand was met⁴⁷, to a great extent, by the MGNREGA (Mahatma Gandhi National Rural Employment Generation) scheme particularly in rural areas. Within the study sample, around 900 individuals from the sample (out of n = 8,110) reported taking up employment under the scheme.

The sample respondents recorded an average of 12 days (in a month) of MGNREGA work, with women registering 17 average days as compared to 9 days by men. Figure 16 highlights a gender reversal in uptake of the scheme as the number of days (per month of employment under the scheme) increases: the proportion of women taking up MGNREGA is greater towards the right end of the graph (for days greater than 16) and significantly larger at 20- and 30-day mark.



Source: Authors' calculations based on survey data

Key takeaways: Decreasing levels of employment were reported by sample respondents before the imposition of nation-wide restrictions. A first cut indicator of the impact of the first wave of COVID-19 on livelihoods is observed in high days of job disruption during the nation-wide lockdown. This is further supported by a more comprehensive indicator which puts the loss of jobs and closure of businesses to the tunes of 60 percent and 12 percent across the sample. Following these job losses, an ongoing recovery is also highlighted across both jobs and businesses. A three-phased comparison of the average monthly individual incomes quantify both the losses and the recovery.

⁴⁷ See Press Release by Ministry of Rural Development dated 15 September 2020. Accessed March 2021 at <https://rural.nic.in/press-release/implementation-mgnregs-during-covid-19-pandemic>





3.4: Financial patterns and social protection

One of the most important pillar in the fight against the first wave of the COVID-19 pandemic in India was that of public safety nets. These mechanisms (primarily acting as fallback instruments) ensured continued food security, financial support, and employment guarantees for the vulnerable. This section highlights findings related to social protection. The need of such measures is underlined first. Indicators on the ownership of ration card and Jan Dhan accounts, receipt of direct benefit transfers (DBTs), food grains and pluses are

highlighted thereafter. Finally, findings on support from district administration(s) are noted.

The first wave of the COVID-19 pandemic, as highlighted in the previous section, led to losses in employment, livelihoods, and incomes. When superimposed on the low level of earning that migrant workers had prior to the pandemic, these disruptions forced many to rely on external sources for monetary/kind assistance. Around 72 percent of the individuals surveyed reported the need for external assistance (for basic everyday activities; in

December 2020) even after the restrictions were lifted. These requirements ranged from cash transfers to the provision of ration and included assistance required in terms of medical equipment, cooking gas and regarding children’s education.

On a more individual level, these disruptions also increased the need to rely on past savings and external borrowing (or a combination of both). On this front, the sample respondents display a high

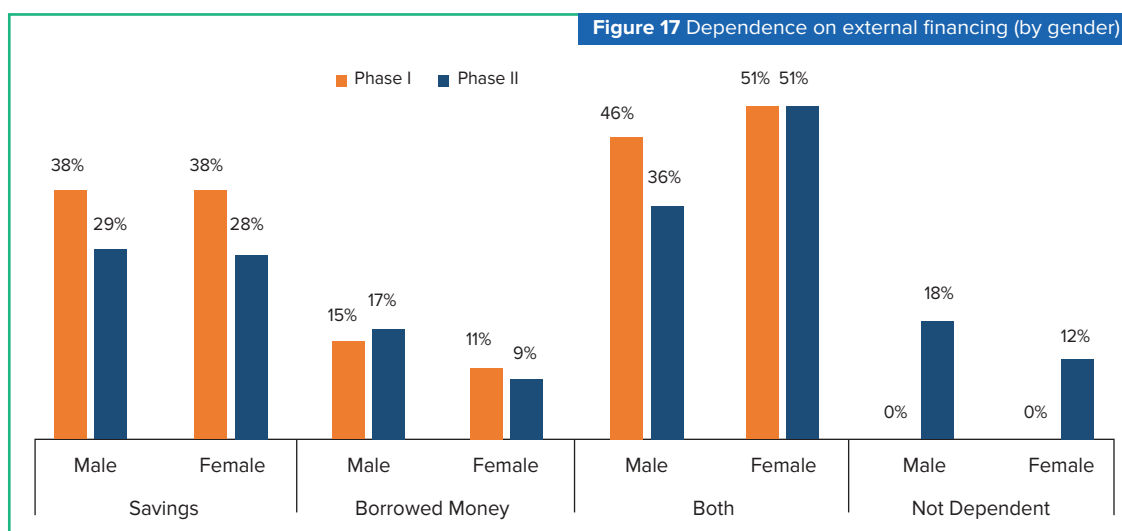
degree of dependence on external financing with around half of them relying on a combination of their past savings and borrowing money from external sources during the nation-wide lockdown. These patterns in financial dependence can also be observed post the easing of restrictions. Table 5 highlights the proportion of individuals reporting using each category of external financing across the two time periods.

Table 5 Dependence on external financing during and post easing of nation-wide restrictions		
Category of external financing	During nation-wide restrictions (late March – June 2020)	Post easing of restrictions (June 2020 onwards)
Savings only	38 percent	28 percent
Borrowed money only	14 percent	15 percent
Combination of both	48 percent	40 percent
Not dependent	0 percent	17 percent

Source: Authors’ calculations based on survey data

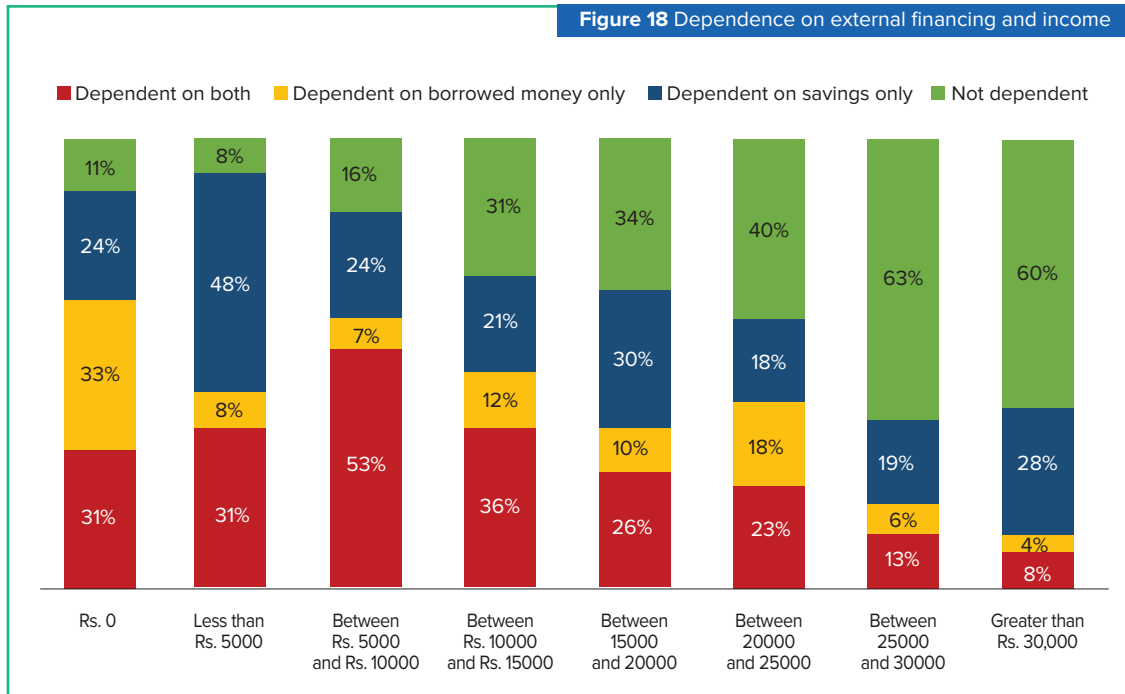
Financial dependence: three characteristics

Three characteristics define this dependence. First, a gender breakdown of sample respondents along this dependence highlights that a greater proportion of women were dependent on a combination of savings and borrowing across the phases as compared to males. This is represented in figure 17 which presents the various sources of financial dependence and provides a gendered breakdown of each across the two time periods.



Source: Authors’ calculations based on survey data

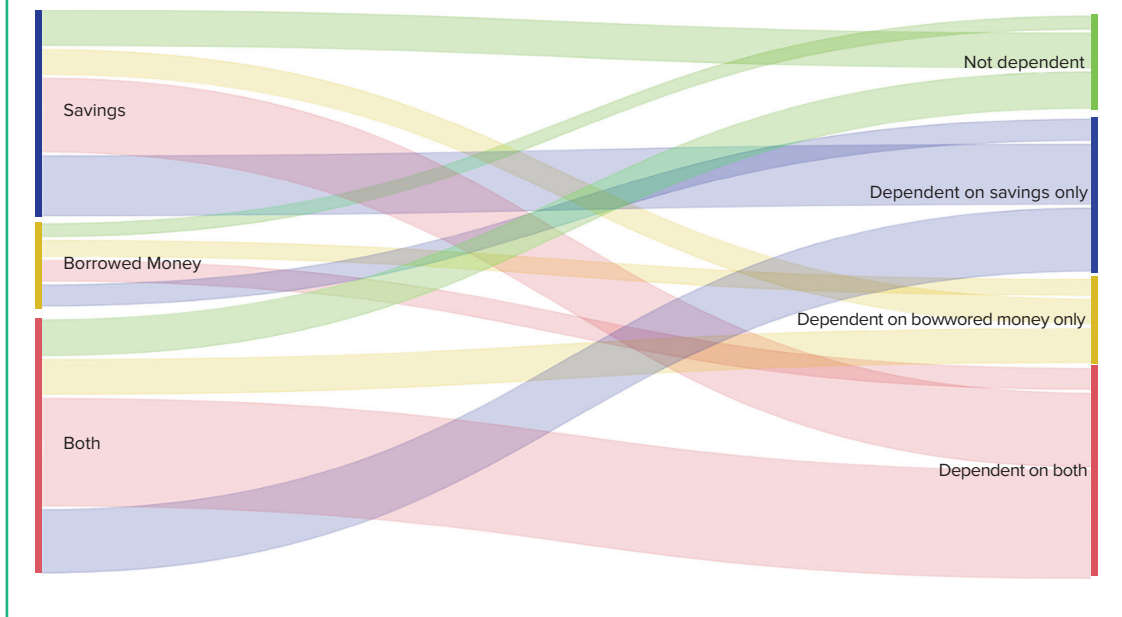
The second characteristic of this dependence is its relationship with the level of income (post the easing of restrictions) as displayed by figure 18. Two patterns emerge from this. One, dependence on the combination of borrowing and past savings is the highest among low-income groups (higher red bars towards the left of figure 18) indicating that low-income earners are more likely to rely on external financing. Second, there is a monotonic increase in the not-dependent category (represented by the green bar in figure 18) as income level increases (from left to right). This indicates that the dependence on external borrowing and income share an inverse relationship.



Source: Authors' calculations based on survey data

The third characteristic of the financial dependence is its mobility between the two time periods (as represented in figure 19). The transfer of individuals from one source of financing to another across the two time periods underscores this mobility. For example, some individuals who reported using a combination of past savings and borrowing during the nation-wide lockdown (left side of figure 19) have subsequently reported a) not being dependent, b) moving to the saving only bucket, c) moving to the borrowing only bucket and d) staying dependent on both savings and borrowings post the easing of restrictions (right side of figure 19). Similar movements can also be observed for other sources of financing during the nation-wide lockdown.

Figure 19 Mobility in dependence on external financing



Source: Authors' calculations based on survey data

As mentioned earlier, the use of social safety nets was one of the most important pillar in India's fight against the first wave of COVID-19. For migrant populations, who are among the most vulnerable sections of the society in domains such ranging from job to food security, these protective mechanisms acted as life support during the months of the nation-wide lockdown. Government authorities were prompted to not only meet the growing demand of the various existing stakeholders, but to also cover a broader section of those in need.

