

# COVID - 19 Pandemic Workshop

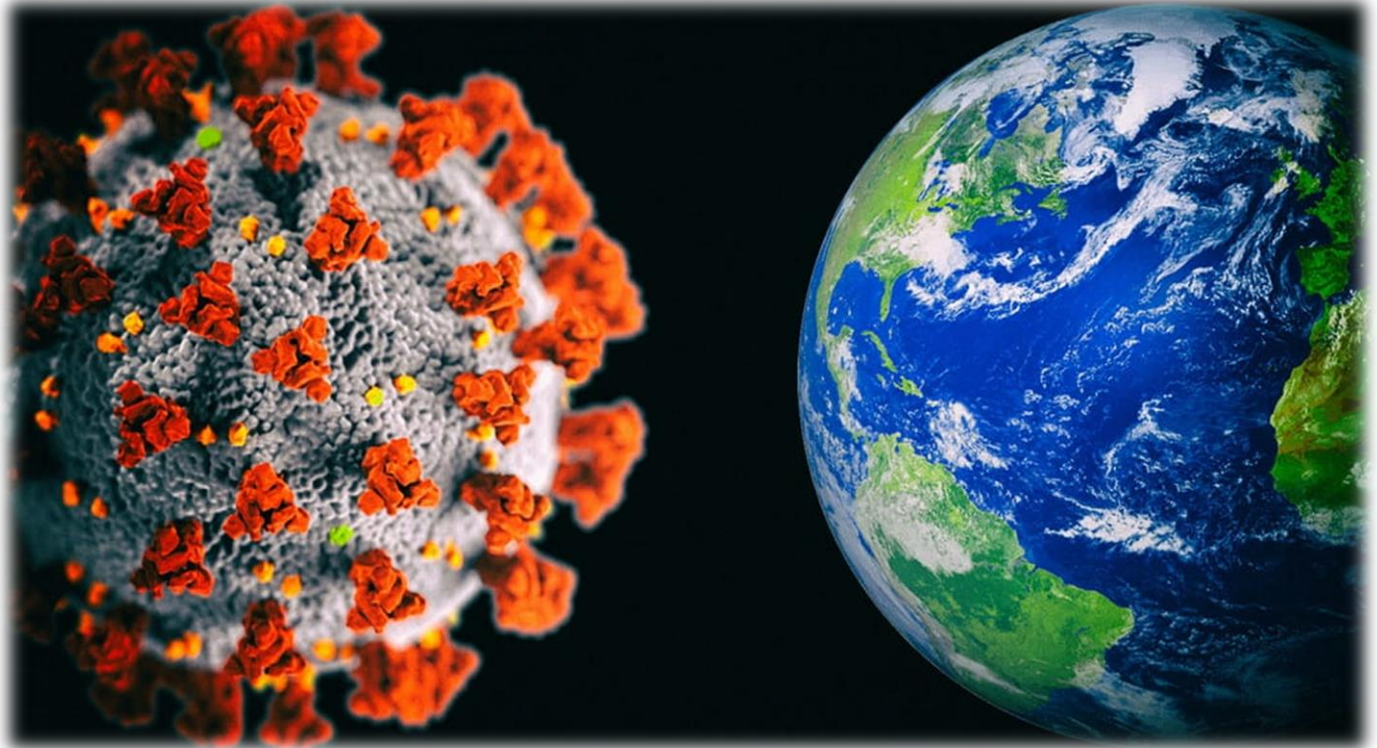


Learning from grassroots with development lens

24<sup>th</sup> and 25<sup>th</sup> June 2020

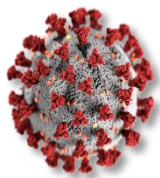
**Bulletin**

**June 2020**



COVID-19 Pandemic workshop was organised by the students of PDM 19 and PCM 01 of The DHAN Academy. It was a two days' workshop organised on 24<sup>th</sup> and 25<sup>th</sup> of June 2020. It was organised in online platform by The DHAN Academy students with me moto of "Learning from grassroots with development lens". The day one was started with the inaugural session which was chaired by Mr. A Gurnathan, Director of The DHAN Academy, Mr. M P Vasimalai, Executive director of DHAN Foundation and Chairperson of the DHAN Academy and Mr. P Premanand, Deputy Director of The DHAN Academy. Then further on the day three major topics viz. Human behaviour,

Migration and Environment during COVID-19 era was discussed. The Students presented their field experiences and also literature findings in the workshop which was later enriched by the panelist with their rich experience and knowledge. On the day two of the workshop few other important dimensions viz. Politics, Medicine, Livelihood and its restoration in post COVID-19 world was thoroughly discussed. This session was chaired by Mr. A Gurnathan, Director of The DHAN Academy, Mr. P Premanand, Deputy Director of The DHAN Academy, who added a rich flavor of knowledge in the workshop key findings.



