

**PRACTITIONER PAPER**

# An assessment of socioeconomic impact of COVID-19 pandemic in India

Ranjan Aneja  | Vaishali Ahuja

Department of Economics, Central University of Haryana, Mahenderagr, India

**Correspondence**

Ranjan Aneja, Department of Economics, Central University of Haryana, Mahenderagr, India.

Email: ranjananeja@cuh.ac.in

Coronavirus (COVID-19) pandemic has created an unprecedented loss and disruptions over all across the world. From developed to developing, no country has been spared from its brunt. In this paper, we have analyzed the implications of COVID-19 on the economy and society of India so far. An impact assessment on the basis of available literature is made on all the three sectors—primary, secondary and service sector along with the impact on migrants, health, poverty, job losses, informal sector, environment, and so forth. The all sectors of the economy has been disproportionately affected and even within a sector, there is a disproportionate loss. The societal impacts are dire too with job losses, mental illness, increased domestic violence, and so forth. Some positive effects can be seen in terms of improved air quality, water quality, wildlife but the sustainability of such impact is conditional upon post-COVID and people's habits and future policies related to the environment.

**JEL CLASSIFICATION**

E02; E2; E6; I1; I3

## 1 | INTRODUCTION

COVID-19, caused by a new strain of coronavirus, risen out of Wuhan city of China in December 2019 has been called a pandemic by the World Health Organization. It has created an unstable environment for individuals, loss of business activities, and loss of employment. This has halted a large number of economic activities because of infectious nature and has no vaccine till date. As on June 24, 2020, there are around 9,129,146 cases globally out of which 4,73,797 lost their lives.<sup>1</sup> India is on the fourth place in the number of confirmed cases and first in Asia. Total confirmed cases in India are 4,56,183 out of which 14,476 lost their lives mainly in the states Maharashtra and Delhi (Ministry of Health and Family Welfare, GOI).<sup>23</sup> Most of the countries including even developed nations like United States, Italy, and United Kingdom are not prepared enough to deal with this pandemic. Presently, the worry is not for just human well-being besides for the worldwide economy which is most noticeably awful hit in each viewpoint. Economic disturbances are probably going to be more extreme and extended in developing and emerging countries with bigger domestic outbreaks and the more fragile and weak healthcare system; with larger exposure to international spillovers through various channels like

trade, tourism, and commodity and financial markets; weaker macro-economic frameworks; and more pervasive informality and poverty (Global Economic Prospects, World Bank, 2020). It is not just a health crisis; it is the economic and humanitarian crisis and called a black swan by many economists. As a result of its infectious nature, almost all nations favored lockdown to limit its spread. Following this, India initially proclaimed a one-day “Janata Curfew” on March 22, 2020. From there on, a total lockdown was reported in India at first for 21 days which was extended to an additional 19 days, and thereafter it got broadened further with minor relaxations. After June 1, many relaxations are given to proceed with the economic activities but borders of some states are sealed even now depending on the severity of the health crisis in a particular state. All the economic activities however now been provided some relaxations after a complete halt on them but an unprecedented loss has already occurred and the economy is shaken badly.

India is also amid a severe crisis. “This is the greatest emergency for the Indian economy since independence,” said Raghuram Rajan, former RBI Governor. This is worse than the financial crisis of 2008, which affected the demand side but workers/people could still go to work, the financial conditions of government of India was sound but it seems that everything is against the economy this year.<sup>4</sup> Almost all

the countries due to COVID-19 are affected similarly in terms of demand–supply shocks and disruptions but in India, there was already a downturn in the economy. In Pre-COVID era India was encountering with major macroeconomic issues such as nearly recession with the sluggish GDP growth rate of 4.7% in 2019 which is lowest since 2013 (as indicated by the official statistics), high unemployment rate, decline in industrial output of core sectors—the worst in 14 years, stagnancy in private sector investment, decline in consumption expenditure for the first time in several decades (Dev & Sengupta, 2020). Also, the informal sector of India which is the largest in the world employs nearly 90% of the total working population and contributes significantly in overall GDP (more than 45%) has been hit by two major shocks (or reforms) already due to demonetization in 2016 and GST in 2017.<sup>5</sup>