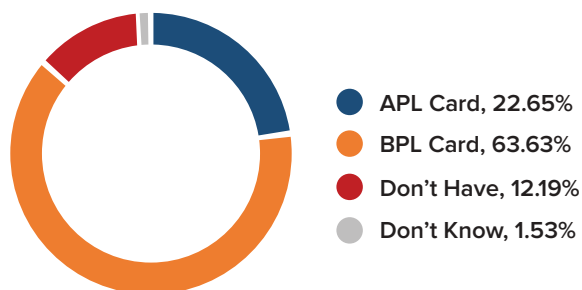
The government adopted a two-pronged social safety strategy to mitigate the impact of the first wave of the COVID-19 pandemic with respect to the migrant population. One was to increase the issuance of ration cards, thereby making more individuals eligible to receive rations from local PDS shops. The second was to identify (women) beneficiaries and other vulnerable sections and to provide them with cash transfers as

instruments of immediate relief. Data on indicators representing these strategies was collected in both Phase I (administered in May-June 2020) and Phase II (administered in December 2020). Findings on these are highlighted below.

The issuance of ration cards increased between the two time periods with the proportion of individuals reporting not having a ration card reducing from 17 percent during Phase I to 12 percent during Phase II. This decrease is on top of already high levels of ration card ownership across the sample respondents. A categorical breakdown (as represented in figure 20) highlights that more than 60 percent of the sample owned a below poverty limit (BPL) card with around 22 percent owning an above poverty limit (APL) card. Furthermore, the proportion of women reporting not having a ration card is lower than that of men indicating higher ration card ownership amongst women.



Figure 20 Ration card type



Source: Authors' calculations based on survey data

However, ownership of a ration card is only a necessary condition for being able to procure ration; not a sufficient one. Challenges, ranging from eligibility to administrative, have been documented to create a gap between those who own a ration card and those who actually receive/or are able to procure ration. Data on the procurement of ration was captured across the two phases in order to observe its trends.

Findings on this front highlight that around 55 percent of respondents received rations during the nation-wide lockdown and 41 percent continued to receive rations even in December 2020 post the easing of restrictions. Table 6 presents a state wise breakup of these proportions.

Table 6 Procurement of ration

State	Procurement of ration	
	During the nation-wide lockdown	Post easing of restrictions
Assam	70 percent	22 percent
Jharkhand	77 percent	46 percent
Madhya Pradesh	36 percent	41 percent
Maharashtra	55 percent	43 percent
Odisha	39 percent	52 percent
Uttar Pradesh	62 percent	40 percent
Sample average	55 percent	41 percent

Source: Authors' calculations based on survey data

As an incremental measure for migrant families, the Government of India (GoI) also announced the distribution of free pulses within the ration framework.⁴⁸ Findings on this indicate that around 46 percent of sample respondents

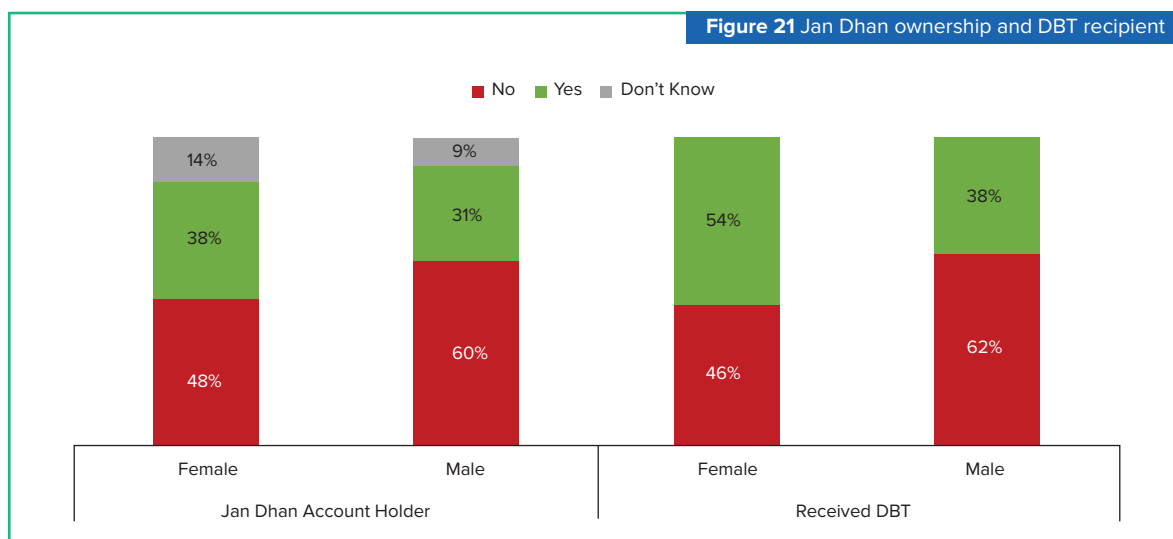
received pulses as announced by the government. The proportion of those receiving both ration and pulses post the easing of restrictions was 35 percent.

⁴⁸ See Press Release by the Press Information Bureau dated 30 June 2020. Accessed March 2021 at <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1635429>

A second mechanism that was used to provide immediate relief was that of Direct Benefit Transfers (DBTs) with Jan Dhan accounts acting as the gateway for eligibility. These cash transfers were unconditional and targeted the most vulnerable cohorts.

Findings on ownership of Jan Dhan accounts highlights that around 33 percent sample respondents (38 percent women as compared to 31 percent men) had Jan Dhan accounts (as per data collected in Phase II). More importantly, 42

percent of the sample respondents were recipient of a direct benefit transfer announced by the government. The proportion of women receiving such a transfer was higher at 54 percent as compared to 38 percent men. While the overall proportion of those receiving DBT is itself high, the gender differential is indicative of the successful targeting of such transfers (for example, the INR 1,500 transfer to women Jan Dhan holders under the PMGKY) towards women. Figure 21 highlights these results.

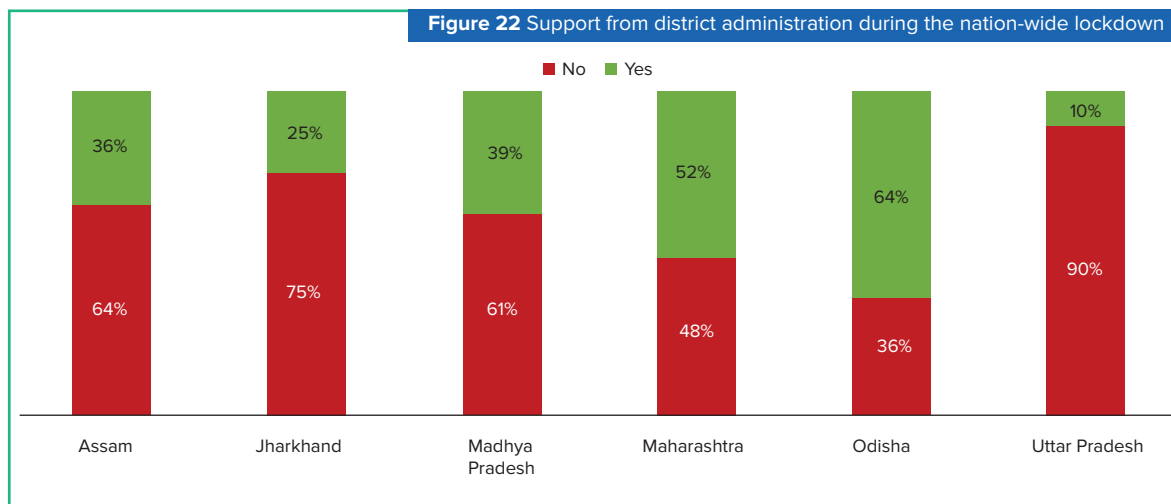


Source: Authors' calculations based on survey data

The high levels of ration card ownership, procurement of ration and pluses across the two phases and successful targeting of vulnerable beneficiaries reflected in the importance of these measures to ensure food and financial security for the sample respondents. Arguably, another crucial aspect for migrant workers returning to their hometowns during the nation-wide lockdown would have been support and assistance from district level authorities. Results

on this aspect highlight that 63 percent of the sample respondents reported not receiving any such support from their respective district administration during the pandemic (see figure 22). This absence of help is reported most strongly amongst respondents from Jharkhand and Uttar Pradesh while around 64 percent respondents from Odisha reported receiving support while traveling back home.

Figure 22 Support from district administration during the nation-wide lockdown



Source: Authors' calculations based on survey data

Key takeaways: Sample respondents report an urgent need for external assistance as late as in December 2020. This is accompanied by high degree of dependence on external sources of financing due to loss of employment and income during the nation-wide lockdown. This dependence is greater for women, has a negative relationship with increasing income and is found to be transferable across categories between the two time periods. Public safety nets played a crucial role in aiding sample respondents maintain food security (through provision of rations and pulses) and financial security (by successfully targeting women beneficiaries). Support from district administration during the nation-wide lockdown, however, was low indicating the need to strengthen local frameworks to arrest shocks from any future crises/outbreaks.

3.5: Health and food consumption

The COVID-19 crises has evolved from a health to a multi-domain crises. However, its impact on the health of individuals across the world has been (and continues to be) devastating. This section highlights findings regarding health aspects such as awareness regarding protective measures

from COVID-19, screening, testing, medical treatment, and the use of the Aarogya Setu app. It also describes trends in meal consumption across the three time periods and presents some results relating to the prices of essential commodities.



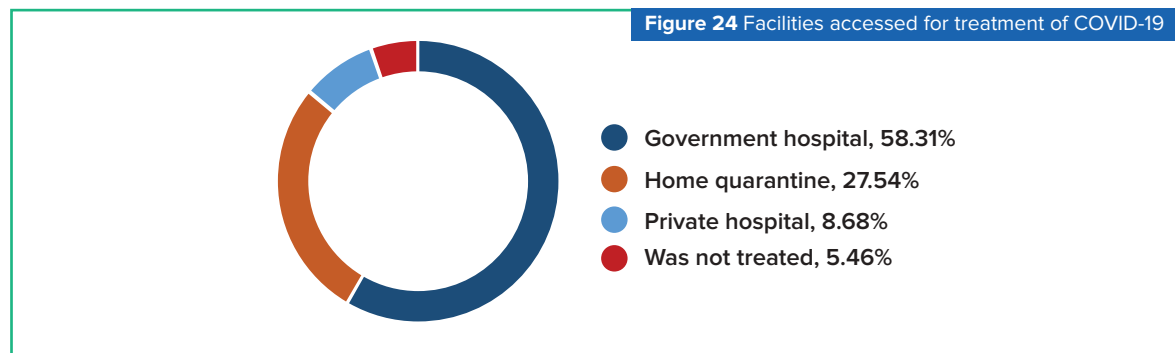
Tips for protection against COVID-19 such as wearing a mask, socially distancing, and washing hands at frequent time intervals etc., have been documented to be successful in preventing the spread of COVID-19. Data on these practices was

collected during Phase I and findings highlight that around 96 percent of the sample respondents were aware about such preventive measures. This widespread knowledge regarding basic preventative measures is especially

important considering the movement of migrant workers (across the sample) back to their hometowns during the pandemic. Furthermore, 86 percent of individuals also reported being screened for body temperature during their journeys back to their hometowns.

Indicators related to the physical health of the individuals (and their families) were recorded during both the phases. Phase I (which collected data between May-June 2020) recorded information on general sickness whereas Phase II

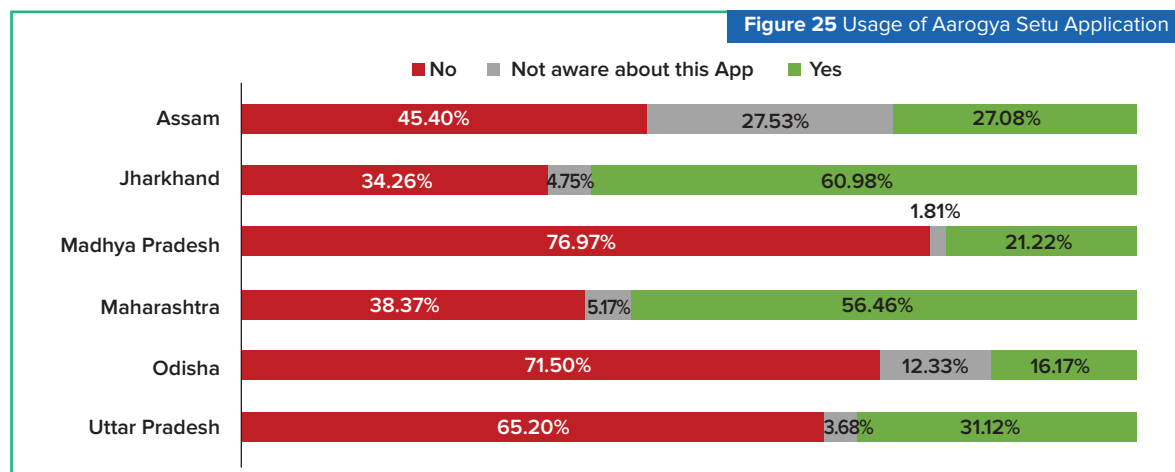
(for which data was collected in December 2020) documented COVID-19 specific information. Approximately 7 percent individuals reported being sick (themselves or any other family member) in Phase I with a majority (63 percent) of them being able to avail medical help. Similarly, 95 percent of the individuals reported not being infected from COVID-19 during Phase II. Figure 24 represents the various treatment locations for those that reported testing positive (n = 403) to COVID-19.