# COVID - 19 Pandemic Workshop

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## COVID-19 Pandemic, Livelihood and its Restoration

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### Introduction –

COVID-19 Pandemic is not the first ever pandemic which hit this glob, but it is the deadliest and possess enough capability to shake the so called developed global system. Due to this pandemic a huge portion of the world population is now in danger. In one hand there is a high risk to get infected by this deadly virus on the other hand the loop of poverty and unemployment chocking the neck of common masses. In the present scenario other than the virus livelihood becomes a prime issue to be discussed about. Especially for the poor community who are dependent on farming and labour work. The government of India has given some relaxation on the agro sector as an essential good but the migrant workers are neglected as the third child of a goat. The epidemics of the past was hardly concerned with migration and livelihood during the colonial India, although major Indian cities like Kolkata (Calcutta), Mumbai (Bombay), Chennai (Madras) and many other urban places hugely suffered from influenza, smallpox, plague, malaria and cholera (Davis, 1951; Banthia and Dyson, 1999; Hill, 2011). Mumbai experienced a deadly plague in 1896 and also an influenza in 1918. Hill observed that epidemic of influenza

arrived in Mumbai in September 1918 which swept through north and east India. He found that excess mortality due to influenza was negatively related with outmigration at district level analysis, but offered no explanation (Hill, 2011). In 1994, a major epidemic of plague broke out in western India with epicenter in Surat. There was a huge exodus of migrant population from the industrial city of Surat.

When migrants flee from the city they not only lose their livelihood but they may carry the infections to their native places (BBC, 2020). In the period of epidemic of HIV/AIDs which broke during 1980s in various parts of the world, migrants were greatly stigmatized as a carrier of the disease and considered to be a population at risk. This has obliterated the great contribution of migrants in economic growth, innovation, skill development and entrepreneurship in building cities and the nation. They are engaged in many 3D jobs (dirty, dangerous and demeaning) which the so-called urban natives hate to do. Access to social security programmes, access to health care and other entitlements are grossly denied to many migrant workers due to lack of their inclusion in urban society. Many of them also lose their political

rights as being away at the time of election from their home constituency and are not able to vote.

After this pandemic this labours faced lot more problems than they ever faced, they straggled a lot to reach home and many of them lost their life due to starvation, depression and comorbidities. The labours who has returned back to their native are not willing to again go back. Now the question remains about the restoration of their livelihood. Government of India has started the MGNREGA work to support the rural economy from the initial days of national lockdown. The GoI also announced several packages and schemes for the welfare of common mass, but the problem in the implementation may ruin all the planning. This report will try to light up on such critical topics for a better understanding.

### Methodology –

This report is mostly descriptive in nature. Secondary sources of data have been used for this Secondary data has been collected from different published sources like books, journals, newspapers and magazines, and web sites.

### Discussions –

The spread of Corona virus from the epicenter of Wuhan in China to worldwide is attributed to migration and mobility of people. On the other hand, the medical professionals largely believe that the control of this infectious disease is possible through immobility and confinement like lockdown and social distancing. In a globalised world, the lockdown is likely to bring unprecedented breakdown of our economic and social system. Migrants are most vulnerable to urban disasters and epidemics. The first case of COVID-19 surfaced in

India on January 30, 2020, and following the outbreak the lock down in the entire country was announced on 24<sup>th</sup> March for a period of 21days. All the state borders and public transports stopped and due to that the whole system collapsed in the country.

### Impact of COVID-19 Pandemic on Migrant labours –

After the announcement of the national lockdown the days become like a night mare to the thousands of migrant workers who lost their livelihood and

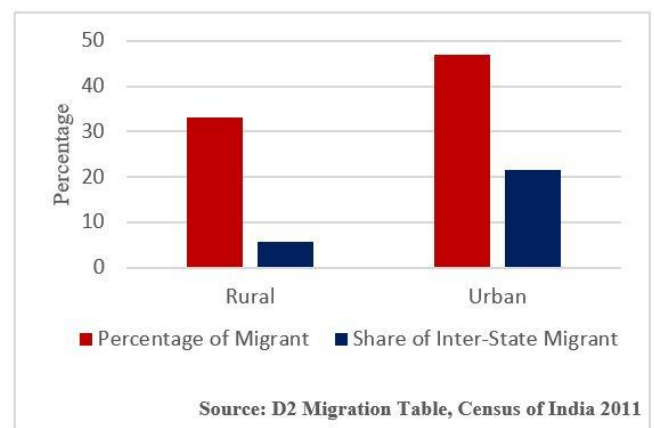


Figure 1 Migration Intensity and Share of Inter-State Migrants in Rural and Urban

become homeless overnight. As a result, thousands of them started fleeing from various cities to their native places. Many migrants lost their lives either due to hardship on the way, hunger, accident or comorbidity and some even committed suicide. A telephonic survey of more than 3000 migrants from north central India by Jan Sahas (2020) shows that majority of the workers were the daily wage earners and at the time of lockdown, 42% were left with no ration, one third was stuck at destinations city with no access to food, water and money, 94% don't have worker's identity card (Jan Sahas, 2020). Most of the migration for work and employment is directed towards the urban centers. According to census, 2011 about half of the urban

population are migrants and one fifth of them are inter-state migrants (See Fig 1).

