Chapter 9
Economic Lockdowns and Challenges of Rural Livelihood: Indian Scenario

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Abstract India is severely affected by the COVID-19 pandemic worldwide, with the number of confirmed cases and death cases increase at an alarming rate. The COVID-19 pandemic and associated lockdowns affected commercial establishments, education, entertainment, industry, tourism, transport, agriculture, migrants, unemployment, food security, GDP, and recession of the country’s economy. Lockdowns in different phases caused a sharp rising of unemployment, stress on supply chains, and the poor’s livelihood challenges in India. The present study will address the present situation of the COVID-19 pandemic, lockdowns, and its response to migrant workers, smallholder farmers, the landless workers, and daily wage labourers from the informal sectors and their livelihood crisis. The livelihood crisis differs from one region to another due to regional differences in resource endowment, unemployment, and agrarian distress in India. About 91% of the total of 465 million workers are engaged in informal sectors in India. In India, severely COVID-19 mostly affected states are Maharashtra, Delhi, Gujarat, Tamilnadu, Uttar Pradesh, West Bengal, Rajasthan, Telangana, and Karnataka. Out of 739 districts in India, 139 reported a large number of confirmed cases, 300 reported only a few cases, and 300 districts are not affected by COVID-19. Already lockdowns have created much pressure on the Indian economy and invited livelihood challenges to rural poor. The prolonged lockdowns may further cause the country’s income erosion and may push the poor into extreme livelihood crises and poverty.

Keywords COVID-19 · Pandemic · Lockdown · Informal sectors · Income erosion · Rural livelihood crisis

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9.1 Introduction

Scientists first identified a human coronavirus in 1965, which caused a common cold. Later on, researchers found a group of same human and animal viruses and named them after their crown-like appearance. Researchers found that seven coronaviruses can infect human bodies. One of them that caused the SARS epidemic in Southern China in 2002, which spread out rapidly to 28 countries, infecting more than 8000 people by July 2003 and raising the death toll of 774. This coronavirus caused fever, headache, and respiratory problems such as cough and shortened breath. Lam et al. (2020) identified SARS-CoV-2-related coronavirus in Malayan pangolins. Lau et al. (2010) and Luk et al. (2019) studied epidemiology, evolution, and Phylogeny of SARS and SARS-related Rhinolophus bat coronavirus in China. Huang et al. (2020) propounded the chemical features of patients infected with the 2019 novel coronavirus in Wuhan, China. Van Doremalen et al. (2013), Otter et al. (2016), and Lai et al. (2005) opined regarding the survival of SARS-CoV and various healthcare measures to prevent and check the transmission of the virus from human-to-human and other objects.

Scientists have divided coronaviruses into four sub-groupings, called alpha, beta, gamma, and delta. Seven of these viruses can infect people. The four common ones are 229E (alpha); (ii) NL63 (alpha); (iii) OC43 (beta); and (iv) HKU1 (beta). The three less-common ones are MERS-CoV, a beta virus that causes Middle East respiratory syndrome (MERS); SARS-CoV, a beta virus that causes severe acute respiratory syndrome (SARS); and SARS-CoV-2, which causes COVID-19.

The new or ‘novel’ coronavirus disease (COVID-19 or 2019-nCoV) has recently been reported from Wuhan (China), and it has also been reported in Thailand, Japan, South Korea, and the USA (WHO). This COVID-19 has caused many fatal cases. Hu et al. (2018) and Zhou et al. (2020) opined that the 2019-nCoV is most closely related to 2 severe acute respiratory syndromes (SARS)-like CoV sequences that were isolated in bats during 2015–2017, suggesting that the bats’ CoV and the human 2019-nCoV share a recent common ancestor. Lau et al. (2020) and Huang et al. (2020) suggested that seventeen years later, the severe acute respiratory syndrome (SARS)-like epidemic, an outbreak of pneumonia, presently which is called coronavirus disease (COVID-19) has been reported in Wuhan, China. A Study Group of the International Committee on Taxonomy of Viruses explored that the causative agent is very rapidly isolated from patients and identified to be a coronavirus and named the virus as severe acute respiratory syndrome coronavirus 2, i.e., SARS-CoV-2 (Gorbalenya et al. 2020). SARS-CoV-2 has spread out all over the world quickly and affected a large number of the human population with a death toll of 4012 by 10 March 2020 (WHO situation report as of 10 March 2020). The SARS-CoV-2 has spread both in China and outside China and infected people worldwide alarmingly, which means that people are unwittingly catching and passing on the coronavirus.