Source: Authors' calculations based on survey data

The Aarogya Setu application – characterised as a contact tracing, syndromic mapping, and self-assessment⁴⁹ digital service – acted as an official gateway about information about COVID-19. However, a majority (57 percent) of individuals in the sample reported not having used the Aarogya Setu

application. Figure 25 presents a state wise breakdown highlighting that the proportion of those having used the Aarogya Setu application was highest in Jharkhand followed by Maharashtra and Uttar Pradesh.



Source: Authors' calculations based on survey data

⁴⁹ Description of the application has been retrieved from official document of the Press Release Bureau. Accessed January 2021 at <https://pib.gov.in/PressReleasePage.aspx?PRID=1626979>



One of the first element to reflect fluctuations in response to an outside event is the consumption of food. Since the first wave of COVID-19 had critical impacts on employment, earning, borrowing patterns etc., data (self-reported) on meal intake was recorded for three time periods: prior to the

national-lockdown (before March 2020), during the national-lockdown (between late March and June 2020) and post the easing of restrictions (post June 2020) for all sample respondents. Figure 26 presents the proportion of individuals reporting each bracket of meal intake across the three time periods.

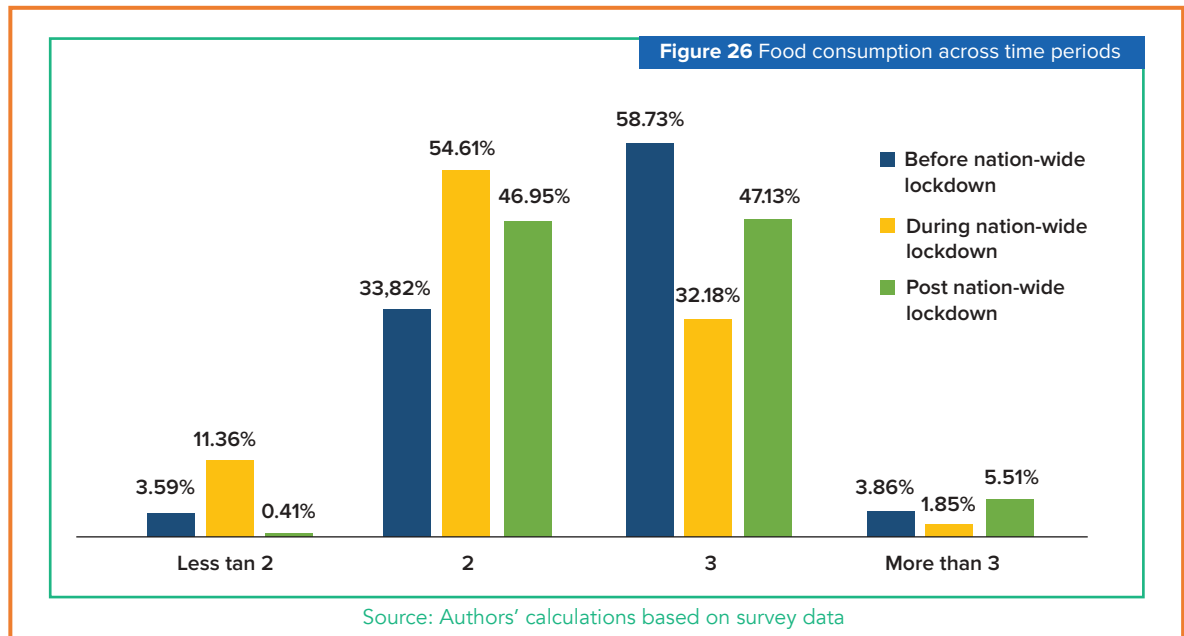


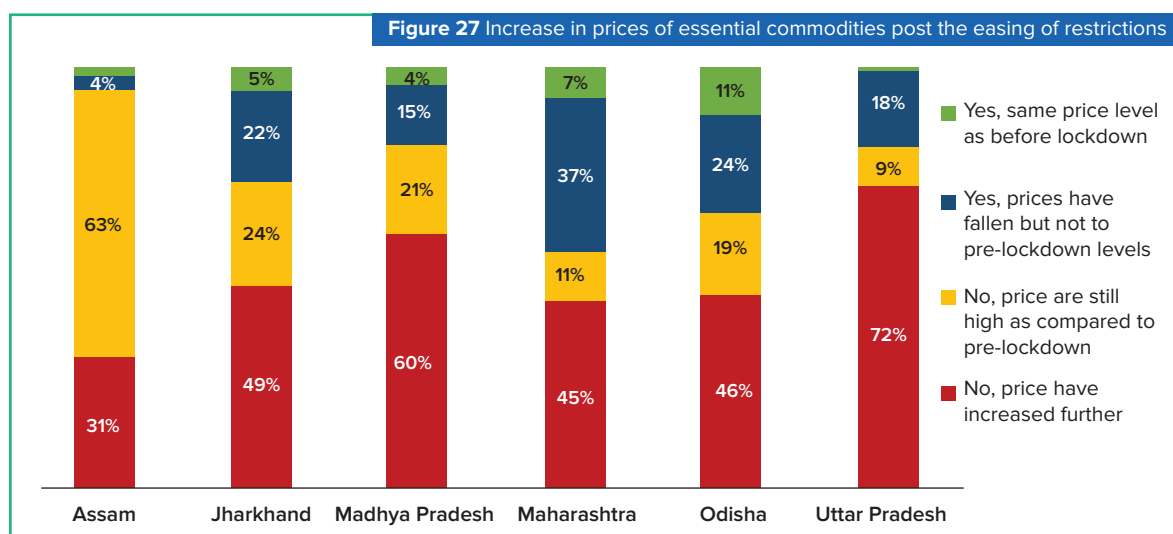
Figure 26 highlight three key trends. First, more than 60 percent of sample respondents were consuming three or more meals per day prior to the pandemic (see blue bars in figure 26 for categories 3 and more than 3). This, along with the fact that less than 4 percent were consuming less than 2 meals a day, indicates a healthy level of meal intake by the sample respondents prior to the nation-wide lockdown.

Second, the impact of the pandemic can be noted by an overall leftward shift in meal consumption. This can be observed by noting the following: the proportion of individuals reporting consuming less than two meals a day has increase from 4 percent to 11 percent (see the blue and yellow bars in the less than 2 meal category in figure 26). A similar increase is seen in those reporting consumptions of two meals per day (from 34 percent to 55 percent; similar coloured bards under 2 meal bracket in figure 26). Furthermore, reductions in the 3 and more than 3 meals per day brackets indicate the impact of the nation-wide lockdown.

Third, an ongoing meal recovery is visible with individuals moving into higher meal brackets post the easing of restrictions as compared to during the pandemic. Decreasing proportions of two and less than two meals a day along with increasing proportion of three and more meals a day (see green bars for all meal categories as compared to the yellow bars in figure 26) represent this recovery. This recovery complements the findings on provision of rations and the ongoing income recovery noted earlier in the document. However, proportions of individuals consuming higher number of meals per day have not reached pre-nation-wide lockdown levels therefore indicating more scope of increase in meal consumption.

Finally, the imposition of nation-wide restrictions disrupted not only economic activity but also led to disruptions in the supply chains for various essential commodities. This was accompanied by an increase in localized demand owing to the return of migrants to their native hometowns. This imbalance between demand and supply drove up prices⁵⁰ of essential commodities. Findings on this indicator highlight that approximately 80 percent of sample respondents

reported an increase in the prices of essential commodities during the nation-wide lockdown. This increase is found to have worsened post the easing of restrictions with around 52 percent of sample respondents noting a further increase in prices. Figure 27 provides a state wise breakdown of increases in the prices of essential commodities post the easing of restrictions and uses the price increase during the nation-wide lockdown as a comparative base.



Source: Authors' calculations based on survey data

⁵⁰ See article in The Indian Express dated 4 April 2020. Accessed January 2021 at <https://indianexpress.com/article/india/india-lockdown-coronavirus-produce-market-6346498/>

Key takeaways: Health and food consumption are two indicators that are impacted directly by an external event such as COVID-19. Respondents from across survey states display high level of awareness regarding protective measures against the virus. On the medical front, most respondents did not report any sickness (general as well as COVID-19 specific). Of those that were infected, a high proportion were able to access treatment facilities. Meal consumption saw a substantial reduction due to the first wave of the COVID-19 pandemic. But an ongoing meal recovery is noted owing to rising levels of income and the provision of rations by the government. Supply chain disruptions and demand-supply imbalances led to a high proportion of respondents reporting an increase in the prices of essential commodities. This increase in prices is further exacerbated post the easing of restrictions.

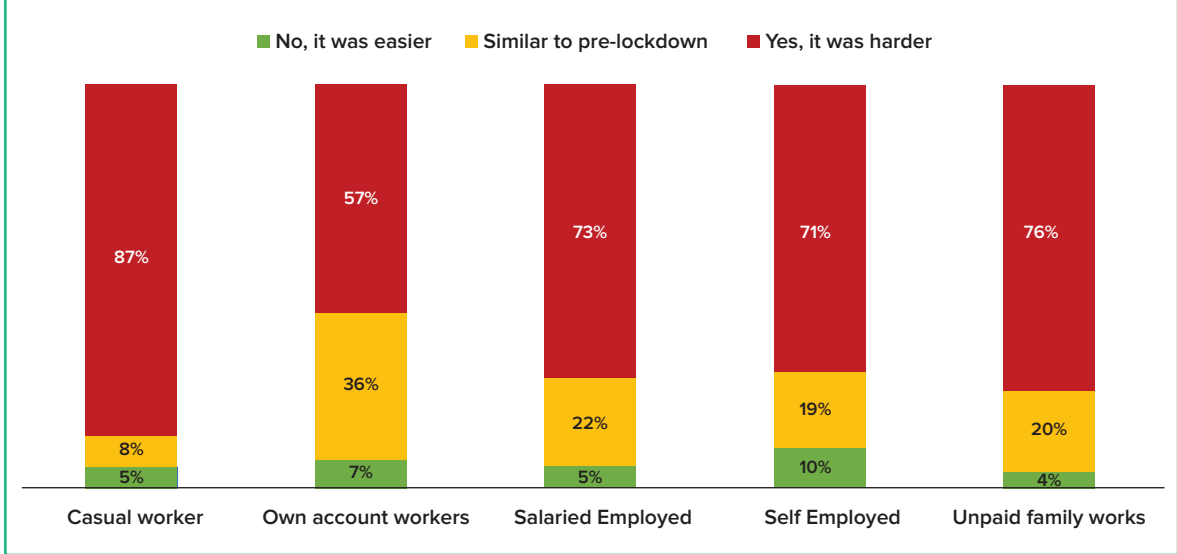
3.6: Work condition and skilling

The re-entering of sample respondents into the workforce (both locally and in other places after migrating) after experiencing disruptions in livelihoods, incomes, financial dependence, food security etc. took place under varying circumstances due to the first wave of COVID-19 pandemic. This section highlights results on indicators relating to the condition of work including difficulties in finding employment post the nation-wide lockdown, work environment, work satisfaction and work condition. Remarks on skilling are also noted.