The financial sector who has got the most important role to play in the crisis times has also been having huge problems in India like Twin Balance Sheet (TBS), high levels of non-performing assets (NPAs) and an inadequately capitalized banking system. In the private corporate sector too, firms are financially weak and over-leveraged (Sengupta & Vardhan, 2019). Some more problems like IL&FS crisis, decline in commercial credit of around 90% in FY2020(Q1) etc.<sup>6,7</sup> With the emergence of such a deadly disease, a new set of challenges is ready for India for both the short-run and long-run. Albeit the macroeconomic uncertainty cannot be gauged, the situation requires major policy interventions in terms of healthcare infrastructure, livelihood, vulnerable sections and various humanitarian issues. Variant of helicopter money—“money financing of the fiscal programme” is a solution suggestion by (Chakraborty & Thomas, 2020) as an innovative method for financing deficit.

In this article, an attempt is made to investigate the socioeconomic implications of the draconian coronavirus pandemic (COVID-19) in India. The motivation behind this is to provide an overview of the loss that occurred to different sectors of the Indian economy and society to have a better understanding of the issues to the government. In this article, we have reviewed many latest articles, authentic newspaper articles, discussions, and interviews of experts from different fields, and so forth.

The article is organized in four sections including Introduction. Section 2 reviews the various researches highlighting the economic impact on different sectors—Primary, secondary, and tertiary sectors. Section 3 showcases the various studies of societal impacts and lastly, Section 4 concludes the study.

## 2 | SECTORAL IMPACTS OF COVID-19 ON INDIAN ECONOMY

### 2.1 | Primary sector

#### 2.1.1 | Agriculture and allied activities

To contain the spread of COVID-19, just like how other countries did, India imposed a complete lockdown in march which coincided with the peak of harvesting season of Rabi crops in India mainly in the

north-west which posed significant losses to the farmers. Although there were relaxations to the agriculture sector during lockdown but transport constraints, mobility restrictions and lack of labor due to reverse-migration of labor to their native places were the major problems faced by the farmers. Farmers in Maharashtra called it a worse situation than that occurred during the demonetization in 2016 (Saha & Bhattacharya, 2020).

Before this pandemic, the rural economy of India was witnessing a decline in incomes of mainly casual workers<sup>8</sup> along with declining rural wages (real). Some rays of hope were seen in January 2020 when food prices started rising but all hopes collapsed with this new crisis. (Mukhopadhyay, 2020)

Agriculture and allied activities are not a homogenous group of activities, in fact, an umbrella of different activities having their different dynamics each. So, the impact of COVID-19 on this sector varies according to the set of activities, that is, on crops, livestock, fisheries, and so forth. Horticulture and Foodgrains production is part of crops and is impacted differently. Horticulture is likely to face the brunt more because of the nature of perishability whereas food grains are non-perishable and apart from problems in harvesting and labor shortage, this is not impacted much. Rabi harvesting has gone well and MSP hike has also been announced for the Kharif crops which assures farmers a 50–83% return on their production cost. With declining demand and reduction in exports of fruits and vegetables, horticulture is hit hard. Similarly, floriculture has been affected because of less demands due to shut down of religious places, postponement of marriages, and so forth. In livestock (milk, meat, eggs), milk is the major contributor that has been impacted and fortunately, had stability during the lockdown.

Fishing and aquaculture are expected to have a high negative impact, food grains and livestock low, and horticulture medium, relatively. Agriculture seems to be a bright spot in India amid the COVID-19 crisis and CRISIL expects agriculture to grow at a rate of 2.5% in FY2021. (CRISIL, 2020).

### 2.2 | Secondary sector

#### 2.2.1 | Manufacturing sector

The manufacturing sector is the major contributor of GDP and employment in the secondary sector and has been recognized as an engine for vibrant growth and creator of the nation's wealth (Rele, 2020). The manufacturing sector is important in the way that it has strong linkages with other sectors, both forward and backward linkages so any impact in this sector will affect other sectors as well. Overall, the manufacturing sector is going to be affected badly by demand–supply disruptions and global value supply chain.