Rural to urban migrants are mainly concentrated in 53 million plus urban agglomerations (with one million and more) that comprises 140 million out of 377 million urban population of the country equivalent to 43 percent of total urban population as per 2011 Census. Out of 53 million plus cities, eight of them are mega-cities with a population of 5 million and more (see Table 1).

**Table 1 Migration Intensity, Share of Inter-State Migrants and Covid-19 Cases in Mega**

Urban Agglomeration (UA)	Percentage of migrants to total population	% Share of inter-state migrants to total migrants	Number of COVID cases in the respective districts as on 22 <sup>nd</sup> June 2020 (Total Cases by district 6761)
Delhi	43.1	87.8	59,746
Greater Mumbai	54.9	46.0	66,488
Kolkata	40.8	18.2	4,653
Chennai	51.0	11.8	41,172
Bangalore	52.3	35.1	1,272
Hyderabad	64.3	7.1	5,512
Ahmedabad	48.7	24.1	18,837
Pune	64.8	22.3	15,882
<b>Urban India</b>	<b>47.0</b>	<b>21.6</b>	Share of Covid 19 cases in these metro cities to total cases is 50 %

Source: Census of India 2011, D3 (Appendix) Migration Table, <https://www.mohfw.gov.in/pdf/DistrictWiseList354.pdf> & <https://www.covid19india.org/> (Accessed on 22th June, 2020)

As on 22th June 2020, the respective districts of eight mega cities reported about two-fifth of corona virus positive cases (<https://www.mohfw.gov.in/pdf/DistrictWiseList354.pdf>). The incidence of COVID 19 shows that these metropolitan areas are the centres from where the disease has been spreading to the near as well as far off places.

### Impact of COVID-19 Pandemic on Agriculture

Though the GoI has announced the agro sector as an essential sector and give some relaxation but due to the non-working condition of other enterprises like transport and industries this sector also face a lot of issue in this pandemic time. The challenges this sector faced are –

- ♣ Interruptions in the acquirement of nourishment grains by government organizations.
  - ♣ Disturbances in the assortment of harvests from the homesteads by private dealers.
  - ♣ A lack of laborers to collect the rabi crop.
  - ♣ A deficiency of drivers in the transportation area.
  - ♣ Barricades in the development of rural products over the significant expressways.
  - ♣ Conclusion or restricted tasks of APMC *mandis*.
  - ♣ Shutdowns in the retail farming markets.
- These elements have prompted an emergency in a scope of yields as well: wheat, grapes, watermelons, bananas, muskmelon, chana, cotton, chilies, turmeric, cumin, coriander, onion, and potato.

### Agribusiness and supply chains

COVID-19 is disturbing a few exercises in agribusiness and supply chains. Fundamental reports show that the non-accessibility of transient work is interfering with some gathering exercises, especially in northwest India where wheat and heartbeats are being collected. There are interruptions in supply chains due to transportation issues and different issues. Costs have declined for wheat, vegetables, and different yields, yet buyers are regularly paying more. Media reports show that the conclusion of inns, cafés, sweet shops, and coffeehouses during the lockdown is as of now discouraging milk deals. In the interim, poultry ranchers have been severely hit because of falsehood, especially via web-based networking media, that chicken are the bearers of COVID-19.



### **Impact of COVID-19 Pandemic on MSME –**

The MSME sector is one of the most vulnerable sectors of Indian economy which still struggling to come out from two major disruptions of demonetization and Goods and Service tax reform. This sector comprises of around 6.3 crore enterprises contributes around 30% of GDP and around 50 % of exports. In India, this sector provides employment to more than 11 crore people. This sector contributes to more inclusive and sustainable growth. International Labour Organisation (ILO) estimates that 24.7 million workers will lose their jobs because of this pandemic situation. They also state that sustaining the existing business will be more difficult. A survey carried out by MSME industry associations in Tamil Nadu reports 44.7% revenue shortfall during the lockdown period. MSME (plant and machinery <1 cr) was affected during the lockdown. They lost their liquidity. A study in China highlights that over 30 per cent of enterprises only have enough cash for less than one month of operation and only 10 per cent of the enterprises have cash flows beyond six months. Another study carried out by researchers from Tsinghua University and Peking shows that only 4 per cent of Chinese SMEs report that COVID-19 decreased their revenue by less than 10 per cent. In such cases this sector become more vulnerable than the previous.

### **Livelihood Restoration –**

For the restoration of the livelihood GoI has taken many initiatives as of now, but very few of them are actively working. The huge population who are now become unemployed if not get proper job the crime rate of the country will increase in the near

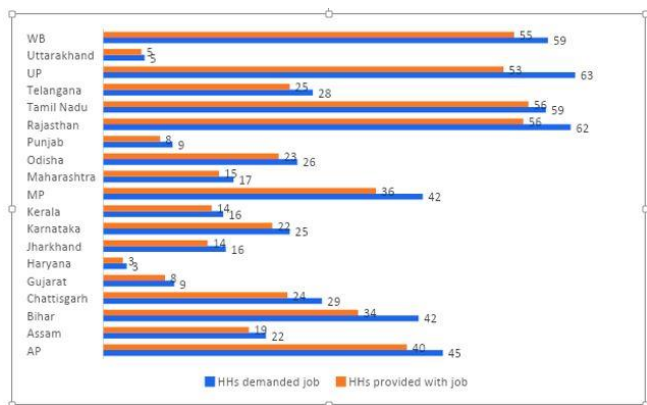
future. In this section a the way forwards will be discussed in a elaborative way –