Factors such as changes in location and availability of work can be argued to make finding work difficult, especially after the first wave of the COVID-19 pandemic. Around 83 percent of the sample respondents reported that it was harder to either resume working or (re)opening their shop/business, finding a new job, or opening a new shop/business. While this difficulty was observed by workers irrespective of the type of employment, a higher proportion of respondents working in casual work reported such difficulty (as seen in figure 28).



Figure 28 Difficulty in employment post easing of nation-wide restrictions

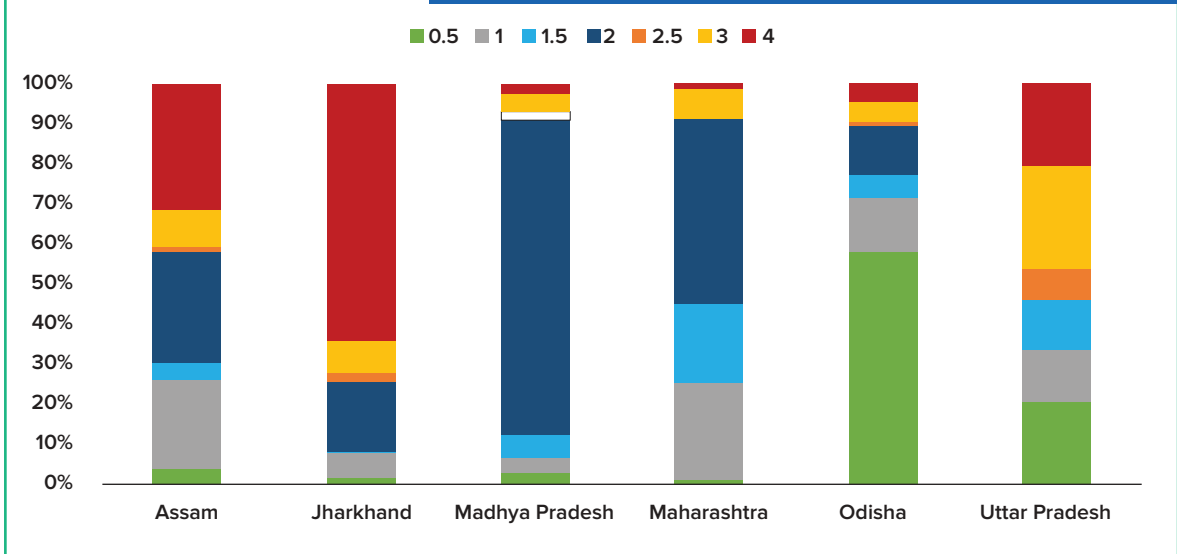


Source: Authors' calculations based on survey data

Increases in work hours were not reported by 84 percent of those who reported being employed post the easing of restrictions (including those who did not lose their jobs/businesses, those who were re-employed, and those who were able to start new

businesses; total n = 4,214). Of those that did report an increase in working hours, the average increase (post the easing of nation-wide restrictions) was 2.17 hours per day. Figure 29 presents a state wise breakdown of this finding.

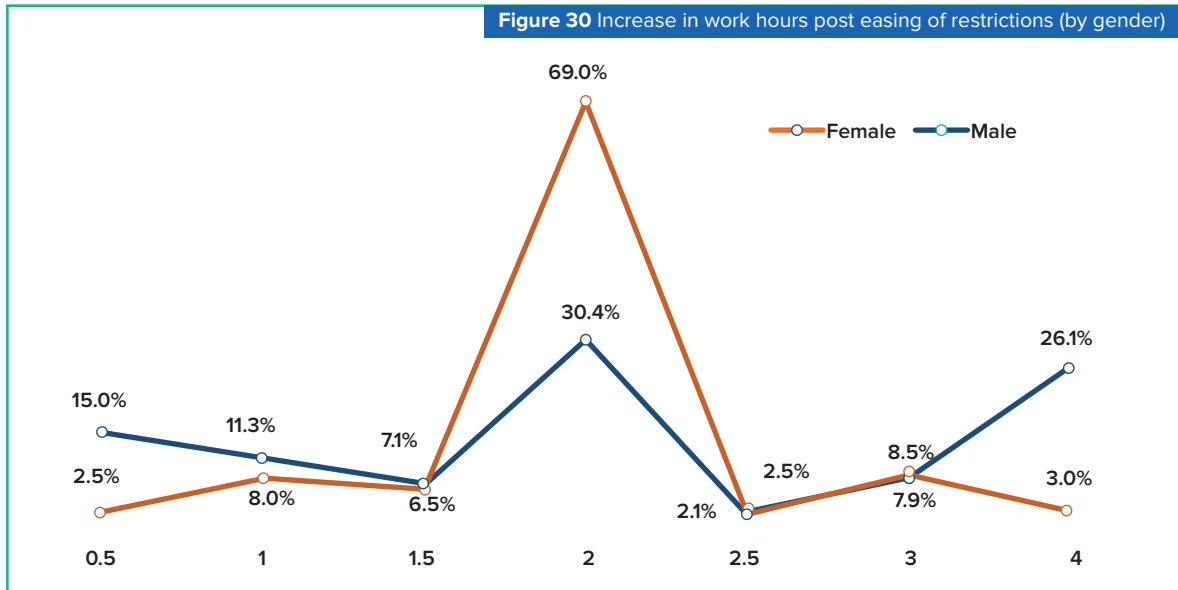
Figure 29 Increase in work hours post easing of restrictions (by survey state)



Source: Authors' calculations based on survey data

Increase in work hours also varies greatly by gender as can be seen in figure 30. While 69 percent of the women surveyed reported an increase of 2 hours per day working time, the same proportion for men

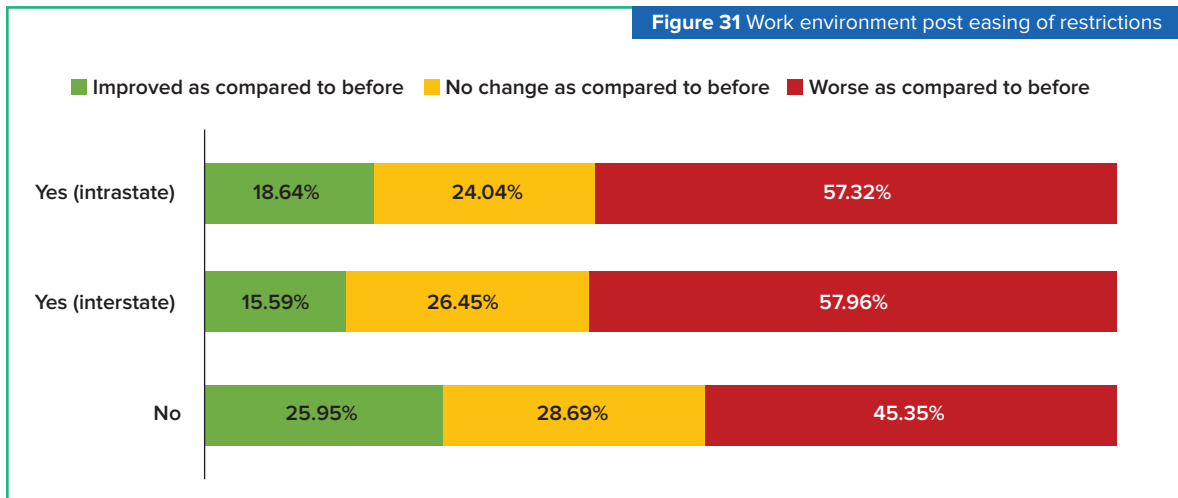
is 30.4 percent. This difference is, however, reversed at the four-hour mark with the proportion of men exceeding that of women by a factor of eight.



Source: Authors' calculations based on survey data

Work environment, which refers to physical attributes of a workplace such as safety provisions, cleanliness, sanitation, etc., was reported to be of poorer quality post the easing of restrictions as compared to before the pandemic by 52 percent of

those employed. A lower proportion of those that did not migrate post the easing of nation-wide restrictions reported this decline in the quality of work environment as compared to those who did migrate (see figure 31).



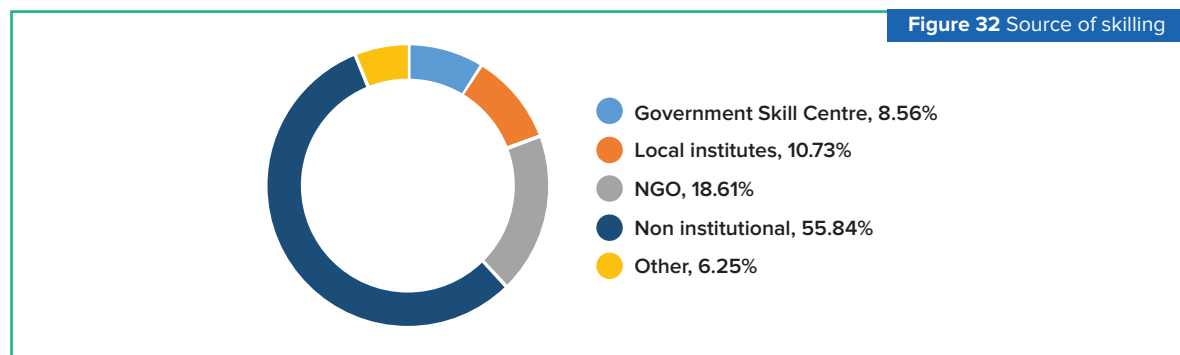
Source: Authors' calculations based on survey data

The overall satisfaction related to work (post easing of restrictions as compared to pre-pandemic levels) was varied across the sample. While 13 percent reported being satisfied with their work, 27 percent individuals were only somewhat satisfied, and 20 percent were completely dissatisfied with their work. Around 40 percent of the surveyed individuals chose to respond with 'Can't say'.

As a proxy for the demand for enhancing employment prospects, data on skilling was captured in both phases. Phase I collected information on whether respondents think that they would need additional skills to find employment post

easing of restrictions while Phase II collected information on if any actual skills were obtained.

While around 3,700 individuals reported requiring additional skills during Phase I, only 736 of them had acquired any such skills. Non-institutional sources, such as family members or individuals from the community, were cited as the primary training providers for more than half of the respondents that indicated that they had acquired some skill (see figure 32). Government skilling centres (9 percent) and local institutes such as schools/colleges etc. (11 percent) were cited in smaller proportions.



Source: Authors' calculations based on survey data

Key takeaways: Difficulties in finding employment post the easing of restrictions were noted across the sample. Respondents working as casual workers reported this difficulty more than other categories of employment. A relatively small proportion of individuals reported increases in work hours. Work environment and satisfaction with working conditions post the easing of restrictions saw declining levels as compared to pre-pandemic levels. On the skilling front, few respondents reported acquiring additional skills (mostly from non-institutional sources).




CHAPTER 4 SUMMARY OF FINDINGS


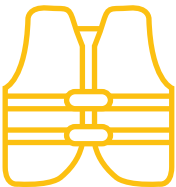
The study sample consisted of migrant workers from six states in India (Assam, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, and Uttar Pradesh) covering approximately 160 districts. Data was collected in two phases: Phase I during May-June 2020 and Phase II during December 2020.

The sample is relatively young and has representation from all educational backgrounds. High dependency within households is observed,

which is concerning given the medical (high population density increases the risk of the spread of COVID-19) and economic (decreased remittances to support higher number of dependents) conditions. Table 7 summarises some important findings in key themes across the two phases to provide a comparative narrative of the evolution of the impact of the first wave of the COVID-19 pandemic. Recovery mechanisms and social safety aspects are also highlighted.