The 50% contributor to the manufacturing sector, the automotive sector was suffering before COVID-19 too due to low consumer demand, inadequate credit facilities, and more problems due to the NBFC crisis. There is a lot of pressure due to demand–supply disruptions on the health of the auto sector in India due to COVID-19. As

per the latest assessment related to the impact of COVID-19 done by SIAM, the auto sector is expected to have a decline between 22% and 35% in various industry segments conditioned with GDP growth of 0–1% for FY21. said Rajan Wadhwa, President, SIAM.<sup>9</sup>

From decades, China has been the epicenter of manufacturing accounting for one-third of total manufacturing over the world. But after the outbreak of COVID-19, many countries are planning to shift focus from China and looking for countries like China where cheap labor is available. So, it is a golden opportunity for India to make “Made in India” global. There is huge potential in India, if proper measures will be taken to boost the manufacturing sector, India will emerge as a new manufacturing hub surpassing China.

The micro, small and medium enterprises (MSMEs) as a whole form a significant share of manufacturing in India and play a crucial role in providing employment opportunities and also in the country's exports. As indicated by recent reports MSMEs contribute 30% in India's GDP and 50% in the employment of industrial workers. But this sector has issues like the non-availability of adequate, timely, and affordable institutional credit. Although all the businesses and sectors are affected due to the pandemic, this sector is badly hit due to reduced cash flows, supply chain disruptions, shortage of migrant workers due to reverse migration, less demand, and so forth. Like China, India is also expected to have major destructions in this sector with more challenges to small firms as compared with upstream firms (Dev & Sengupta, 2020).

It is not easy to re-start MSMEs once they are shut down (Chidambaram, 2020). India's Sherpa to the G20 also said that small industries are most vulnerable and it is difficult for them to survive without financial assistance because of their incapability to deal with such sudden disruptions.<sup>10</sup>

## 2.3 | Service sector

### 2.3.1 | Financial market and institutions

The financial sector who has got the most important role to play in the crisis times has also been having huge problems in India like Twin Balance Sheet (TBS), high levels of non-performing assets (NPAs) and an inadequately capitalized banking system. In the private corporate sector too, firms are financially weak and over-leveraged. (Sengupta & Vardhan, 2019). Some more problems like IL&FS crisis, decline in commercial credit of around 90% in FY2020-first half, and a near-demise of a well-known and reputed private bank—Yes Bank, and so forth.

To what extent the financial market will be affected depends on the severity and longevity of the crisis, effectiveness of the implementation of fiscal and monetary policies and central bank's reactions (Beck, 2020).

There is no such impact on the banking sector, but because banks are at the forefront of public attention the indirect impact of several other sectors that are hit by the pandemic is likely to be on the banks and other financial institutions. Banks are the major source of help in times of crisis, therefore when all other sectors are hit badly, banks

will also face the brunt. The already existing problems in the financial sector are expected to multiply due to this draconian crisis. The stock market has also seen the worst in March, 2020 due to the lockdown and collapse of various business activities.

Subramanian and Felman (2020) suggested that around one-third of industrial and service firms have applied for moratoria on their bank loans. The stock of non-performing assets (NPAs) may increase by Rs. 5 lakh crore even if only a quarter of these deferred loans go bad, eventually. And this is a conservative estimate. Senior bank officials have been quoted as estimating that the stock of NPAs could increase by as much as Rs 9 lakh crore. In this case, we would be looking at NPAs of Rs 18 lakh crore, equivalent to around 18% of current loans outstanding. For planning purposes, it is worth considering who will pay for such losses, if they do materialize.<sup>11</sup>

Other important dimensions of service sector like aviation, transport, travel, and tourism are worst hit not only in India, but globally. The loss to this sector too will be based on the severity and longevity of the crisis. A report by KPMG indicates that around 38 million job losses are expected in India's travel, tourism and hospitality industry.<sup>12</sup>