1For details see: https://www.webmd.com/lung/coronavirus-history.
2View more details at: https://www.webmd.com/lung/coronavirus-strains#1.
3Visit: https://academic.oup.com/cid/advance-article-abstract/doi/10.1093/cid/ciaa112/5721420.
This unprecedented and unexpected growing tendency of worldwide transmission is now a pandemic. Riou and Althaus (2020) and Phan et al. (2020) described the pattern of human-to-human transmission of COVID disease from December 2019 to January 2020. The present study aims to demonstrate the temporal and spatial distribution of COVID-19 cases of the world and to suggest some preparedness measures to combat novel coronavirus. The COVID-19 has now affected all the geographical locations of the world.4

9.2 Propagation of COVID-19 or 2019-nCoV or SARS-CoV-2

COVID-19 is now a global threat of the twenty-first century. It may be considered as one of the significant factors which may retard all sorts of socio-economic advancement of all affected nations. COVID-19 is an acronym where ‘CO’ denotes corona, ‘VI’ denotes virus, and ‘D’ denotes disease, and 19 marks the year of occurrences. Coronavirus is a single-stranded RNA virus with a diameter ranging from 80 to 120 nm. The first situation report of WHO as of 20 January 2020 revealed that on 31 December 2019, the WHO China Country Office has been informed of cases of pneumonia unknown etiology detected in Wuhan City of Hubei Province, China. However, the causal agent of the cases was not identified.

On 7 January, the Chinese authorities identified a new type of coronavirus. China, 12 January 2020, shared the genetic sequence of the new virus for countries to develop specific diagnostic kits. The Ministry of Public Health, Thailand reported the first imported case of laboratory-confirmed 2019-novel coronavirus (2019-nCoV OR COVID-19) from Wuhan, China, on 13 January 2020. Subsequently, on 15 January, the Ministry of Health, Labour and Welfare, Japan (MHLW), and on 20 January, the Republic of South Korea reported the cases of the novel coronavirus infections. As of 20 January, only four countries of the world, i.e., China, Thailand, the Republic of Korea, and Japan, were affected by novel coronavirus with the confirmed cases of 282 and a total death toll of 6.

Since then, the number started to increase in different countries of the Western Pacific region, Eastern Mediterranean region, European region, American region, Southeast Asia region, and African Region of the world. On 31 January 2020, 19 countries got affected by COVID-19, and it reached over 24 countries by 5 February, 33 countries by 25 February, 53 countries by 29 February, 85 countries by 5 March, 109 countries by 10 March, and 227 on 07 May. Within a span of 3 and a half months (20 January to 7 May 2020) the number of confirmed cases increased from 282

4The worldwide distribution of COVID-19 depicts that the USA, Italy, France, Spain, UK, Canada, Iran, India, Japan, South Africa, Switzerland, Brazil, Peru, Mexico, Ecuador, Saudi Arabia, Pakistan, China, Egypt, Russian Federation, Turkey, Germany, Belgium, Netherland, Portugal, Sweden, Ireland, Austria, Poland, Romania, Denmark, Indonesia, Republic of Korea, and Philippines are severely affected by COVID-19.
to 3,672,238, and death cases increased from only 6 to worrying 254,045. As of 7 June 2020, there were 6,799,713 confirmed COVID-19 cases and 397,388 death cases worldwide. On 7 July the number of confirmed COVID-19 cases reached 11,500,302, and death cases reached 535,759. As of 16 August, confirmed COVID-19 cases climbed to 21,294,845, and death cases climbed to 761,779. Such an unprecedented increase of COVID-19 cases shocked the whole world. Almost all the countries of the world are severely affected by the COVID-19 pandemic. At present, all the healthcare personals, government, and non-government organizations and the common public must show the solidarity and fight shoulder to shoulder to combat the pandemic (Yoo 2020). Globally, the American region, European region, and the Southeast Asia region are severely affected by COVID-19 in terms of both confirmed and death cases.

## 9.3 Status of COVID-19 in India

At present, India has the largest number of confirmed cases in Asia. It ranks third in regard to COVID-19 confirmed cases in the world after the USA and Brazil. Six major cities, i.e., Mumbai, Delhi, Ahmedabad, Chennai, Pune, and Kolkata, account for about half of all reported cases in India. In India, the total confirmed COVID-19 cases have been increasing rapidly: 1397 confirmed cases on 31 March has reached 50,12,269 on 15 September 2020 (Table 9.1).