### **Role of MGNREGA in Livelihood restoration –**

After the nationwide lockdown to supply an income to the rural livelihood it was started during the initial periods of the lockdown. Finance minister Nirmala Sitharaman has acknowledged the crucial role that the employment guarantee scheme can play in reviving the rural economy. This was reflected in the recent announcement of the minister in which an additional Rs.40,000 crore have been allocated for the scheme. In Union Budget presented in February 2020, Rs.61,500 crore were allocated for the scheme, which was much lower than the revised estimate of Rs.71,001.81 crore in 2019-20. In all, Rs.1,01,500 crore have been allocated for the MGNREGA in the current financial year.

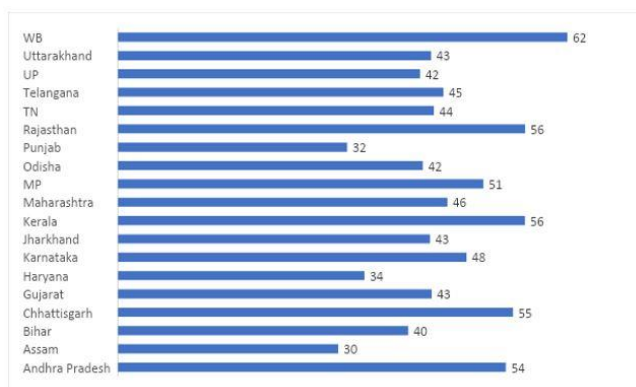
But now the question is can MGNREGA really restore the livelihood of all the people? MGNREGA was designed as a demand driven-programme. According to the guidelines of the scheme, all households demanding employment under MGNREGA are entitled to receive a maximum of 100 days of employment. However, gaps exist between the number of households that demanded employment and those that received it, every year. Power relations of local governments, shortages of staff, capacity issues have put brakes on employment generation under the MGNREGA. According to an article Bose and Roy (2020) in 2019-20, around 578 lakh households demanded employment under MGNREGA across major states, but around 512 lakh households received employment. The gap

varies across states. In the article they also mentioned that States like Madhya Pradesh, Rajasthan, Bihar and Uttar Pradesh performed poorly as compared to other major states. [Figure 2]



**Figure 2** Number of households demanding and receiving work under the MGNREGA (in lakh). (Source: MGNREGS MIS).

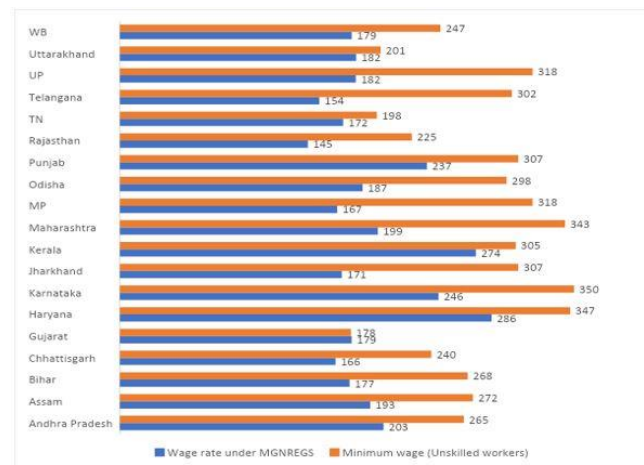
The average number of days of employment provided was lesser than 50 days in 14 out of 19 major states in India. Figure 3 shows that the best performing state was West Bengal with 62 days of employment generation on average during 2017-18 to 2019-20. In view of the widespread agrarian distress that has engulfed substantial parts of the country, shortfall of days of employment from 100 days, across major states, is not on account of lack of demand for work; rather, it reflects inability of the state governments to create avenues of employment under this scheme.



**Figure 3** Average number of days of employment under the MGNREGA, major states, 2017-2020

## Wage gap

Legal minimum wages for un-skilled workers are much higher than wage rate under the MGNREGA in all the major states, except for Gujarat. In 12 major states (out of 19), average wage rate under the MGNREGA was 50%-75% of the legally prescribed minimum wage for the unskilled



**Figure 4** Average wage rate under the MGNREGA and legal minimum wage across major states in India, 2019-20 (in Rs.) workers. [Figure 4]

In such case may be the mass will be employed but they will be underemployed. As a result they will not able to need their daily needs.

Keeping all this gap in mind the step wise graduation of MGNREGA can be like this

1. Providing employment opportunities to the households for 100 days at the existing wage rate.
2. Providing 100 days of employment to all households that demanded work at legal minimum wage.
3. Expanding the number of days of employment to 200 days at the existing average wage rate of the states.
4. Expanding the number of days of employment to 200 days with legal minimum wage rate to every household that demand work.