## 3 | SOCIETAL IMPACTS OF COVID-19

### 3.1 | Gender gap and inequality

It has been estimated that globally, women are more likely to be vulnerable to losing their jobs as compared to men due to the COVID-19 pandemic.<sup>13</sup>

The drop in employment is found to be biased and not gender-neutral in India which has one of the most unequal gender division of domestic work globally. The drop in absolute number is more for men compared with women because of the already existing large gender-gap in employment. By comparing the pre and post lockdown hours spent on domestic chores, a decline in gender gap is found in terms of hours devoted to domestic chores on an average during the first month of lockdown in most of the states. Also, there is an increase of 0.5 to 4 hours in men's proportion of housework post-lockdown. Still, the male proportion/distribution continues to be skewed to the right (Deshpande, 2020).

Considering the disproportionate burden of the crisis on low skilled workers, poors, other vulnerable sections, many economists think that COVID-19 is most likely expected to raise inequality within and among countries (Initiative on Global Markets, 2020) and the results of study conducted by (Furceri, Loungani, Ostry, & Pizzuto, 2020) confirms that those having basic education (low skilled) are affected more than those with higher and advanced degrees, in terms of loss of income hence confirming increase in income inequality after during and after pandemics.

### 3.2 | Health crisis—rural/urban

Due to the paucity of testing services, shortage of doctors, health equipment, beds even in the developed area of India, COVID-19 is a

major threat for India. With a subsequent rise in the no. of confirmed cases India's capacity to contain the further spread and to handle the current cases is questioned by many experts. As per the National Health Profile of India, 2019, India's expenditure on healthcare as % of GDP was merely 1.28% which is lower than poorer countries of the world (Rakshit & Basishtha, 2020). Coronavirus Pandemic has disproportionately affected the rural and urban areas. Presently, the brunt is faced more in urban areas because of the high density of people. But the risk is much more to the rural areas where around 70% of India's population resides. India's healthcare sector is still developing and there are large differences in the healthcare systems of rural and urban areas. The rural health care system which is a three-tier system is comprised of-

- Sub-centres with 23% shortfall in healthcare facilities,
- Primary Health Centres with 27% and
- Community Health Centres with 28% shortfall, as of July 1, 2019.<sup>14</sup>

The healthcare system in the rural area is not adequate to handle this pandemic and the transmission especially in the northern states where population density is high because of doctors' shortage, healthcare facilities like very less availability of no. of beds per thousand people, equipment, and so forth. (Kumar, Nayar, & Koya, 2020)

### 3.3 | Domestic violence and crime

According to the latest report by National Commission for Women (NCW), within 25 days following lockdown, there was a 45% increase in the number of cases of domestic violence against women. Domestic violence cases have seen an upsurge mainly in states of Uttar Pradesh, Bihar, Haryana and Punjab<sup>15</sup> with a near doubling of the cases as compared to pre-lockdown cases said NCW chief Rekha Sharma. The real situation, however, may be more dangerous because many women from rural areas especially do not file a case and raise their voice and are scared of their husbands and family (Kundu & Bhowmik, 2020).

For the overall crime rate, there has been good news since lockdown that the crime rate has decreased significantly in India and globally too but studies shows that the hunger, poverty and inequality which are the after results of any crisis and pandemic lead to increase in the crime rate (Uppal, 2020).

### 3.4 | Reverse migration

After the partition in 1947, it is the second biggest mass relocation that India is experiencing. More specifically, it is the "reverse migration." As indicated by IMO (International Migration Organization, 2011) return or reverse migration is the act/process or movement of individuals back to their local spots who prior moved to urban

communities or urban regions looking for employment and to gain bread-butter for their families.