Table 7 Summary of findings

Characteristic	Phase I (May-June 2020)	Phase II (December 2020)
Migration 	Returnee migrants constituted the entire sample. A majority travelled from urban areas (where they worked) to rural areas (where their hometowns were located) due to the nation-wide lockdown.	Sample respondents displayed low levels of migration post the easing of nation-wide restrictions with a preference for local jobs. Of those who migrated, urban areas emerge as key destinations.
Employment and livelihoods 	Declining levels of employment were noted before the onset of the nation-wide restrictions. Most workers worked under casual contracts and were employed in agriculture and construction sectors. A sizeable loss in the number of working days is reported during initial months of the nation-wide restrictions.	More than 7 in 10 respondents reported losing their livelihoods due to the first wave of the COVID-19 pandemic. It also had a negative impact on re-employment trends with around half of sample respondents not being employed in December 2020. Incomes decreased as a result of loss of employment, but an offsetting recovery is notable post the easing of nation-wide restrictions.
Financial patterns and social protection 	The loss of jobs and income compelled respondents to rely on other sources of financing such as their past savings and borrowing. Despite these sources, a majority of respondents reported requiring additional support. Safety nets were widespread with high level of ration	Recovery in jobs and incomes led to decreased reliance on other sources of financing (especially among high earners). Despite already the high levels of ration card ownership, the number of people without a card reduced

Characteristic	Phase I (May-June 2020)	Phase II (December 2020)
	card ownership, procurement of rations and pluses and the successful targeting of women beneficiaries under DBTs.	even further. Continued support in terms of provision of ration is noted even in December 2020. On the other hand, results indicate scope for strengthening of support from district administrations during times of crises.
Health and food consumption 	Sample respondents displayed high level of awareness regarding the protective measures against COVID-19 along with low levels of sickness (individuals and household members) and widespread provision of treatment where required. Food consumption reduced considerably with a movement from consuming three or more meals to two or less meals per day. Most individuals also noted increases in prices of essential commodities.	There were low levels of infections of COVID-19 across the sample with most being treated in government facilities and through home quarantine. Respondents report ongoing meal recovery with movement towards pre-pandemic levels of food consumption. Most individuals noted a further increase in the process of essential commodities on top of the already increased prices during the nation-wide lockdown.
Work Condition and Skilling 	Most individuals reported a) the need to find a new earning opportunity post the easing of restrictions, b) the need to acquire new skills to get jobs and c) uncertainty regarding earning the same wage as before ⁵¹ .	Sample respondents reported difficulties in looking for employment, a worsening of work environment and a decrease in the level of work condition satisfaction post the easing of nation-wide restrictions. Few individuals reported acquiring additional skills.

⁵¹ These results are drawn from Phase I indicators' data for which were collected in May-June 2020.



In sum, the impact of the first wave of the COVID-19 pandemic was significant in the short run. However, sample respondents report an ongoing recovery in terms of livelihoods, income, and food intake. Support from social safety nets proved critical in arresting further deterioration in the food and income security of sample respondents. Further, results also indicate the success of targeted measures (toward women beneficiaries) vis-à-vis DBTs.



The next section presents and discusses some insights from an econometric exercise.

CHAPTER 5 PREDICTIVE ANALYSIS

The different characteristics and domains explored throughout this report often have inter-linked and cross-cutting impacts. For example, it is plausible to assert that those who are employed are more likely to consume a greater number of meals per day than those who are unemployed. On the other hand, people who have faced sickness are more likely to take on debt to recuperate in comparison to people who remained healthy during the first wave of the COVID-19 pandemic.

Exploration of these cross-cutting relationships is important on two counts. First, it allows the formation of linkages between characteristics and

outcomes therefore informing on the possible differential impact of being in one characteristic group as compared to another on outcomes of interest. Second, these relationships help in the design and delivery of more effective and efficient interventions.

Data collected in both the phases was analyzed and multiple multivariate econometric (logistic) models were developed. This section presents the results of this modelling on two (dependent) outcomes of interest: debt and food security. Comparable odds ratios are presented (detailed regression tables can be found in the appendix).

5.1: Outcome - Debt

The impact of the first wave of the COVID-19 pandemic on livelihoods and income led to a high level of dependency of sample respondents on external sources of finance. Considering this observation, a binary variable - debt - was generated to capture the two major sources of alternate financing: savings (base) and borrowing (increment) across the two time periods (during the nation-wide lockdown in late March-June 2020 and post the easing of restriction from June 2020 onwards). Likelihoods results from this model as listed in table 8.

The first column represents relevant characteristics

such as being in rural areas (as compared to urban areas), being a women (as compared to being a man) and being able to procure ration (as compared to not being able to procure ration). The second column denotes the odds ratios (in terms of increase or decrease in likelihood) of debt with respect to these characteristics during the nation-wide lockdown. The last column indicates similar coefficients for post the easing of nation-wide restrictions. The comparability of these ratios across the two time periods stems from the fact that both these time periods have the same set of respondents represented in them.

Table 8 Debt likelihood results

Characteristic	During the nation-wide lockdown (Phase I)	Post the easing of nation-wide restrictions (Phase II)
Being in rural areas	44 percent more likely	21 percent more likely
Being a woman	9 percent less likely	9 percent less likely
Being able to procure ration	44 percent less likely	13 percent less likely

Source: Authors' calculations based on survey data



Being in rural areas, as compared to urban areas, is observed to result in increased likelihoods of taking on debt during both periods. The coefficients can be read as follows: being in rural areas increases the likelihood of taking on debt by 44 percent and 21 percent respectively during phase I and phase II as compared to being in urban areas. These results, and the decline in likelihood, are in line with priors across both time periods.

For the earlier time period (Phase I): having incurred critical losses in terms of employment and incomes, most of the sample respondents returned to their hometowns (during the nation-wide lockdown) which were situated in rural areas. Since the pre-pandemic earning level of migrant workers across the sample was very low to begin with (therefore decreasing the likelihood of having substantial savings), taking on new debt was the only way to maintain their food security as well as to ensure monetary support for everyday activities.

For the second time period (Phase II): the decrease in likelihood (from 44 percent to 21 percent) can be explained by observing that a) many migrants have decided to stay back in their respective hometowns and work local jobs, b) many of them have been in their rural hometowns from late March/early April 2020 thereby increasing their chances of having

re-established self-sustaining sources of financing and c) many respondents have received rations, pluses and direct benefit transfer which reduced their dependency on external sources of financing (i.e., taking on debt). Furthermore, it has also been documented that the cost of living in rural areas is lower than that of living in urban areas⁵² which contributes directly to the decrease in likelihood of taking on more debt.

Being a women reduces the likelihood of taking on debt during both the periods. Contributing factors to this might be the fact that women might have lower access to credit markets⁵³ and that they historically have had restricted participation in terms of household finances⁵⁴.

The procurement of ration shares a negative relationship with taking on external debt: those who were able to procure ration were 44 percent and 19 percent less likely to take on debt. The channel of impact can be as follows: during times of crises, food consumption emerges as the basic necessity. Being provided with ration reduces the level of exposure that might be prevalent in case of the absence of supply for food items, therefore reducing the need and likelihood of taking on external debt. [The appendix houses detailed regression tables presenting additional results from the debt model].



⁵² See ORF Occasional Paper by Jha titled "Making Affordable Cities a Reality in India" (2019). Accessed April 2021 at https://www.orfonline.org/wp-content/uploads/2019/09/ORF_Occasional_Paper_213_Affordable_Cities.pdf

⁵³ Rajeev, Vani and Bhattacharjee (2011). Accessed April 2021 at <https://www.jstor.org/stable/23017852>

⁵⁴ See the literature section of Sharma and Kota (2019). Accessed April 2021 at <https://ro.uow.edu.au/aabfj/vol13/iss3/7/>

5.2: Outcome - Food security

The consumption of food, as noted in the previous sections, was impacted negatively due to the first wave of the COVID-19 pandemic but recovered thereafter post the easing of nation-wide restrictions. These trends prompted the construction of a variable called food security where individuals who reported being able to

consume three meals or greater were regarded as food secure (increment) while those that were consuming two or less than two meals were not food secure (base). Table 9 presents the likelihood results from the food security model (with similar interpretations as the last model).

Table 9 Food security likelihood results		
Characteristic	During the nation-wide lockdown (Phase I)	Post the easing of nation-wide restrictions (Phase II)
Being a woman	18 percent less likely	16 percent more likely
Being able to procure ration	9 percent more likely	1 percent more likely

Source: Authors' calculations based on survey data

Being a woman has a reversing relationship with food security over time. During the nation-wide lockdown, women were 18 percent less likely to be food secure. This can be explained by observing that women have been found to shoulder the additional responsibility of household chores during the pandemic in addition to incurring critical job losses. Coupled with the fact that the sample records high household dependence, a narrative of women being at the forefront of the receiving end of reduced overall food consumption in the household explains this result to an extent. Anecdotal evidence supports this channel of impact. However, post the easing of restriction,

factors such as more women getting back into the workforce and being self-employed have led to a reversal in this trend. This underscores the importance of (income and decision-making) independence in maintaining food security for women migrant workers.

Being able to procure ration is linked to higher likelihoods of enjoying food security. This is expected and can be explained by noting that procurement of ration leads to an expansion of the food budget boundary for household therefore leading to an increase in the likelihood of higher food security. [The appendix houses detailed regression tables presenting additional results from the food security model].

Key takeaways: Associations between characteristics and outcomes reveal important aspects vis-à-vis the impact of events (such as the first wave of COVID-19) and inform the development of effective interventions. These results can help guide a deeper understanding of the cross-cutting impact of the pandemic and, therefore, assist in the construction of interventions that are geared towards mitigation and preventing future losses.



CHAPTER 6 POLICY ASPECTS AND CONCLUSION

To shed light on the plights of migrant workers in India and to inform its programmatic interventions in light of the first wave of COVID-19, UNDP India studied migrant workers across six Indian states in two phases. The first phase consisted of a rapid assessment to gauge the depth of the multi-domain impact of the first wave and to understand the immediate needs of the migrant population. The second phase was a follow-up evaluation to highlight the medium-term impact of the first wave and to inform recovery paths going forward. This section highlights some relevant policy aspects of the results presented in this report.

It was found that more than half of the sample respondents did not migrate post the easing of nation-wide restrictions. Instead, they chose to participate in local employment opportunities and in agriculture. Local employment at the source (native hometowns) has emerged as a common denominator among those looking to acquire a new job or starting their business or engaging in farm-related activities. This shift toward local opportunities underlines the need for an increased focus on the localized job creation mechanisms to meet growing demand (especially rural demand). It also underscores the requirement of a concentrated effort in skill-mapping so as to maximize workforce participation without delay and ensure efficient allocation of public resources.

To this end, existing local job providing platforms, such as the MGNREGA, can be strengthened at the source in terms of increasing the number of job days, relaxing limits on the kind of work that can be undertaken within the scheme and re-visiting the ceiling on number of workers from a household. Furthermore, an increase in outreach (at the panchayat/block level) can inform potential workers of availability of opportunities and ensure their enrolment into the local employment generating mechanisms.

Adapting to changing levels of technology in the workspace is another component that is likely to prove critical in shaping the future workforce. A basic shift in thinking about and carrying out training and skilling can act as an instrument in balancing and integrating the current working capacities of the workforce with future opportunities. Assimilating best practices from manual work, such as those in agriculture, along with technological solutions to existing problems is likely to pave the way for future growth of the economy, especially in rural areas.

Further, these changes in curricula must be enacted not only for the current workforce, but for future workers as well. Grooming future generations for an evolving work environment must begin from an early age and at an early point in time in their educational journey. This integration will require a significant amount of monetary as well as intellectual investment from both public and private players.

In addition to shifting trends in employment and skilling, a key feature of migration in India has been its relation with the rural-urban divide. As noted above, most migrants come from rural areas and travel to urban spaces in search of work. To optimize this dynamic, barriers to movement and job transition can be reduced by introducing formal employment frameworks that incentivise both the worker and the firms that are wanting to employ them. Measures such as the formalization of job contracts as per government norms can not only ensure greater transparency among the workers and employers but also act as a bridge to overcome the existing data issues and prevent labor exploitation.

Results on social protection from this study (and the broader literature) assert its importance in the protection of vulnerable populations like the migrant community. Provision of ration, pluses and direct benefit transfers have played an indispensable role in helping migrants cope with the impact of the first wave of the COVID-19 pandemic. To this effect, the

call for 'One Nation, One Ration' is a positive step in the universalization of food security. Other such mechanisms that allow faster, easier, widespread, and more secure access to essentials during emergencies need to be strengthened and brought to the attention of the vulnerable. The portability of such measures – across villages, districts, towns, cities, and states needs to be ensured so that continued support can be accessed by those requiring it, irrespective of their location.