## Skill enhancement for additional livelihood in Rural and Urban areas –

**Atmanirbhar Bharat** (transl. self-reliant India) is the vision of the Prime Minister of India Narendra Modi of making India a self-reliant nation. This can be achieved only the youth of India become self-reliant. According to a report Indian youths are unskilled to do any job of this century. A skill enhancement training for the rural and urban youth can solve the problem of livelihood restoration in the near future. After the green revolution the moto of rural India diverted to the mono cropping or the mono enterprises, but if we turn the pages of history India never followed such a system where if one enterprise fall down the whole community become endangered. This things can be solved with a skill enhancement of agro-allied sector in rural and some electronic or automobile skill enhancement for the urban youth. This can be done through the skill India programme, and those youth can get a financial and technical support through the Startup India. KVKs and ITIs can take a responsibility to provide such trainings in a large scale.

## Conclusion –

This COVID-19 pandemic has make the Indian as well as world economy stagnant, all the systems has collapsed and people do not have any way forward to follow. In such case a new beginning can be done which will not depend on any other nation. A self-reliant system where each enterprise will be interdependent to each other. The Gandhian Gram Swaraj is a very better alternative which can show the light in the initial years of a never ending journey.

## References

- [1] Arumugam, D. U., & Kanagavalli, D. G. (2020). COVID-19: Impact of Agriculture in India. *AEAGAEUM JOURNAL*, 8(5).
- [2] Bandyopadhyay, R. Migrant Labour, Informal Economy, and Logistics Sector in a Covid-19 World. *BORDERS OF AN EPIDEMIC*, 31. - <https://www.im4change.org/upload/files/Esays%20COVID-19.pdf#page=41>
- [3] Bhagat, R. B., Reshmi, R. S., Sahoo, H., Roy, A. K., & Govil, D. (2020). *The COVID-19, Migration and Livelihood in India* (No. id: 13054). - [https://www.researchgate.net/profile/Harihar\\_Sahoo2/publication/341756913\\_The\\_COVID-19\\_Migration\\_and\\_Livelihood\\_in\\_India\\_A\\_Background\\_Paper\\_for\\_Policy\\_Makers\\_International\\_Institute\\_for\\_Population\\_Sciences\\_Mumbai\\_The\\_COVID-19\\_Migration\\_and\\_Livelihood\\_in\\_India/links/5ed2484792851c9c5e66722a/The\\_COVID-19-Migration-and-Livelihood-in-India-A-Background-Paper-for-Policy-Makers-International-Institute-for-Population-Sciences-Mumbai-The\\_COVID-19-Migration-and-Livelihood-in-India.pdf](https://www.researchgate.net/profile/Harihar_Sahoo2/publication/341756913_The_COVID-19_Migration_and_Livelihood_in_India_A_Background_Paper_for_Policy_Makers_International_Institute_for_Population_Sciences_Mumbai_The_COVID-19_Migration_and_Livelihood_in_India_A_Background_Paper_for_Policy_Makers_International_Institute_for_Population_Sciences_Mumbai_The_COVID-19_Migration_and_Livelihood_in_India/links/5ed2484792851c9c5e66722a/The_COVID-19-Migration-and-Livelihood-in-India-A-Background-Paper-for-Policy-Makers-International-Institute-for-Population-Sciences-Mumbai-The_COVID-19-Migration-and-Livelihood-in-India.pdf)
- [4] Brief, A. P. The COVID-19, Migration and Livelihood in India: Challenges and Strategies. –
- [5] Choudhary, M. V. K. (2020). A Framework for Revival of MSME Sector Post COVID 19. *Tathapi with ISSN 2320-0693 is an UGC CARE Journal*, 19(10), 288-295.
- [6] Das, P. (2020). COVID-19 Pandemic and Macroeconomic Uncertainty: Indian Economic Outlook.
- [7] Goyal, A. (2020). *Post Covid-19: Recovering and sustaining India's growth* (No. 2020-016). Indira Gandhi Institute of Development Research, Mumbai, India. - <http://www.igidr.ac.in/pdf/publication/WP-2020-016.pdf>
- [8] [https://iipsindia.ac.in/sites/default/files/iips\\_covid19\\_mlli\\_PB.pdf](https://iipsindia.ac.in/sites/default/files/iips_covid19_mlli_PB.pdf)
- [9] Jebaraj, P. (2020). Only 30 lakh found MGNREGA work in April. - [http://vslir.iima.ac.in:8080/jspui/bitstream/11718/22995/1/The\\_Hindu\\_30\\_04\\_2020\\_P.01%2608\\_Pressrader.png](http://vslir.iima.ac.in:8080/jspui/bitstream/11718/22995/1/The_Hindu_30_04_2020_P.01%2608_Pressrader.png)

- [10] Mampi Bose and Shantanu De Roy (2020) Four Ways that MGNREGA Can Be Expanded to Help India's Rural Economy - <https://m-thewire-in.cdn.ampproject.org/c/s/m.thewire.in/article/labour/rs-1-lakh-crore-and-the-mgnrega-gambit-for-boosting-indias-rural-economy/amp>
- [11] Mythili, R. (2020). COVID-19 IMPACT ON SMEs AND RECOVERY MEASURES TO BE TAKEN FOR OVERCOMING ECONOMY CRISIS IN INDIA. *Purakala with ISSN 0971-2143 is an UGC CARE Journal*, 31(12), 191-195.
- [12] Raney, H. M. (2020). COVID 19 Pandemic: Impact on MSMEs. *Studies in Indian Place Names*, 40(68), 396-401.
- [13] Singh, B. P. (2020). Impact of COVID-19 on Rural Economy in India. *Available at SSRN 3609973*.