As indicated by the Census of India, 2011 Delhi and Maharashtra had the most extreme number of the flow of migrants for the most part from the states of UP, Bihar, Rajasthan, Odisha, Assam, Punjab, West Bengal, Madhya Pradesh. And at present Maharashtra is followed by Delhi in the highest number of COVID-19 cases. (Ministry of Health and Family Welfare, Government of India). Now, due to COVID-19 there is mass reverse migration due to limited employment opportunities, fear of more destruction due to the uncertainty of future crisis, financial crisis, health crisis, and so forth. The extent of this reverse migration was such that the efforts of government through policies could not match this crisis. (Mukhra, Krishan, & Kanchan, 2020)

Singh (2020) studied the impact of the coronavirus pandemic on the rural economy of India mainly about the plight of migrant workers and the short run-long run implications of COVID-19 on the rural economy. He stated that COVID-19 is going to affect the rural economy in both the short run and long run with reverse migration exerting excess pressure on the agriculture and rural economy that will significantly affect the poverty and will put a greater number of people into abject poverty. He also discusses that although the government is announcing schemes and helping in many ways. But mass corruption in the system is the biggest challenge in the effective implementation of plans.

### 3.5 | Poverty, job losses and informal sector

According to the World Bank (2016) report, every fifth Indian is poor with around 80% population residing in rural areas.<sup>16</sup>

At least 49 million individuals all over the world are expected to dive into "extreme poverty" as a direct result of the destruction caused by the pandemic and according to World Bank, India is estimated to have its 12 million citizens pushed in extreme poverty (Bloomberg, 2020).

According to the Centre for Monitoring Indian Economy (CMIE), in India more than 122 million people lost their jobs in April 2020, out of them largely were the small traders and wage-laborers. According to a phone survey of 4,000 workers conducted by Centre for Sustainable Employment, around 80% of urban workers in the sample lost jobs with a sharp decline in the earnings of farmers and those who were self-employed in sectors other than agriculture.<sup>17</sup>

Pre-existing similarities in the formal and informal sectors in India are more likely to be increased because the informal or unorganized sector or workers do not have access to social security benefits and there is a lot of uncertainty in their work. The informal sector workers were already facing issues like low wages and income and in this pandemic, they are among the most affected people. Around 40 to 50 million workers are seasonal migrant which are directly and harshly affected and moved back to their native places (reverse migration)

due to lack of employment, income, shelter, and so forth (Dev & Sengupta, 2020).

### 3.6 | Psychological impact—mental illness

Apart from the health and economic crisis, this is the major challenge to every country hit by the pandemic. Due to lockdown, mass unemployment, the collapse of various businesses, loss of income, increasing inequalities and poverty, deaths, less mobility, and so forth. there is a huge impact on the mental status of people. From older to younger, rich to poor, everyone is affected. This outbreak is resulting in additional health issues like anxiety, stress, depression, anger, fear, and so forth, globally. (Torales, O'Higgins, Castaldelli-Maia, & Ventriglio, 2020)

The psychological challenges can be severe to marginalized people like farmers who already have psychological burdens due to pre-existing problems in the agriculture sector. Nearly 16,500 cases of farmers' suicide are reported every year due to their poor socio-economic conditions and due to COVID-19 such cases can be aggravated. (Hossain et al., 2020)

Recent studies in psychological science and evidence show that similar pandemics like the current one increased mental health problems like post-traumatic stress disorder (PTSD), confusion, loneliness feeling, boredom during and after the quarantine too. (Brooks et al., 2020)

Older people are battling with larger health risks as well as are likewise prone to be less fit for supporting themselves in isolation. Although social distancing is important to contain the spread of the virus, if not executed effectively, such measures can likewise prompt expand social confinement of older people when they might require the most support. (UNDP, 2020) So, there is more stress and tension for older people and the youth there are several challenges too. Schools and Colleges are yet closed and there is disruptions in studies, those who are weaker at studies and do not have internet access to study online (like in some rural areas, especially girls are not allowed to have a phone and internet connection) are likely to face the brunt more. And those who are about to enter the workforce are likely to face problems due to changing needs of the employers and less vacancies These all factors lead to mental stress and in extreme cases where people are already suffering from some mental illness, the consequences of this pandemic may be harsh.

### 3.7 | Positive impact on environment

With serious negative implications and destruction to the economy and people, COVID-19 has got some positive implications too.