On the other hand, the pandemic has also exposed shortcomings of the current architecture (one such instance was that of restrictions in gaining access to rations while being away from one's hometown). Tackling these deficiencies is likely to result in increased and sustained support to migrants in case of further shocks. Furthermore, existing low levels of public health insurance need to be reversed and a higher proportion of migrants have to be brought under the ambit of such schemes. This will not only reduce the out-of-pocket expenditure on health by these individuals, but also lead to enhanced coverage for a range of diseases therefore leading to a healthier (and more productive) workforce. The alleviation of

these limitations can prove beneficial to the economic, and social welfare of vulnerable populations.

On a more fundamental level – increasing investments in education and women's participation in the workforce can prove to be critical in expediting the ongoing recovery. These interventions have been noted to have effects not only on the concerned individual in terms of greater job security, higher pay, higher food security and upward social mobility, but also transitional effects especially on children in migrant households.

Finally, the lack of reliable data has acted as a key hindrance in the design and implementation of various interventions across the public and private sphere. The construction and maintenance of data structures on issues such as migratory patterns, access to social protection, skills mapping and health and food security can act as a harbinger of positive and progressive change for the development of policy. This will not only benefit the migrant population in terms of increased assistance from public and private bodies, but also help authorities in deploying targeted interventions and reduce leakages.

By striking a balance between short term goals such as provisions of local employment and skill training and long-term aspirations such as putting into action a more efficient and equitable framework regulating work in the informal sector, governments and policymakers can expedite recovery and also initiate broader dialogues concerning the welfare of people on the move.



REFERENCES

- Assaf, Al Ghazi and Malki, Al Abdullah M. 2014. **“Modelling the Macroeconomic Determinants of Workers’ Remittances: The Case of Jordan”**, International Journal of Economics and Financial Issues.
- BBC News. 2020. **“Covid: India sees world’s highest daily cases amid oxygen shortage”**. 22 April.
- Bhagat, R.B., Reshmi R.S., Sahoo, Harihar, Roy, Archana K. and Govil, Dipti. 2020. **“The COVID-19, Migration and Livelihood in India”**, International Institute for Population Sciences.
- Dandekar, Ajay and Ghai, Rahul. 2020. **“Migration and Reverse Migration in the Age of COVID-19”**, Economic and Political Weekly, Vol. 55, Issue No. 19.
- Das, Surajit and Farooque, M.U. 2020. **“80 percent Bihar Migrant Workers in Delhi-NCR Had Zero Income in April-May”**, News Click.
- Dhawan, Bulbul. 2021. **“COVID-19 impact: Coronavirus led to a volatile employment trend throughout 2020.”** 01 April, Financial Express.
- Dutta, Sumi Sukanya. 2019. **“India’s public expenditure on health less than Lower Income Countries: Government data”**, The New Indian Express.
- Gram Vikas and The Centre for Migration and Inclusive Development. 2020. **“Impact of COVID-19 Lockdown on Migrant Labourers from Kalahandi, Odisha”**. India.
- ILO (International Labour Organization) and ADB (Asian Development Bank). 2020. **“Tackling the COVID-19 youth employment crisis in Asia and the Pacific.”**
- ILO (International Labour Organization). 2020. **“ILO Monitor: COVID-19 and the world of work. 5th edition”**. Briefing Note, 30 June.
- ILO (International Labour Organization). 2020. **“ILO: As job losses escalate, nearly half of global workforce at risk of losing livelihoods”**, Press Report, April 29.
- IMF (International Monetary Fund). 2020. **“The Great Lockdown: Worst Economic Downturn Since the Great Depression.”** Blog post by Gita Gopinath, Economic Counsellor and Director of the Research Department. April 14.
- IMF (International Monetary Fund). 2020a. **“IMF Managing Director Kristalina Georgieva’s Statement Following a G20 Ministerial Call on the COVID 19 Emergency.”** Press Release 20/98, 23 March.
- IMF (International Monetary Fund). 2020e. **“Confronting the Crisis: Priorities for the Global Economy.”** Speech by Kristalina Georgieva, IMF Managing Director. International Monetary Fund, Washington, DC.
- IOM (International Organization for Migration), United Nations Migration. Migration Data Portal, Global Migration Data Analysis Centre.
- IOM (International Organization on Migration, United Nations Migration). 2020. **“World Migration Report 2020”**. Geneva, Switzerland.
- Iyer, Madhunika. 2020. **“Migration in India and the impact of the lockdown on migrants”**. PRS Legislative Research. India.
- Jha, Abhishek and Kawoosa, Mohammed Vijdan, 2019. **“What the 2011 census data on migration tells us”**, Hindustan Times. India.
- Jha, Ramanath. 2019. **“Making Affordable Cities a Reality in India”**. Occasional paper, Observer Research Foundation (ORF).
- Kakvi, Kashif. 2020. **“MP: Survey Says 54 percent Migrant Labourers from the State do not Wish to Re-Migrate”**, Vikas Samwad. India.
- Kochhar, Rajesh. 2021. **“In the pandemic, India’s middle class shrinks and poverty spreads while China sees smaller changes.”** 18 March, Pew Research Centre.
- Lahoti, Rahul, Abraham, Rosa, Kesar, Surbhi, Nath, Paaritosh and Basole, Amit. 2020. **“COVID-19 Livelihoods Survey”**, Azim Premji University. India.
- Maiti, Dibyendu and Sen, Kunal. 2010. **“The Informal Sector in India: a means of Exploitation or Accumulation”**, Journal of South Asian Development, Vol 5, Issue 1, page 1-13.
- Mawii, Zothan and Eckstein, Iona. 2020. **“Migrant Workers in Goa: Survey Findings and Analysis”**, Tandem Research. India.

Mukhra, Richa, Krishnan, Kewal and Kanchan, Tanuj. 2020. **“COVID-19 Sets off Mass Migration in India”**, Archives of Medical Research, Vol. 51, Issue 7, pp. 736-738.

Mukul, Pranav and Magazine, Anchal. 2020. **“In lockdown, volatility marks price rise in potatoes, onions, pulses and sugar.”** 04 April, The Indian Express.

Office of the Registrar General & Census Commissioner, India, Ministry of Home Affairs, Government of India. **“Data on Migration 2011.”** Migration Tables, Census 2011.

PIB (Press Information Bureau) and Ministry of Consumer Affairs, Food & Public Distribution, Government of India. 2020. **“PM announces extension of Pradhan Mantri Garib Kalyan Ann Yojana till November.”** 30 June.

PIB (Press Information Bureau) and Ministry of Electronics and IT. 2020. **“Aarogya Setu is now open source.”** 26 May.

PIB (Press Information Bureau) and Ministry of Rural Development, Government of India. 2020. **“Implementation of MGNREGS during COVID-19 Pandemic.”** 15 September.

PIB (Press Information Bureau) and National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India. 2020. **“Estimates of Gross Domestic Product for the First Quarter (April-June) 2021-21.”** 31 August.

Press Trust of India. 2020. **“Two-thirds of migrants have returned to cities or wish to do so: Survey”**. Financial Express. India.

Radhakrishnan, Vignesh, Sen, Sumant and Singaravelu, Naresh. 2020. **“Data | India's GDP was on a downward slope even before COVID-19 wreaked havoc.”** 02 September, The Hindu.

Rajeev, Meenakshi, Vani, B.P. and Bhattacharjee, Manojit. 2011. **“Credibility of Equal Access to Credit: Does Gender Matter?”**, Economic and Political Weekly, Vol. 46, Issue 33, pp. 76-79.

Sapkal, Shandilya and Majumdar et al. 2020. **“Workers in the time of COVID-19”**. Action Aid. India.

Sharma, Manish, and Kota, Hima Bindu. 2019. **“The Role of Working Women in Investment Decision Making in the Family in India”**, Australasian Accounting, Business and Finance Journal, Vol. 13, Issue 3, pp. 91-110.

Sumner, Andy, Chris Hoy, and Eduardo Ortiz-Juarez. 2020. **“Estimates of The Impact of COVID-19 On Global Poverty”**, WIDER Working Paper 2020/43. Helsinki, UNU-WIDER.

The World Bank. 2020. **“The Global Economic Outlook During the COVID-19 Pandemic: A Changed World”**.

The World Bank. 2020. **“COVID-19 to Plunge Global Economy into Worst Recession since World War II”**. Press Release. June 8, Washington.

The World Bank. 2020. **“World Bank Predicts Sharpest Decline of Remittances in Recent History”**. Press Release. April 22, Washington.

Trivedi, Divya. 2020. **“Survey finds 94 per cent of construction workers ineligible for funds transfer”**, The Hindu Frontline, India.

Tyagi, Malvika. 2020. **“How Much Do We Really Know About the Migrants Who Shuttle Between Bharat and India?”**. The Wire. India.

UNCTAD (United Nations Conference on Trade and Development). 2011. **“Impact of Remittances on Poverty in Developing Countries”**. New York and Geneva.

UNDESA (United Nations Department of Economic and Social Affairs). 2013. **“Cross-national comparisons of internal migration: An update on global patterns and trends”**, Technical Paper No. 2013/1. New York.

UNDP (United Nations Development Programme). 2020. **“COVID-19 and Human Development: Assessing the Crises, Envisioning the Recovery”**, 2020 Human Development Perspectives. New York

UNICEF (United Nations Children's Fund). 2021. **“COVID-19: Schools for more than 168 million children globally have been completely closed for almost a full year, says UNICEF.”** Press Release. 10 March, New York.

United Nations. 2020. **“COVID-19 and People on the Move”**. Policy Brief. 3 June.

Venugopal, Arya. 2020. **“Voices of the Invisible Citizens”**, Jan Sahas. New Delhi, India. Mawii, Zothan and Eckstein, Iona. 2020. **“Migrant Workers in Goa: Survey Findings and Analysis”**, Tandem Research. India.

WHO (World Health Organization). 2020. **“WHO Director-General's opening remarks at the media briefing on COVID-19”**. 10 April.

World Health Organization. 2020. **“WHO COVID 19 Disease (COVID-19) Dashboard”**.



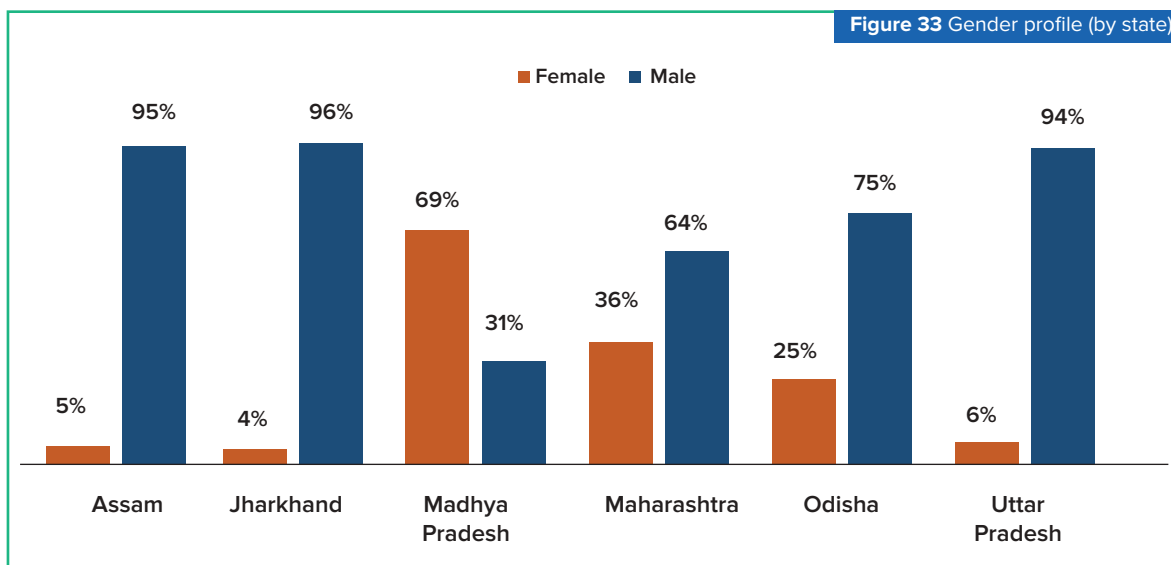
APPENDIX

Table 10 List of agencies

Focus State	Name of the Agency	Address
Assam	Jeevan Initiative	Jeevan Initiative, 4, Pub Sarania Bylane 5, Guwahati - 781003, Assam, India.
Jharkhand	Change Alliance	S J House, D 25, D South Extension Part II, New Delhi – 110049, India.
Madhya Pradesh	Action for Social Advancement	Action for Social Advancement, "The Farmers House", Plan-C, Tulip Greens, Vill. Mahabadia, Kolar Road, Bhopal - 462042, Madhya Pradesh, India.
Maharashtra	Shaishavi Project Consultants Pvt Ltd	Shaishavi Project Consultants Pvt. Ltd., 401, Opel Avenue, E - 8, Golmohar Colony, Bhopal - 462039, Madhya Pradesh, India.
Odisha	Kalinga Institute of Social Sciences	Kalinga Institute of Social Sciences, KIIT Campus-14, KIIT University, Bhubaneswar - 751024, Odisha, India.
Uttar Pradesh	Indus Action Initiative [Phase I] and Shaishavi Project Consultants Pvt Ltd. [Phase II].	Indus Action Initiatives, G-7 2nd Floor, Lajpat Nagar-3, South Delhi, New Delhi - 110024, New Delhi, India. Shaishavi Project Consultants Pvt. Ltd., 401, Opel Avenue, E - 8, Golmohar Colony, Bhopal - 462039, Madhya Pradesh, India.