There is an increasing trend of confirmed cases since 31 March 2020 to till date (21 August 2020). In the month of May, June and July confirmed cases increased at an alarming rate in India. The death cases increased five times only in the month of May, three times in June, and more than two times in July. Severely affected states in India are Maharashtra, Tamilnadu, Delhi, Gujarat, UP, Karnataka, Telengana, West Bengal, Andhra Pradesh, and Rajasthan (Fig. 9.1). A sharp increase in confirmed cases was started from mid of June in major states of Maharashtra, Tamilnadu, and Delhi. Andhra Pradesh, Karnataka, Uttar Pradesh, and West Bengal revealed a sharp increase in the confirmed cases since mid of July 2020.

### Table 9.1 Confirmed COVID-19 cases and death cases in India

| Date  | Total cases | Total deaths |
|-------|-------------|--------------|
| 31-Mar | 1397        | 35           |
| 30-Apr | 33,610     | 1075         |
| 31-May | 182,143     | 5164         |
| 30-Jun | 566,840     | 16,893       |
| 31-Jul | 1,638,870   | 35,747       |
| 20-Aug | 2,836,925   | 53,866       |
| 15-Sept | 5,012,269  | 82,010       |

*Source* Ministry of Health and Family Welfare, Govt. of India
Fig. 9.1 State-wise confirmed COVID-19 cases and death cases as on 20 August 2020 (Source Ministry of Health and Family Welfare, Govt. of India)
Fig. 9.2 Number of new COVID-19 cases reported on 31 March, 30 April, 31 May, 30 June, 31 July, and 20 August 2020 in different Indian states (Source Ministry of Health and Family Welfare, Govt. of India)

In India, the states of Maharashtra (628,642), Tamilnadu (355,449), Andhra Pradesh (316,003), Karnataka (249,590), Delhi (156,139), Uttar Pradesh (167,510), West Bengal (125,922), and Bihar (112,437) have witnessed a large number of confirmed cases as on 20 August 2020 (Fig. 9.2). Whereas, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Meghalaya, Sikkim, Tripura, Goa, Chhattisgarh, Ladakh, Himachal Pradesh, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Puducherry, and Andaman and the Nicobar Islands are the Indian states and Union territories with comparatively low infection and mortality caused by the disease. The statistics of infection and death on 20 August 2020 reveals that Tamilnadu, Karnataka, Andhra Pradesh, Delhi, Uttar Pradesh, and West Bengal are severely affected. However, all these states were not so severely affected around two months earlier, i.e., as of 30 June 2020. Another one-month earlier, i.e., during early May, death cases had been mostly concentrated in three Indian states—Maharashtra, Gujarat, and Delhi (Fig. 9.3).

9.4 COVID-19 and Preparedness Measures

Two measures are chiefly taken into account globally to combat COVID-19: clinical measures and non-pharmaceutical measures. WHO has developed interim guidance for laboratory diagnosis, advice on the use of masks during home care and in health-care settings in the context of COVID-19 outbreak, clinical management, infection
Fig. 9.3 Number of new COVID-19 death cases reported on 30 April, 31 May, 30 June, 31 July, and 20 August (Source Ministry of Health and Family Welfare, Govt. of India)

prevention and control in healthcare settings, home care for patients with suspected novel coronavirus, risk communication, and community engagement and Global Surveillance for human infection with COVID-19.

9.4.1 Clinical Measures

It includes laboratory testing and identification of COVID-19 affected confirmed cases for proper care, isolation, and interruption to transmit viruses. Clinical measures will help to specify the locations of affected areas and communities for taking other preventive measures. To promote clinical measures around the world WHO has made an arrangement of a laboratory network in six WHO regions to upgrade the expertise in virology, diagnostics, sequencing, and often viral culture. These laboratories will support the Member States of WHO regarding resting and identifying the COVID-19 cases. Since 24 February 2020 WHO has been providing polymerase chain reaction (PCR) test kits for COVID-19 directly to countries, offering the Member States the capacity to detect cases or clusters before the disease gains a strong foothold.
9.4.2 Non-pharmaceutical Measures

The hospitals and the healthcare system need to be designed properly with all precautionary measures, providing all the staff the adequate protective facilities. The following measures may be suggested to check the infection of COVID-19.

- All the staff who are working in healthcare facilities and who have close contact with COVID-19 patients should always wear scrubs, and it should be appropriately maintained.
- All the health and administrative staff should wear special shoes at work and be left at the hospital.
- All the staff should wash their hands carefully, and shower facilities should be provided for staff to take a shower before leaving the work to avoid transmission to the general public.
- Every candidate in the healthcare system should clean regularly electronic equipment such as mobile, tablets, desktop screen, keyboard, printer, and other objects which are being used by the people.
- Everyone who is attending COVID-19 patients should follow physical distancing and consider sleeping in a separate room and using a separate washroom.