One such is a gift to the river Ganga. In just 34–35 days of lockdown due to COVID-19 in India, the pollution in the river has decreased significantly which the two major plans, Ganga Action Plan, 1986, and Namami Gange, 2014, with hundreds of crores investment could not do, said Prof. B. D. Tripathi, Chairman, Mahamana Malaviya Research Centre for Ganga.<sup>18</sup>

There is a positive impact on air quality, water quality, wildlife and vegetation due to less traffic, less pollution due to lockdown and less business activities etc.<sup>19</sup>

## 4 | CONCLUSION

COVID-19 pandemic has incurred unprecedented loss globally but India being an emerging economy is likely to get more affected in every sector and that too disproportionately. Agriculture and allied sector have been hit disproportionately with horticulture, poultry facing more brunt but overall agriculture sector is seen as a bright spot and is likely to get affected less as compared with loss occurred to other sectors. Manufacturing sector especially automotive sector and MSMEs are suffering more loss and due to global supply chain disruptions this sector is affected badly. Service sector which is the key driver of economic growth and largest contributor of GDP has been hit hardly due to various restrictions on mobility, halt on tourism and hospitality for the time being, very less transport activities, shutdown of schools/colleges, and so forth. The overall loss to the economy and to different sectors depends on the severity and longevity of crisis. Amid this coronavirus pandemic and an unprecedented crisis, apart from the monetary losses, the societal impact is harsh with major sociological and psychological challenges. Already existing poverty and inequality is likely to increase with major negative impact on migrants, casual and informal worker with domestic violence and mental illness being another major challenge. Although there are some positive impacts also but the sustainability of these impacts on air quality, water quality, wildlife is conditional to post-lockdown scenario and people's behavior and habits. Various fiscal and monetary policy measures are undertaken and announced by the government and Reserve Bank of India but prominent economists are of the view that more spending is needed by the government regardless of the GDP numbers and fiscal deficit. In fact, more attention is needed toward the vulnerable sections of the society and sectors especially poor people, MSMEs and the non-essential commodities sector who is worst hit in this demand contraction due to pandemic. Unique, inclusive and innovative measures are the need of the hour.

### ORCID

Ranjan Anaja  <https://orcid.org/0000-0001-8445-2239>

### ENDNOTES

<sup>1</sup> See <https://covid19.who.int/>

<sup>2</sup> See <https://covid19.who.int/region/searo/country/in>

<sup>3</sup> See <https://www.mohfw.gov.in/>

<sup>4</sup> See <https://economictimes.indiatimes.com/news/international/world-news/covid-19-pandemic-worse-than-2008-09-financial-crisis-imf/articleshow/75161296.cms?from=mdr>

<sup>5</sup> See <https://www.ideasforindia.in/topics/macroeconomics/reviving-the-informal-sector-from-the-throes-of-demonetisation.html>