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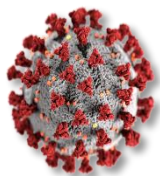


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## Environmental Impact analysis due to COVID 19 Lockdown

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**Introduction:** Human beings often forget that we are largely dependent on Mother Nature and become ignorant towards taking care of it. We have been so reluctant to the preservation of natural resources and sustainable development that we had forgotten the beauty of the Earth completely. The Coronavirus disease-2019 (COVID-19) lockdown imposed throughout the world has struck a chord in every one of us and it has made us thinking how nature is so important for our day to day living.

According to WHO There is currently no conclusive evidence that either weather or climate have a strong influence on transmission. The severe acute respiratory syndrome Coronavirus-2 (SARS-CoV-2) virus which causes COVID-19 disease has been transmitted in all regions of the world, from cold and dry, to hot and humid climate, only temperature and humidity may influence how long the virus survives outside of the human body, this effect is likely to be small compared to the degree of contact between people. This (SARS-CoV2) virus has generated an unprecedented impact in most countries of the world. To save from this virus many countries are announcing the complete lockdown and which has an impact on environment. On the one hand, climate experts

predict that greenhouse gas (GHG) emissions could drop to proportions never before seen since World War II (*Global Carbon Project, 2020*).

### Temperature and humidity

Covid-19 and the temperature of the environment have significant relation according to many reports and journals. In retrospect studies, the outbreak of severe acute respiratory syndrome (SARS) in Guangdong(China) in 2003 gradually faded with the warming weather coming, and was basically ended until July (Wallis and Nerlich, 2005).It has been documented that the temperature and its variations might have affected the SARS outbreak (Tan, 2005). A study in Korea found that the risk of influenza incidence was significantly increased with low daily temperature and low relative humidity, a positive significant association was observed for diurnal temperature range (DTR) (Park et al., 2019). A study demonstrated that absolute humidity had significant correlations with influenza viral survival and transmission rates (Metz and Finn, 2015). Few studies reported that the COVID-19 was related to the meteorological factors, which decreased with the temperature increasing (Oliveiros et al., 2020; C.Wang et al., 2020; M. Wang et al., 2020), but their effects on the

mortality have not been reported. According to (Bherwaniet *al.*, 2020) temperature rise has been reported to mitigate the spread of viruses, similar trends are observed in most of the Indian cities under the study for SARS-CoV-2. With the present analysis, it is inferred that the hot climate should reduce the spread of COVID-19, whereas relative humidity correlates positively with the number of infected cases. Although a common trend may not be visible right now with respect to environmental factors, it will be wise to find out and understand their correlation in order to support the future action plans It should also be noted that a single model or one prediction methodology may not fit to understand the impact of environmental factors for all the cases of such a geographically large and diverse country like India. As the monsoon has entered now into the Indian sub-continent, due to regular rain fall in some parts of the country the temperature will be low and the humidity will be high as a result it can be predict that there is a very high chance of increase in the case of COVID 19 in the country.

### **Air Quality Improvement**

Air pollution has come up as a growing concern all over the world, especially in developing nations like India. India witnessed economic growth, rapid expansion of cities, industrialization, and fast-paced development of infrastructure since liberalization during the 1990s. Simultaneously, the level of air pollution in India has increased to a major health risk and cause of large premature mortality. Approximately one million people died in 2015 due to ambient particulate matter (PM) pollution alone in India (Guo et al., 2017). There is a large overlap between causes of death in COVID-

19 patients and the conditions caused and/or exacerbated by long-term exposure to fine particulate matter (PM<sub>2.5</sub>). PM<sub>2.5</sub> contains microscopic solids or liquid droplets small enough that they can be inhaled and cause serious health problems. According to (Wu. X 2020) Long-term exposure to PM<sub>2.5</sub> is linked to many of the co morbidities that have been associated with poor prognosis and death in COVID-19 patients, including cardiovascular and lung disease. According to (ariveda.org) Delhi (53,116 case), Prayagraj (1,351 case) and Kanpur (871 cases) are the most polluted city by PM 2.5 in India. Due to the COVID-19 pandemic, human activities are largely restricted in many regions in India since mid-March of 2020, and it is a progressing experiment to testify effectiveness of restricted emissions. Through the study it has been found that concentrations of six criteria pollutants, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, NO<sub>2</sub>, ozone and SO<sub>2</sub> during March 16th to April 14th from 2017 to 2020 in 22 cities covering different regions of India were analyzed. Overall, around 43, 31, 10, and 18% decreases in PM<sub>2.5</sub>, PM<sub>10</sub>, CO, and NO<sub>2</sub> in India were observed during lockdown period compared to previous years. While, there were 17% increase in O<sub>3</sub> and negligible changes in SO<sub>2</sub>. On an average reduction in PM concentration over southern part of India is around 50-60% and over the Indo-Gangetic basin, including Delhi, UP, Bihar, West Bengal etc it is as much as 75%. The air quality index (AQI) reduced by 44, 33, 29, 15 and 32% in north, south, east, central and western India, respectively. Correlation between cities especially in northern and eastern regions improved in 2020 compared to previous years, indicating more

significant regional transport than previous years because in cities more than half of the air pollution is caused due to vehicular emission. Large reduction in airplane emission would further the recovery of ozone hole.