9.4.3 Lockdowns as a Measure for COVID-19 Preparedness

More than 100 countries all over the world introduced either a full or partial lockdown by the end of March 2020 to prevent and check the transmission of coronavirus. Such a decision to lockdown affected billions of people in the world. Some cities, i.e., Stockholm, Jakarta, Seoul, Singapore, Hong Kong, etc., have issued some recommendations of the restrictions of movement and social distancing rather than strict rules. As a result of which the movement of traffic fell down dramatically. South Korea focussed on large-scale testing and contact tracing rather than social distancing and stand still lockdown. In Jakarta and Indonesia, where there was no official lockdown, but the congestion of people dropped. Countries of France, Spain, Iran, Germany, UK, Netherlands, Sweden, Canada, Mexico, Belgium, Ireland, USA, Turkey, China, India, and Switzerland called their strictest lockdown in March 2020. In eight countries, new confirmed COVID-19 cases declined, unlike India. But most of the countries found peak cases of COVID-19 within a month from lockdown. According to WHO situation report, lockdowns are not enough to combat COVID-19. The COVID-19 affected countries must use the opportunity to “find, isolate, test, treat, and trace” all COVID-19 cases. Surely, lockdown will reduce congestion, physical contact, and mass gathering as well as check the transmission of coronaviruses, but strict lockdown should not be followed for a long time. The COVID-19 affected countries should issue guidelines and recommendations in regard to the movement of the people, and it must be followed by being a responsible citizen of the country.
The Government of India confirmed the country’s first case of 2019-nCoV on 30 January 2020 in the state of Kerala, when a university student returned from Wuhan, China. The Prime Minister of India declared the “Janata Curfew” on 19 March 2020 to be observed on 22 March 2020 when the 2019-nCoV confirmed cases reached 500 (Business Line, March 22). The government declared a 21 days nationwide lockdown on 24 March 2020 as a preventive measure against the 2019-nCoV pandemic. This lockdown was placed before the entire 1.3 billion population of India when the number of confirmed positive coronavirus cases in India was approximately 500 (Gettleman and Schultz, 2020). At the immediate end of the first lockdown, some states, i.e., Odisha and Punjab, extended the lockdown till 1 May 2020, which was followed by West Bengal, Maharashtra, Karnataka, and Telangana. On 14 April, the Prime Minister again declared 2nd phase of lockdown from 15 April to 3 May (Prime Minister Narendra Modi Announcement, 14 April 2020). On 1 May, the Government of India again extended the nationwide lockdown further by two weeks until 17 May (NDTV.com).

In the first phase of lockdown, nearly all services and factories were being suspended (Singh et al., 25 March 2020). Approaching the end of the first phase of lockdown, the rate of increase of 2019-nCoV infections had noticeably slowed down in India from a rate of doubling every three days prior to the lockdown to the rate of doubling every eight days on 18 April (Gupta, 18 April 2020). During 2nd phase of lockdown from 20 April 2020, the government announced certain relaxations in several sectors such as dairy, agriculture, and plantation, and shops selling farming supplies. Public works departments were also allowed to open maintaining social distancing. Relaxations were also given to Cargo transportation vehicles, including trucks, trains, and planes, Banks, and Government centres.

The lockdown areas were classified into three zones, i.e., red zone (indicating the presence of infection hotspots), orange zone (indicating some infection), and green zone (no infection). There are 130 districts under the red zone, 284 districts under the orange zone, and 310 districts under the green zone in India (Thacker, 1 May 2020). On 12 May, the Indian government declared 4th phase of lockdown with some relaxations.

During ‘Unlock 1.0’ (1–30 June 2020), lockdown restrictions were imposed only in the containment zones, and several activities were allowed in a phased manner. The permission was given to reopen shopping malls, religious places, hotels, and restaurants from 8 June. Under ‘Unlock 2.0’ (from 1 to 31 July 2020), almost all the activities were permitted in all other areas except containment zones. State governments were allowed to impose proper restrictions. Permission was given in International and interstate travelling. ‘Unlock 3.0’ started from 1 August 2020, which removed night curfews, permitted gymnasium and yoga centres, permitted Independence Day celebration with social distancing, and declared the closure of educational institutions till 31 August 2020. During ‘Unlock 3.0’, Tamilnadu and Maharashtra declared lockdowns for the month of August 2020, where West Bengal imposed lockdowns twice a week. Under ‘Unlock 4.0’ (till 30 September 2020), religious activities, entertainment, political activities, sports, academic functions, and gatherings were permitted with 100 people.
9.5  Impact of COVID-19 and Associated Lockdowns in India