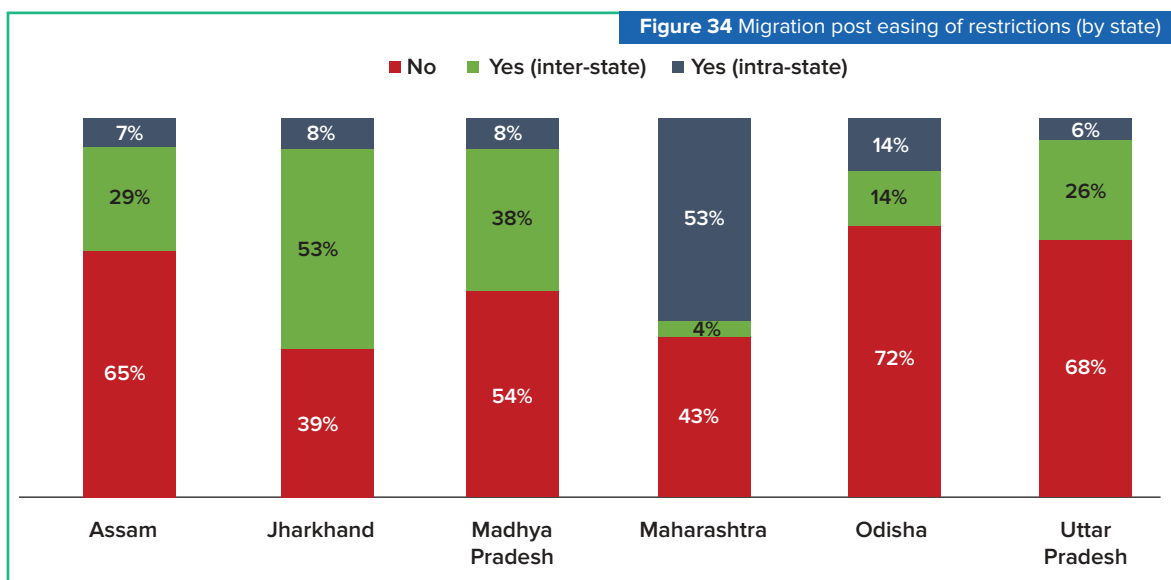
A.1: Supplementary results

A.1.1. A state-wise breakdown of gender profiles highlights that the sample is more male dominated in Assam and Jharkhand (figure 33). However, a relatively greater degree of women's representation is observed in Madhya Pradesh.



Source: Authors' calculations based on survey data

A.1.2. Migration post the easing of restrictions was significantly different across states (figure 34). This is particularly true for respondents from Jharkhand, who report 53 percent interstate migration and individuals from Maharashtra, who report 53 percent intrastate migration.



Source: Authors' calculations based on survey data

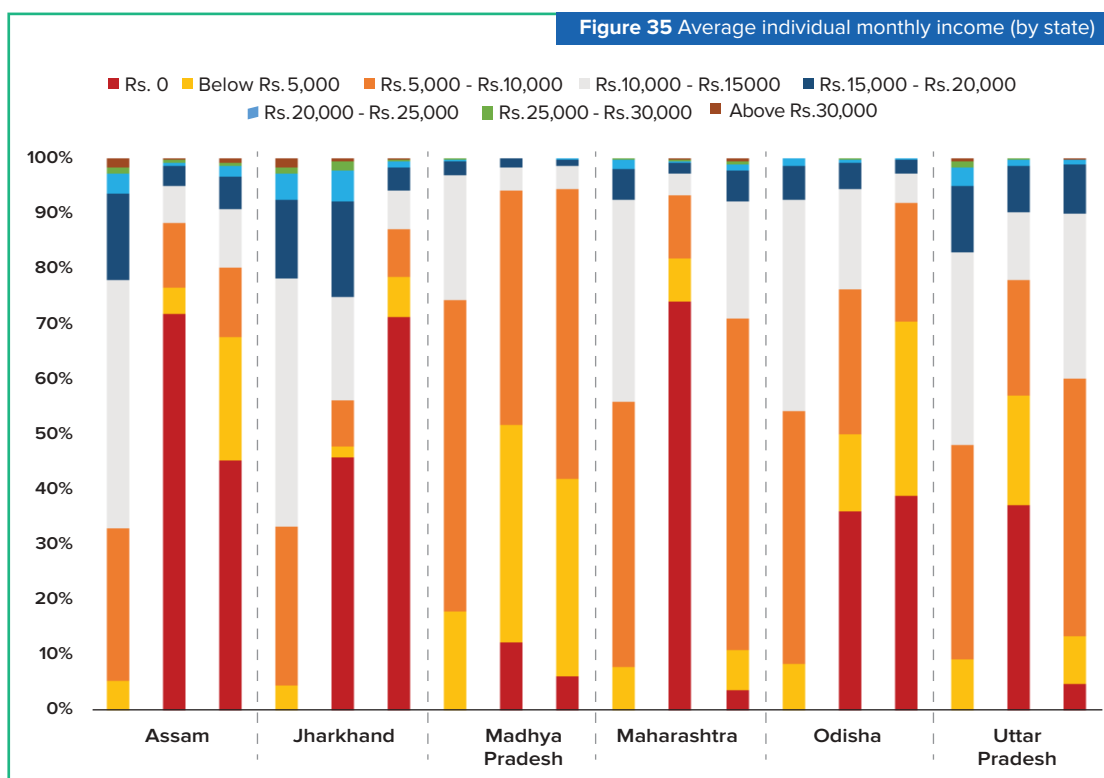


A.1.3 Table 10 presents a state and gender breakdown of the re-employment trends post the easing of nation-wide restrictions.

Table 11 Employment post easing of nation-wide restrictions (by state and gender)		
State	Percentage of women employed	Percentage of men employed
Assam	53 percent	56 percent
Jharkhand	50 percent	51 percent
Madhya Pradesh	71 percent	80 percent
Maharashtra	58 percent	62 percent
Odisha	22 percent	30 percent
Uttar Pradesh	41 percent	44 percent

Source: Authors' calculations based on survey data

A.1.4 A state-wise slicing of average monthly income proportions across the three time periods is represented by figure 35. Each state has three bars: one for pre-pandemic levels (leftmost), one for during the nation-wide lockdown (middle) and one for post the easing of nation-wide restrictions (rightmost). The states from left to right are Assam, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, and Uttar Pradesh.



Source: Authors' calculations based on survey data

The figure above highlights that individuals in Assam and Maharashtra were impacted more severely as compared to other states during the first wave of the COVID-19 pandemic indicated by the length of the red proportions in their respective (middle) bars. Several deviations can be noted from figure 35 for the states of Jharkhand, Madhya Pradesh, and Odisha.

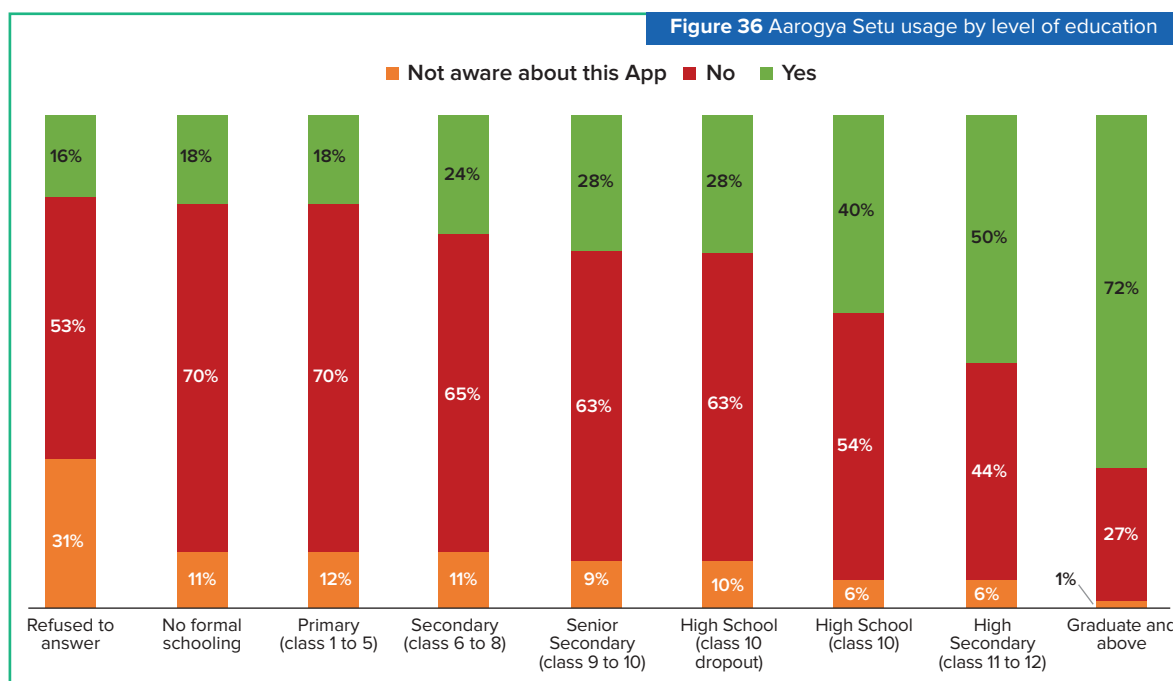
The deviations of Madhya Pradesh, which observes low impact in the middle bar and even lower in the rightmost bar, can be contextualized by observing the following:

1. Only 15 percent individuals from the state reported that they had lost their jobs as compared to the sample average of 60 percent during the nation-wide lockdown. There also exists a substantial difference in the proportion of individuals reporting receiving partial wages and having no impact on jobs between Madhya Pradesh and other survey states during this time. These factors contribute the shorter length of the red bar for the state during the nation-wide restrictions.
2. Since the red bar during the nation-wide lockdown is itself very low, the reduction of it to even lower levels post the easing of restrictions is also natural.

Jharkhand and Odisha, on the other hand, note deteriorating conditions of incomes even post the easing of nation-wide restrictions. For Jharkhand, factors contributing to this trend include a) greater than sample average loss in employment due to the first wave of COVID-19 pandemic, b) lesser re-employment in terms of jobs and reopening of businesses post the easing of restrictions, and c) significantly higher level of interstate migration with 44 percent of those migrating reporting being unemployed post the easing of restrictions.

Explaining a similar trend for Odisha are the first two points (in the case of Jharkhand) and a greater than average proportion of individuals from the state not migration post the easing of nation-wide restrictions leading to a higher opportunity cost.

A.1.5. The usage of the Aarogya Setu app is related on the educational level of the individual (figure 36). This highlights the indirect impacts of a higher level of education on access to critical information in times of crises.