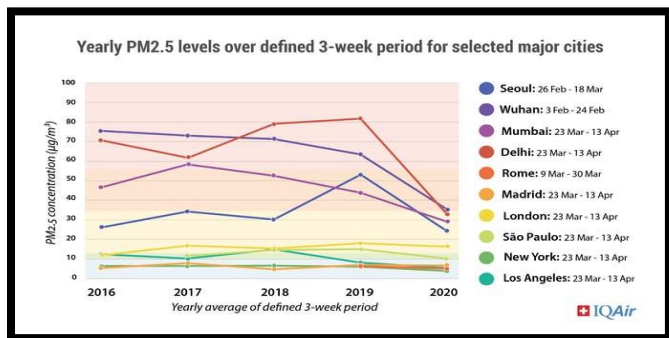


Figure 1 Country wise PM level measurement

### Clean beaches

Beaches are one of the most important natural capital assets found in coastal areas. The lack of



Figure 3 Dolphin in Ganga Ghat

tourists, as a result of the social distancing measures due to the new coronavirus pandemic, has caused a notable change in the appearance of many beaches in the world. For example, beaches like those of Acapulco (Mexico), Barcelona (Spain), or Goa (India), now look cleaner and with crystal clear waters. Ganga is one of the Holy River and also very important near to the north and eastern part of India, but people's irrespective of use make this river water much polluted that it was

so difficult to get back again clean water. Recently imposing lockdown due to COVID 19 helps to change that scenario, the South Asian River **Dolphins** which is also known as Ganges Dolphins have been spotted **near Kolkata Ganga Ghats after 30 years.**

### Ganga fit for drinking in Haridwar

The Uttarakhand Pollution Control Board Water from Har-ki-Pauri in Haridwar was tested and the results from the tests reveal that the water here has been classified as 'fit for drinking after chlorination', for the first time in decades.

### The number of flamingos increased in Mumbai



Figure 2 Lot of Flamingos in Mumbai

As a result of the lockdown imposed due to COVID-19, tens of thousands of flamingos have gathered in the city of Navi Mumbai. The birds normally migrate to the different area every year, but residents have reported that this year they have seen a massive increase in their numbers.

### Reduction of environmental noise level

Environmental noise is defined as an unwanted sound that could be generated by instance, industrial or commercial activities, sound of engine vehicles which all causes health problems and altering the natural conditions of the ecosystems. But due to lockdown noise level drop considerably in most cities in the world. Prashant Gargava, member secretary of Central Pollution

Control Board (CPCB), the apex body for measuring noise pollution across the country, says “While the diurnal decibel level limit in residential areas in normal times is set at 55 dB(A) and 45 at night, chances are the current figures range between just 30 and 40. “The chirping of birds measures around 40-50 decibels”. Biyani said the Govindpuri Metro station area, which had sound decibels of around 100 daily, has now reduced to around 50-60 decibels due to the less number of vehicles on the road”.

#### Reduction in waste recycling (Negative impact)

The quarantine policies, established in most countries, have led consumers to increase their demand for online shopping for home delivery. As result both organic and inorganic waste are increasing in house. Waste recycling has always been a major environmental problem of interest to all countries (Liu et al., 2020). Recycling is a common and effective way to prevent pollution, save energy, and conserve natural resources (Varotto and Spagnolli, 2017; Ma et al., 2019). As a result of the pandemic, countries such as the USA have stopped recycling programs in some of their cities, as authorities have been concerned about the risk of COVID-19 spreading in recycling centers.

#### **Necessary Step can be taken to fight against COVID-19 by maintaining healthy environment**

##### **Forestation**

According to World Wildlife Fund, forests cover more than 30% of the Earth's land surface. The unstoppable growths in human population lead to deforestation for resources, industries and land for agriculture or grazing. Rising average temperature and ocean levels, and increased rate of extreme

weather events affect not only the global land and ecosystem, but also human health (Ruscio et al., 2015). Deforestations are also linked to different types of disease due to the birds, bat-borne viral outbreaks (Afelt et al., 2018; Olivero et al., 2017). Many researchers said that, COVID-19 originated from bat. To prevent this outbreak, billions of dollars are being spent to developing diagnostic, treatment, and medicine. But we are neglecting the primary tools of prevention such as forestation and respecting wildlife habitats. It is therefore very much important for the world to realize the significance of the forests, and to encourage afforestation as much as possible throughout the world to maintain the healthy environment.