The pandemic invited a sharp rise in unemployment, stress on supply chains, the collapse of the industries, a decrease in Govt. income, etc. All sectors of the economy have been severely affected due to COVID-19 Pandemic in INDIA. More than 45% of households across the nation have reported on income drop (April 2020) as compared to the previous year. During the lockdowns, a large number of people lost employment, and subsequently, the nation has been suffering from economic crisis and livelihood challenges. The pandemic has brought about a large-scale socio-economic changes worldwide at present. It has disrupted lives, created loneliness caused by social distancing; it has led to increased anxiety caused by economic difficulties, fear of illness, and worry about near and dear ones. As a whole, COVID-19 Outbreak has disrupted the lifestyle of people across the world.

9.5.1 Informal Sectors of the Economy

In 2000, 75.2% of employment was in the informal sector and 24.8% in the formal sector. In 2010, employment in the informal sector climbed to 87.4%, and in the formal sector, it was declined to 12.6%. No notable changes have been found in 2013 and 2015–2016 regarding employment share in informal and formal sectors. At present, only 10% of the countries workforce is in the formal sectors. Lockdowns invited suspension of the transport network and all economic activities and services. This brought turmoil in the lives of millions who are primarily involved in informal sectors. They lost their livelihood overnight and got stranded in different pockets of the country. International Labour Organization (ILO) speculated that India is likely to face a severe job crisis because of subsequent lockdowns. All migrant and migrant workers in informal sectors are also severely hit. It may affect their food and nutritional intake, access to healthcare, and education of children worst. The informal sector constitutes about 81–88% of the Indian economy. About 90% of the 500 million workers in India are part of the informal sectors, which contributes half of the national gross domestic product. The sector comprises a vast array of small-to-medium-sized enterprises. The informal sector is the backbone of India’s wealth, as the formal sector depends on the goods and services provided by it. It

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5See for details: https://www.statista.com/statistics/1111510/india-coronavirus-impact-on-household-income/.

6See the Economic Times report which is available under the URL: https://economictimes.indiatimes.com/news/economy/indicators/national-database-of-workers-in-informal-sector-in-the-works/articleshow/73394732.cms.

7For details: https://retail.economictimes.indiatimes.com/news/industry/41-lakh-youth-lose-jobs-in-india-due-to-covid-19-pandemic-ilo-adb-report.
employs the vast majority of India’s workers, such as extremely poor, highly mobile, seasonally circulatory, daily-wage, and contract-based labourers.

Central Trade Union had conducted a study that identified 21 trades in India where informal workers are engaged massively. This included the domestic workers, street vendors, home-based workers, homes stay hosts, agricultural labourers, beedi rollers, artisans, construction workers, financial/banking agents, tiffin services, tailoring and production, weavers, animal husbandry, feri tokri workers, hospitality staff, factory workers, auto-rickshaw drivers, medical helpers, daily wage labourer, and shop owners.

In India, major informal sectors of the economy are agriculture, forestry, and fishing; construction; trade, repair, accommodation, and food services; real estate, ownership of dwelling, and professional services (Table 9.2). In 2011–2012, 96.8% of unorganized workers were engaged in agriculture, forestry, and fishing, and this percentage increased to 97.1% in 2017–2018. A large number of rural people depend on these sectors of the economy. As of 2017–2018, mining and quarrying (22.5%); manufacturing (22.7%); and transport, storage, communication, and services related to broadcasting (47.7%) also contributed a reasonable share of informal workers.

Lockdowns impacted the income of the workers engaged in all these trades and influenced poor families. Overall income losses already accumulated are significant, and workers are worried about the situation worsening. They are going to face severe everyday problems for getting food, healthcare facilities, children’s education, etc. The study depicted that unprecedented lockdowns in India generated some significant insights before informal sector workers, i.e., domestic workers, street vendors, home-based workers, weavers, beedi workers, tendu leave cultivators, factory workers, workers engaged in the hospitality business, workers engaged in constructions, and agricultural workers in terms of job losses and income erosions.