- <sup>6</sup> See <https://www.livemint.com/industry/banking/rbi-imposes-moratorium-on-yes-bank-caps-withdrawals-at-rs-50-000-sources-11583421982753.html>
- <sup>7</sup> See <https://economictimes.indiatimes.com/industry/banking/finance/banking/risk-aversion-how-failed-bank-loans-have-led-to-a-credit-crisis-for-indias-small-biz/articleshow/71932092.cms?from=mdr>
- <sup>8</sup> There are around 40–50 million seasonal migrant workers in India.
- <sup>9</sup> See <https://economictimes.indiatimes.com/industry/auto/auto-news/siam-says-auto-sector-left-out-in-eco-package/articleshow/75806003.cms?from=mdr>
- <sup>10</sup> See <https://economictimes.indiatimes.com/small-biz/sme-sector/msmes-dont-have-the-capacity-to-deal-with-something-unexpected-like-covid-19-suresh-prabhu/articleshow/75485280.cms>
- <sup>11</sup> Read more on <https://indianexpress.com/article/opinion/columns/india-economy-mpa-covid-19-arvind-subramanian-josh-felman-6400664/>
- <sup>12</sup> See <https://scroll.in/article/959045/indias-covid-19-lockdown-may-cause-38-million-job-losses-in-the-travel-and-tourism-industry>
- <sup>13</sup> Alan et al. (2020). Ongoing research, <https://www.youtube.com/watch?v=GGGb9zXHH4g>
- <sup>14</sup> Government of India Ministry of Health and Family Welfare Statistics Division Rural Health Statistics [https://main.mohfw.gov.in/sites/default/files/Final%20RHS%202018-19\\_0.pdf](https://main.mohfw.gov.in/sites/default/files/Final%20RHS%202018-19_0.pdf)
- <sup>15</sup> See <https://economictimes.indiatimes.com/news/politics-and-nation/india-witnesses-steep-rise-in-crime-against-women-amid-lockdown-587-complaints-received-ncw/articleshow/75201412.cms>
- <sup>16</sup> India's poverty profile, The World Bank-IBRD-IDA. Retrieved from <https://www.worldbank.org/en/news/infographic/2016/05/27/indias-poverty-profile>
- <sup>17</sup> Thomas (2020). See <https://scroll.in/article/963284/indias-poor-may-have-lost-rs-4-lakh-crore-in-the-coronavirus-lockdown>
- <sup>18</sup> See <https://timesofindia.indiatimes.com/india/how-lockdown-has-been-a-gift-for-river-ganga/articleshow/75569852.cms>
- <sup>19</sup> See <https://www.india.com/festivals-events/world-environment-day-2020-positive-impact-of-covid-19-lockdown-on-environment-4047703/>