Source: Authors' calculations based on survey data



A.2: Additional results

A.2.1. A majority (61 percent) reported being sole earning individuals in their families (women: 47 percent; men: 66 percent) during Phase I. This is worrying considering two factors. First, migrants have been documented to be employed mostly in the informal sector with minimum job protection, un-protected wages, and high uncertainty. Furthermore, the econometric model from this study indicates that being the sole earning member of the household is positively linked to increasing debt taking behaviour. A combination of these two factors contributes to the cyclical and severity of the debt cycle that migrants across the country have faced. Second, findings also note high household dependence during the pandemic in the sample implying a greater slicing of the pie therefore putting more economic strain on sole earners.

A.2.2. The mode of receiving income observed marginal shifts with the proportion of individuals receiving cash transfers reducing from 69 percent (Phase I, n = 10,023) to 61 percent (Phase II, n = 1994⁵⁵) and those receiving bank transfers increasing from 29 percent to 37 percent. Digital payment as a mode of paying incomes remained occasional with only 2 percent individuals reporting receiving incomes through mediums such as Paytm and other applications post the easing of nation-wide restrictions.

A.2.3. A US dollar conversion for the average monthly income categories is presented in table 12:
Exchange rate used: 1 US\$ = 72.41 INR [dated 21 March 2021]

Income bracket in INR	Income bracket in USD
INR 0	US\$ 0
Below INR 5,000	Below US\$ 69.05
Between INR 5,000 and 10,000	Between US\$ 69.05 and US\$ 138.10
Between INR 10,000 and 15,000	Between US\$ 138.10 and US\$ 207.15
Between INR 15,000 and 20,000	Between US\$ 207.15 and US\$ 276.20
Between INR 20,000 and 25,000	Between US\$ 276.20 and US\$ 345.26
Between INR 25,000 and 30,000	Between US\$ 345.26 and US\$ 414.31
Above INR 30,000	Above US\$ 414.31

Source: Publicly available exchange rates

A.2.4. The result on the need of external financing must be seen in tandem with the loss of employment and incomes. This loss not only prompted the respondents to take on external debt or use their savings, but also prevented them from returning to the status quo. Already lower earnings accentuate this problem by inducing a cycle of debt consisting of lower earning, loss of livelihood, external borrowing, lower earning and so on.

⁵⁵ The reduction in sample size is due to various factors: a) many individuals were not employed therefore, not receiving incomes post the easing of nation-wide restrictions, b) more people moved into the self-employed and unpaid family work category post lockdown therefore, not being eligible for this question and c) a relatively smaller proportion of those surveyed refused to answer the question.

A.3: Predictive analysis: variable definitions

A.3.1. Debt was generated by coding the use of personal savings during the pandemic—as a form of monetary support—as the base (0) and any kind of monetary borrowing from external sources as the increment (1). Any individual falling the base category relied only the usage of his/her savings while those in the increment category reported borrowing some amount from external sources.

A.3.2. Food security was coded as an incremental variable where the base category (0) encapsulated any individual that was consuming 2 or lesser meals per day. The increment took value 1 when the number of meals consumed either equalled or was greater than 3.

A.4: Predictive analysis: regression tables

Tables 13 and 14 present the results from the logistic regression models. Odds ratios are reported along with stars representing the levels of significance (** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$). Two models are run for each outcome variable: one without and one with state fixed effects (sfe). Both models report robust standard errors.

Characteristic	Debt	Debt (with sfe)	Food security	Food security (with sfe)
Gender = 0, Female	0.86** (0.05)	0.91 (0.06)	0.74*** (0.05)	0.82*** (0.06)
Ration card type = 2, above poverty limit	1.43*** (0.12)	1.30*** (0.11)	1.23** (0.10)	1.30*** (0.11)
Urban/Rural = 1, Rural	1.40*** (0.10)	1.44*** (0.11)	0.68*** (0.05)	0.73*** (0.06)
What is your current level of education? = 0, No formal schooling	1.41*** (0.17)	1.50*** (0.19)	0.70*** (0.09)	1.03 (0.13)
Did any member of the household fell sick during the pandemic? = 1, Yes	1.63*** (0.17)	1.60*** (0.16)	0.59*** (0.07)	0.72*** (0.09)
Did you feel stress during the pandemic = 1, Yes	1.27*** (0.07)	1.45*** (0.08)	0.75*** (0.04)	0.60*** (0.04)
Direct Benefit Transfer recipient = 1, Yes	1.33*** (0.07)	1.41*** (0.08)		
Are you covered under any insurance protection for the family? = 1, Yes	0.69*** (0.04)	0.65*** (0.04)		
Procurement of ration during pandemic = 1, Yes	0.57*** (0.04)	0.56*** (0.04)	1.07 (0.07)	1.09 (0.07)
Were you working in the month of February 2020? = 1, Yes	1.08 (0.11)	1.07 (0.11)	1.14 (0.14)	1.02 (0.13)
Could you work in the first half of March 2020? = 0, No	0.80*** (0.06)	0.85** (0.07)	1.00 (0.09)	1.16* (0.10)
Monthly income in February 2020 = 1, Below INR 5,000	3.55*** (1.23)	3.30*** (1.24)	0.91 (0.30)	0.72 (0.24)
Monthly income in February 2020 = 2, INR 5,000 – INR 10,000	2.73*** (0.92)	2.63*** (0.97)	0.72 (0.23)	0.58* (0.18)



Characteristic	Debt	Debt (with sfe)	Food security	Food security (with sfe)
Monthly income in February 2020 = 3, INR 10,000 – INR 15,000	2.33** (0.79)	2.29** (0.84)	0.68 (0.22)	0.55* (0.18)
Monthly income in February 2020 = 4, INR 15,000 – INR 20,000	1.77* (0.61)	1.75 (0.65)	0.74 (0.24)	0.62 (0.20)
Monthly income in February 2020 = 5, INR 20,000 – INR 25,000	1.08 (0.40)	1.02 (0.41)	1.24 (0.43)	1.11 (0.39)
Monthly income in February 2020 = 6, INR 25,000 – INR 30,000	0.96 (0.43)	0.95 (0.44)	1.30 (0.56)	1.08 (0.46)
Jharkhand dummy		2.98*** (0.31)		0.62*** (0.06)
Madhya Pradesh dummy		1.45*** (0.16)		0.41*** (0.05)
Maharashtra Dummy		1.85*** (0.20)		1.97*** (0.21)
Odisha dummy		1.31** (0.15)		0.35*** (0.04)
Uttar Pradesh dummy		2.50*** (0.24)		0.86* (0.08)
How did you survive at the time of lockdown? = 2, Borrowed money			0.57*** (0.05)	0.59*** (0.05)
How did you survive at the time of lockdown? = 3, Both			0.62*** (0.03)	0.64*** (0.04)
Constant	0.90 (0.68)	0.41 (0.26)	1.64 (0.82)	1.79 (0.94)
Observations	8,110	8,110	8,110	8,110

Source: Authors' calculations based on survey data

Table 14 Debt and food security regression models (Phase II)				
Characteristic	Debt	Debt (with sfe)	Food security	Food security (with sfe)
Gender = 0, Female	1.27*** (0.08)	0.91 (0.07)	0.78*** (0.05)	1.16** (0.08)
Ration Card = 1, BPL Card	1.17** (0.09)	1.09 (0.09)	0.83** (0.06)	0.80** (0.07)
Ration Card = 2, APL Card	1.40*** (0.13)	1.17* (0.11)	0.97 (0.09)	1.06 (0.10)
Ration Card = 3, Don't know	1.06 (0.23)	1.14 (0.26)	0.57*** (0.12)	0.67* (0.15)

Characteristic	Debt	Debt (with sfe)	Food security	Food security (with sfe)
What area are you currently situated in? = 0, Rural	1.33*** (0.08)	1.21*** (0.08)	1.18*** (0.07)	0.97 (0.07)
Post income bracket = 1, 0	9.11*** (5.72)	8.11*** (4.78)	1.03 (0.44)	0.51 (0.28)
Post income bracket = 2, Less than INR 5,000	3.87** (2.43)	3.71** (2.19)	0.59 (0.26)	0.48 (0.26)
Post income bracket = 3, Between INR 5000 – INR 10000	5.98*** (3.75)	5.89*** (3.45)	0.57 (0.25)	0.96 (0.52)
Post Income Bracket = 4, Between INR 10000 and INR 15000	4.68** (2.94)	5.24*** (3.08)	0.76 (0.33)	1.34 (0.72)
Post income bracket = 5, between INR 15,000 – INR 20000	2.80 (1.78)	3.12* (1.86)	1.62 (0.72)	2.57* (1.43)
Post income bracket = 6, Between INR 20,000 – INR 25,000	3.68* (2.48)	3.69** (2.37)	1.51 (0.79)	1.85 (1.17)
Post income bracket = 7, Between INR 25,000 – INR 30,000	1.21 (1.07)	0.96 (0.90)	0.94 (0.66)	0.55 (0.45)
Migration post easing of restrictions = 1, Yes (interstate)	2.70*** (0.19)	2.48*** (0.19)	0.79*** (0.05)	0.73*** (0.05)
Migration post easing of restrictions = 2, Yes (Intrastate)	3.23*** (0.27)	2.25*** (0.20)	0.54*** (0.04)	0.53*** (0.05)
What was the impact of the lockdown on your wages/income? = 0, Lost job	3.05*** (0.40)	4.04*** (0.57)	0.73*** (0.08)	0.59*** (0.08)
What was the impact of the lockdown on your wages/income? = 1, Had to close shop/business	4.63*** (0.67)	4.80*** (0.71)	0.70*** (0.09)	0.60*** (0.09)
What was the impact of the lockdown on your wages/income? = 2, Did not lose job but did not get any wages	2.96*** (0.42)	3.51*** (0.51)	1.24* (0.15)	1.01 (0.14)
What was the impact of the lockdown on your wages/income? = 3, Received partial wages	11.49*** (1.99)	9.52*** (1.61)	0.79* (0.11)	0.73** (0.11)
Did you receive any additional food grains post lockdown? = 1, Yes	0.91 (0.07)	0.87* (0.07)	0.72*** (0.05)	1.01 (0.08)
Have you received pulses as announced by the government? = 1, Yes	0.88* (0.07)	0.89 (0.07)	0.55*** (0.04)	0.67*** (0.05)
Did you (or someone from your family) fall sick? = 1, Yes	1.14 (0.16)	1.53*** (0.22)	1.06 (0.21)	1.15 (0.25)
What kind of work are you currently employed in? = 0, Unpaid family work	0.89 (0.14)	0.83 (0.13)	1.23* (0.14)	1.16 (0.14)
What kind of work are you currently employed in? = 1, Own account workers	1.13 (0.22)	0.99 (0.20)	0.72** (0.11)	0.77 (0.13)
What kind of work are you currently employed in? = 2, Self-employed	0.91 (0.14)	0.73* (0.12)	0.74** (0.09)	0.88 (0.11)



Characteristic	Debt	Debt (with sfe)	Food security	Food security (with sfe)
What kind of work are you currently employed in? = 3, Salaried/Employed	0.49*** (0.06)	0.39*** (0.05)	1.52*** (0.14)	1.48*** (0.15)
What kind of work are you currently employed in? = 4, Casual worker	0.66*** (0.08)	0.51*** (0.07)	1.08 (0.09)	1.10 (0.10)
Jharkhand dummy		2.11*** (0.24)		0.38*** (0.05)
Madhya Pradesh dummy		2.31*** (0.31)		0.07*** (0.01)
Maharashtra dummy		2.88*** (0.41)		0.05*** (0.01)
Odisha dummy		1.00 (0.11)		0.45*** (0.05)
Uttar Pradesh dummy		0.56*** (0.07)		0.05*** (0.01)
Are you still dependent on your savings/ borrowed money? = 1, Dependent on borrowed money only			1.23** (0.10)	0.98 (0.09)
Are you still dependent on your savings/ borrowed money? = 2, Dependent on both			2.03*** (0.13)	1.99*** (0.14)
Are you still dependent on your savings/borrowed money? = 3, Not dependent			2.02*** (0.16)	1.70*** (0.15)
Constant	0.02*** (0.02)	0.02*** (0.02)	3.02 (2.24)	19.61*** (18.53)
Observations	8,110	8,110	8,110	8110

Source: Authors' calculations based on survey data





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