### 9.5.2 Situation of Migrant Workers

Migrant workers constitute the backbone of the Indian economy because migration is a livelihood strategy of millions of people in India. The high-income states of Goa, Delhi, Haryana, Punjab, Maharashtra, Gujarat, and Karnataka invite workers from other states of the country. Bihar, Odisha, Uttar Pradesh, Jharkhand, and Rajasthan are the states badly affected by the COVID-19 pandemic, from where out-migration takes place frequently. Migrant workers are majorly comprised of daily wage labourers working in the manufacturing and construction industries. They do not possess adequate healthcare, nutrition, housing, and sanitation, since many of them work in the informal sector. Due to the lockdown, more than 300 deaths in India were
| Sectors                                                                 | 2011–2012 | 2016–2017 | 2017–2018 |
|------------------------------------------------------------------------|-----------|-----------|-----------|
|                                                                       | Organized/formal | Unorganized/informal | Organized/formal | Unorganized/informal | Organized/formal | Unorganized/informal |
| Agriculture, forestry, and fishing                                     | 3.2       | 96.8      | 2.8       | 97.2         | 2.9       | 97.1         |
| Mining and quarrying                                                   | 77.4      | 22.6      | 77.4      | 22.6         | 77.5      | 22.5         |
| Manufacturing                                                          | 74.5      | 25.5      | 76.4      | 23.6         | 77.3      | 22.7         |
| Electricity, gas, water supply, and other utility services             | 95.7      | 4.3       | 95.0      | 5.0          | 94.7      | 5.3          |
| Construction                                                           | 23.6      | 76.4      | 26.6      | 73.4         | 25.5      | 74.5         |
| Trade, repair, Accommodation, and food services                        | 13.4      | 86.6      | 13.4      | 86.6         | 13.4      | 86.6         |
| Transport, storage, communication, and services related to broadcasting| 53.0      | 47.0      | 53.7      | 46.3         | 52.3      | 47.7         |
| Financial services                                                     | 90.7      | 9.3       | 88.1      | 11.9         | 88.1      | 11.9         |
| Real estate, ownership of dwelling and professional services           | 36.9      | 63.1      | 46.8      | 53.2         | 47.2      | 52.8         |
| Public administration and defence                                      | 100.0     | 0.00      | 100.0     | 0.00         | 100.0     | 0.00         |
| Other services                                                         | 58.8      | 41.2      | 52.7      | 47.3         | 52.1      | 47.9         |
| TOTAL GVA at basic prices                                              | 46.1      | 53.9      | 47.3      | 52.7         | 47.6      | 52.4         |

*Source* Computed from National Accounts Statistics, 2019
being reported till 5 May, caused due to starvation, suicides (Elsa 2020), exhaustion, road and rail accidents (Gettleman et al. 2020), police brutality (Singh 2020), and denial of timely medical care. Despite government promises and schemes to generate employment in rural areas, some migrant workers began going back to the cities due to lack of employment in their hometowns, as lockdown restrictions were reduced as part of the unlock 1.0 in June. A large number of those were returning to the hubs of interstate migrants, i.e., the Mumbai–Thane–Pune belt, Jaipur and Delhi, Coastal Andhra, and Southern Tamil Nadu. Lockdowns created huge uncertainty about how long this crisis will last and what damage it would cause to the economy, livelihood of people, and basic healthcare services. Considering its size and spread, the management of migrants under lockdowns in different phases represents a massive logistic challenge. The provision of food and basic amenities of the migrant workers, provision of basic income support to the migrants, registrar the migrants family under various Govt. schemes, provision of basic healthcare and preventive kits, counselling and psychological support to the migrants under the distress conditions, and dealing with likely economic stress in the destination areas are emerging as the matters of top priorities.

9.5.3 Impact of Lockdowns on Agriculture and Rural Lives in India

The nationwide lockdown has severely affected lives and livelihoods across rural India. Almost half of India’s population depends on agriculture. The rural economy of India is indeed based on agriculture. Agriculture and allied sectors contribute more than half of the workforce in the country. In India, smallholder farmers having less than two hectares of land manage to earn around INR 6000–7000 per month. There are 120 million smallholder farmers in India, and 40% of them are engaged in grain production, and over half of its produce fruits, vegetables, oilseeds, and other crops. Farmers possessing four to ten hectares of land earn around INR 20,000 per month, whereas farmers own more than ten hectares of land earn around INR 40,000 per month. It has been estimated that around 78 million agricultural households possess less than two hectares of land with a monthly average income of INR 6500. Around 85% of farmers are under the category of small and marginal farmers who possesses less than two hectares of land. The monthly expenditure of all these agricultural households exceeds the earning during the non-cropping sessions, which compels them to take loans. Only 11 million agricultural households own more than two hectares of land, out of which 3.65 million households possess more than four hectares of land. During the lockdown period in India, less income

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8 The Economic Times reported on 5 May 2020 entitled ‘Suicide leading cause for over 300 lockdown deaths in India, says study’. Retrieved on 13 May 2020.
9 See the New Indian Express report on ‘Two more gas tragedy victims die of COVID-19 in Bhopal; toll reaches seven’. Retrieved on 13 May 2020.
agricultural households started to face severe crises, starvation, and extreme poverty situation. The nationwide lockdowns created a shortage of labourers. They disrupted the production of farm inputs, i.e., fertilizers, seeds, and equipment. It stimulates an increase in price, made inaccessible these inputs to smallholder farmers and marginal farmers.