## REFERENCES

- Alan et al. (2020). Ongoing research, <https://www.youtube.com/watch?v=GGGb9zXHH4g>
- Beck, T. (2020). Finance in the times of coronavirus. In *Economics in the Time of COVID-19* (p. 73). London, UK. <https://cepr.org/sites/default/files/news/COVID-19.pdf>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: A rapid review of the evidence. *The Lancet*, 395, 912–920.
- Chakraborty, L., & Thomas, E. (2020). *COVID-19 and Macroeconomic Uncertainty: Fiscal and Monetary Policy Response* (Working Paper No. 20/302). NIPFP, New Delhi. [https://www.nipfp.org.in/media/medialibrary/2020/04/WP\\_302\\_2020.pdf](https://www.nipfp.org.in/media/medialibrary/2020/04/WP_302_2020.pdf).
- Chidambaram, P. (2020, May 4). We will never know how many people died of starvation, because no state government will admit to starvation deaths. The Indian Express. <https://indianexpress.com/article/opinion/columns/p-chidambaram-india-coronavirus-lockdown-migrants-hunger-6390882/>
- CRISIL (2020). Quickonomics: The one bright spot in the economy. CRISIL, An S&P Global Company. <https://www.crisil.com/en/home/our-analysis/views-and-commentaries/2020/06/the-one-bright-spot-in-the-economy.html>
- Deshpande, A. (2020). *The Covid-19 lockdown in India: Gender and caste dimensions of the first job losses*, Working Papers id:13085, eSocialSciences. <https://ideas.repec.org/p/ess/wpaper/id13085.html>.
- Dev, S. M., & Sengupta, R. (2020). *Covid-19: Impact on the Indian economy*. Mumbai: Indira Gandhi Institute of Development Research.
- Furceri, D., Loungani, P., Ostry, J. D., & Pizzuto, P. (2020). Will Covid-19 affect inequality? Evidence from past pandemics. *Covid Economics*, 12, 138–157.
- Hossain, M. M., Purohit, N., Sharma, R., Bhattacharya, S., McKyer, E. L. J., & Ma, P. (2020). *Suicide of a farmer amid COVID-19 in India: Perspectives on social determinants of suicidal behavior and prevention strategies*. <https://doi.org/10.31235/osf.io/ekam3>.
- International Organisation of Migration (2011). "International Migration Law: Glossary on Migration", second edition. IOM, Geneva.
- Initiative on Global Markets (2020), *Inequality and the Covid-19 crisis*. Chicago: IGM Forum. <https://www.igmchicago.org/surveys/inequality-and-the-covid-19-crisis/>.
- Kumar, A., Nayar, K. R., & Koya, S. F. (2020). COVID-19: Challenges and its consequences for rural health care in India. *Public Health in Practice*, 1, 100009.
- Kundu, B., & Bhowmik, D. (2020). *Societal impact of novel corona virus (COVID 19 pandemic) in India*. <https://doi.org/10.31235/osf.io/vm5rz>.
- Mukhopadhyay, B. R. (2020). COVID-19 and the Indian farm sector: Ensuring everyone's seat at the table. *Agriculture and Human Values*, 37, 549–550. <https://doi.org/10.1007/s10460-020-10076-y>.
- Mukhra, R., Krishan, K., & Kanchan, T. (2020). Covid-19 sets off mass migration in India. *Archives of Medical Research*. (In press). <https://doi.org/10.1016/j.arcmed.2020.06.003>.
- Rakshit, B., & Basishtha, D. (2020). Can India stay immune enough to combat COVID-19 pandemic? An economic query. *Journal of Public Affairs*. (Online first) <https://doi.org/10.1002/pa.2157>.
- Rele, S. (2020). Emerging outbreaks and epidemic threats: The practicality and limitations in the development and manufacturing of treatments for Coronavirus (COVID-19). *Polymorphism*, 4, 45–52.
- Saha, T., & Bhattacharya, S. (2020). Consequences of lockdown amid covid-19 pandemic on indian agriculture. *Food and Scientific Reports*. 1(special issue), 47–50. <https://foodandscientificreports.com/details/consequence-of-lockdown-amid-covid-19-pandemic-on-indian-agriculture.html>.
- Sengupta, R., & Vardhan, H. (2019). Banking crisis is impeding India's economy. In *East Asia Forum* (Vol. 3).
- Singh, B.P. Impact of COVID-19 on Rural Economy in India. *SSRN Electronic Journal*, <http://dx.doi.org/10.2139/ssrn.3609973>.
- Subramanian, A., & Feman, J. (2020). With Covid-19 crisis dealing sharp blow to struggling financial sector, revival calls for new approach. The Indian Express. <https://indianexpress.com/article/opinion/columns/india-economy-mpa-covid-19-arvind-subramanian-josh-felman-6400664/>
- Thomas, J. J. (2020). India's poor may have lost Rs 4 lakh crore in the coronavirus lockdown. Scroll. in. <https://scroll.in/article/963284/indias-poor-may-have-lost-rs-4-lakh-crore-in-the-coronavirus-lockdown>
- Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of COVID-19 coronavirus and its impact on global mental health. *International Journal of Social Psychiatry*, 66, 317–320.
- Trivedi, U., & Beniwal, V. (2020). World's Biggest Lockdown to Push 12 Million Into Extreme Poverty in India. Bloomberg. <https://www.bloomberg.com/news/articles/2020-05-27/world-s-biggest-lockdown-to-push-12-million-into-extreme-poverty>
- United Nations (2020). Everyone Included: Social Impact of COVID-19. United Nations, Department of Economic and Social Affairs Social Inclusion. <https://www.un.org/development/desa/dspd/everyone-included-covid-19.html>
- Uppal, P. (2020). Covid-19 will Lead to increased crime rates in India. *International Journal of Research-GRANTHAALAYAH*, 8(4), 72–78.

## AUTHOR BIOGRAPHIES

**Dr. Ranjan Aneja** is an Associate Professor in Department of Economics, Central University of Haryana, India. His area of interest is Economic Modeling and Policy Analysis, Macroeconomic stability and Regional Economics. He has published several papers in premium journals. He serves as reviewer to multiple journals of international repute indexed in Scopus and Web of Science and listed in ABDC.

**Ms. Vaishali Ahuja** is a student of post-graduation in Economics at Central University of Haryana, India. Her area of interest is

Resource Economics and Macro Economics. She has attended several seminars and conferences of national and international repute.

**How to cite this article:** Aneja R, Ahuja V. An assessment of socioeconomic impact of COVID-19 pandemic in India. *J Public Affairs*. 2021;21:e2266. <https://doi.org/10.1002/pa.2266>