The Government of India announced several measures, including exemption of agriculture and fisheries from lockdown restrictions in late March, but there have been lacunas in the implementation at the ground level. The Ministry of Home Affairs, Government of India, on 15 April 2020, issued guidelines and exempted agriculture, horticulture, animal husbandry, poultry and fishery, and allied activities from lockdown restrictions. Labourers started to return to work and go to the market for procurement. The agri-input shops and agro-processing centres were also started to function after 15 April 2020. As a whole, the pandemic has disrupted production, declined income from agricultural sectors, increased the number of job losses, and caused income erosion of the labourers, and finally invited livelihood crisis in rural areas.

9.5.4 Lockdowns and Its Impact on Unemployment Status and GDP

The rate of unemployment climbed a peak of 27.1% in the first week of May 2020 just after the first phase of nationwide lockdown. The employment rate in the 3rd week of June was 38.4% and it was 37.8% in the last week of the same month. In the month of March 2020, the unemployment rate was 8.75% and it reached 23.5% during April and May 2020. The labour participation rate in different sectors of economic activities declined significantly as a result of lockdowns. The unemployment rate started to drop first in the first week of June under the unlock 1.0 when it dropped to 17.5%. Subsequently, it fell to 11.6% in the second week and 8.6% in the fourth week of June.10 The noticeable drops in the unemployment rate in June under Unlock 1.0 signals the revival of economic activities in the country.

The unemployment rate of mostly COVID-19 affected states of Tamilnadu, Andhra Pradesh, Delhi, Uttar Pradesh was below around 15% since 2016–2019 (Fig. 9.4). However, it crossed 20% level in the month of April and May 2020 (Fig. 9.5). The nationwide lockdowns at several phases resulted in an increase in the unemployment rate both in the rural and urban economies in India. From August 2019 to March 2020, there was no such variation in the unemployment rate in the country. It ranged between 7.14 and 8.75%, whereas 8.27–9.71% in urban India and 5.99–8.44% in rural India. However, in April 2020 and May 2020, the unemployment rate climbed to between 23.52 and 23.48%, respectively (Table 9.3). Rural India experienced an unemployment rate between 22.89 and 22.48%, where urban

10For details, visit: https://unemploymentinindia.cmie.com/.
Fig. 9.4 State-wise unemployment rate for the year 2016, 2017, 2018, and 2019 (Source Centre for Monitoring Indian Economy CMIE)
India observed a slightly higher rate of unemployment—between 24.95 and 25.79%, respectively.\textsuperscript{11}

\textsuperscript{11}\text{Data is retrieved from the webpage of the Centre for Monitoring Indian Economy CMIE). Visit: https://unemploymentinindia.cmie.com/}.
Due to the introduction of ‘unlock 1.0’ from 1 June and ‘unlock 2.0’ from 1 July and impositions of some relaxations in several economic activities, the unemployment rate started to resume towards the previous level. During July 2020, severely COVID-19 affected states of Maharashtra, Tamilnadu, Andhra Pradesh, Karnataka, Delhi, Uttar Pradesh, West Bengal, and Bihar witnessed unemployment rate between 4 and 12%. COVID-19 pandemic and associated lockdowns have resulted in a prolonged economic slowdown in the country. The countries GDP growth fell from 8.2% during January–March 2018 to 3.1% during the same quarter in 2020 (Rajan and Gopalan 2020). In the financial year 2020–2021, the GDP growth rate fell to 23.9% for the quarter of April–June 2020 (Misra and Iqbal 2020). Economic sectors like manufacturing, construction, trade, and hotel industry revealed a negative GDP growth. From April to June 2020, the manufacturing growth rate stood at $-39.3\%$, the mining growth rate at $-23.3\%$, construction growth rate at $-50\%$, and the trade and hotel industry at $-47\%$.\(^\text{12}\)

\section*{9.5.5 Lockdowns and Capital Assets}

The pandemic situation has disrupted the basic livelihood strategies of the government, i.e., sustainable use of natural resources, plan for human well-being, income behaviour, and food security of the poor people. COVID-19 induced lockdowns impacted capital assets such as human capital, natural capital, social capital, physical capital, and financial capital in India. It changed the processes such as laws, policies,

\begin{table}[h]
\centering
\caption{Rural–urban variation of unemployment rate (\%) in India}
\begin{tabular}{l|c|c|c}
\hline
Months & India & Urban & Rural \\
\hline
Aug 2019 & 8.19 & 9.71 & 7.48 \\
Sep 2019 & 7.14 & 9.58 & 5.99 \\
Oct 2019 & 8.10 & 8.27 & 8.02 \\
Nov 2019 & 7.23 & 8.88 & 6.45 \\
Dec 2019 & 7.60 & 9.02 & 6.93 \\
Jan 2020 & 7.22 & 9.70 & 6.06 \\
Feb 2020 & 7.76 & 8.65 & 7.34 \\
Mar 2020 & 8.75 & 9.41 & 8.44 \\
Apr 2020 & 23.52 & 24.95 & 22.89 \\
May 2020 & 23.48 & 25.79 & 22.48 \\
Jun 2020 & 10.99 & 12.02 & 10.52 \\
Jul 2020 & 7.43 & 9.15 & 6.66 \\
\hline
\end{tabular}
\textit{Source} Centre for Monitoring Indian Economy CMIE
\end{table}

\(^\text{12}\)Visit: https://www.firstpost.com/business/amid-covid-19-crisis-indias-gdp-contracts-by-23-9-in-april-june-quarter-8772011.html.
culture, and institutions in regard to improving the livelihood of the common people and as a result of which erosion in human capital, natural capital, social capital, physical and financial capital has been observed in India (Fig. 9.6). The loss of capital assets has invited a shock and critical trend in society.

9.6 Conclusion

The unexpected COVID-19 pandemic and its rapid expansion worldwide have disturbed the economic, social, religious, political, and financial structures worldwide. The world top most economies are on the verge of collapse. Kristalina Georgieva, the Managing Director of International Monetary Fund (IMF) explained that ‘a recession at least as bad as during the Global Financial Crisis or Worse’. At present, the world has been facing a critical economic situation since World War-II. The COVID-19 pandemic is spreading rapidly and causing more economical
damages worldwide. The US Official stated that American unemployment would be 30% and its economy would shrink by half. The common people will be losing their jobs, and it has invited a real threat due to the shutting down of industries, supermarkets, and businesses. The stock market of the USA is severely affected by COVID-19, and it is down about 30%. Besides, there is uncertainty and unpredictability regarding the spread of COVID-19. The Organization for Economic Cooperation and Development (OECD) stated that global growth could be cut in half to 1.5% in 2020 if the virus continues to spread. Most of the countries worldwide are passing through the recession and collapse of their economic structure, and 80 countries of the world have already requested the IMF for financial help. Bernard M. Wolf, the renowned Professor of Economics, Schulich School of Business, opines that:

…it is catastrophic and we have never seen anything like this, we have a huge portion of the economy and people under lockdown that’s going to have a huge impact on what can be produced and not produced.

The Director of IMF suggested for things to fight against COVID-19 as:

- firstly, continue with essential containment measures and support for the health system,
- secondly, shield affected people and firms with large timely targeted fiscal and financial sector measures,
- thirdly, reduce stress to the financial system and avoid con tangent, and
- fourthly must plan for recovery and must minimize the potential scaring effects of the crisis through policy action.

All the nations, apart from developed and underdeveloped, are poorly affected by COVID-19. All the countries, considering the severity of the pandemic, should extend all kind of cooperation and coordination among themselves to fight against COVID-19 to promote economic and social stability worldwide. Any wrong decisions and policies to combat COVID-19 may lead to a severe impact on other countries’ economies as well.

The long run of this crisis does not affect only the workers in the informal sector, but also it looms large for the formal sectors as well. Initially, some states like Bihar, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Assam, Manipur, Arunachal, and West Bengal have a greater likelihood to face livelihood challenges by this pandemic as these states are preconditioned with a ‘moderate’ to ‘high’ poverty level. The states like Uttarpradesh, Bihar, Andhrapradesh, Rajasthan, Madhupradesh, Assam, and West Bengal are the states where workers in the ‘below 14 years’ age group range from 1 lakh to 1 million will face the formidable challenges. If the crisis situation continues, a large number of people in India (mainly with low per capita income) will suffer from extreme poverty, starvation, which is coming to be a severe challenge to the economic and social system of the country. Unfortunately, we could not organize informal sector workers and migrant workers, who are the backbone and wealth of a nation for the well-being and development—both in rural and urban areas. Now, the Lives and livelihood of the poor people are under significant threat.
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