#### Global ban on wildlife trade

The starting point of COVID-19 outbreak was Hunan seafood market, Wuhan, China. China has temporary put a ban on wildlife markets where animals such as civet, bat, wolf pup, pangolin etc. are kept alive in small cages while on sale. 60% of emerging transferable diseases originate from animals, and 70% of these are supposed to originate in wild animals. So, the unrestricted wildlife trade might enhance the risks of emerging new viruses. Many scientists have urged different countries to permanently ban the wildlife markets and trades. These actions would help to protect human lives from future pandemics like COVID-19. Therefore, considering the national security, bio safety, and public health, it is essential to globally ban wildlife markets and trades.

#### **COVID-19 and WASH**

Lack of Water Sanitation and Hygiene (WASH) best practices have an undeniable link to the spread

of diseases like COVID-19. The spread of Ebola in Africa and its compounded impact due to sub-optimal sanitation facilities is a case in point. In these times of distress, the importance of efficient waste-management techniques cannot be overemphasized, especially for a country like India, where more than 163 million people do not have access to clean drinking water and only 50 per cent of the households report using sanitation facilities but improving water and sanitation has clear benefits. As per the UN World Water Development Report, the return on investment in water and sanitation can be high. As per a report published by Central Pollution Control Board (CPCB) in March 2015, the sewage generation from urban areas in the country is estimated at 61,948 million litres per day (MLD), against which a sewage treatment capacity of 23,277 MLD, or 37 per cent of the sewage generation is available. The current sewage treatment capacity is clearly sub-optimal and will lead to faster spread of diseases like COVID-19. In simple short terms measurement basis, good hygiene habits – like the use of soap and sanitizers are the remedial and in term long term Implementing efficient actions with respect to ‘waste management’ can not only check the current situation from getting exacerbated but also negate such possibilities in future. These measures are most essential as ‘prevention is better than cure’.

### **Field Level Experience:**

In the lockdown period it has been found out that peacock came out on the main road itself because of reducing the air and noise pollution and these all happen because of fewer vehicles in the road. In the

summer season some states like in Rajasthan, MP, Maharastra, Karnataka temperature is very high but this year(2020) less pollution maintain the temperature level and monsoon also came in right time. Gulbarga district (Karnataka) has lots of factories in Sedam town side; due to lockdown factory work stopped which reduces the air pollution. Bhima and Shivganga are two important rivers of Gulbarga district and now water become clean and people can use this water for drinking purpose after chlorination. The whole world’s economy is being affected due to this pandemic COVID-19. Next step should be livelihood restoration, migrated people suffered a lot so may they have a fear on migration in near future so focus on mix cropping may be valid in economic perspective. In case of rural area problem related waste recycling is negligible and during lockdown period fertilizer use also reduces so this is the time for thinking about more organic agriculture. COVID-19 talks about increase immunity system so creating demand on different types of medicinal herbs will be helpful for human society and also open a new way as part of livelihood restoration. As part of MGNREGA afforestation and reforestation can be started and as rainfall rate is quiet good so renovation of water structure in water scarcity area may be helpful for future and these all steps will maintain a healthy environment.

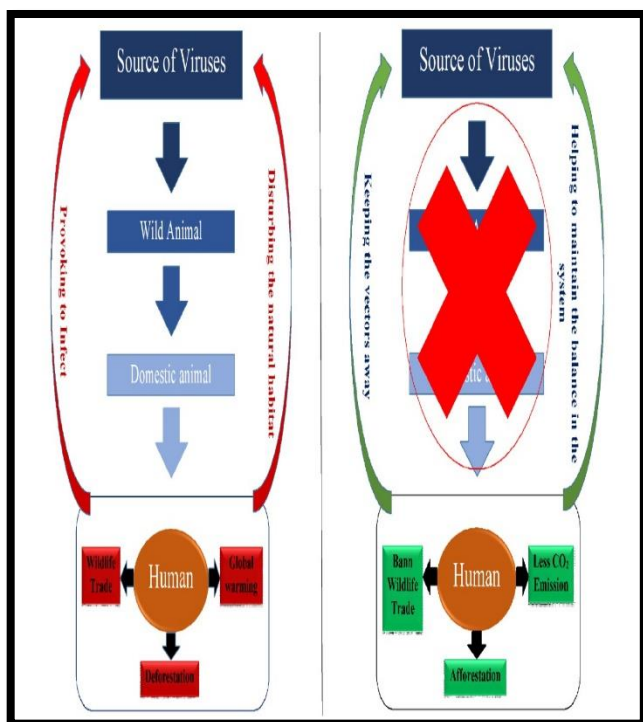
### **Conclusion**

The COVID-19 crisis was caused by a combination of harmful interactions between humans and wildlife, and also the accelerated movement of people and goods across the whole world in the aspect of modernization. While the former set of factors allowed for the transmission of the COVID-



19 virus from animals to humans, the latter has enabled its subsequent spread to pandemic proportions. This is the time for thinking about more eco friendly product, Focus on organic farming, giving more priority to the agro based farming system, using jute bag instead of plastic all these small steps can enrich the environment. Different types of Govt. policy can make sure area wise limitation regarding industrial work and as an individual citizen also Independent country everybody together should take care of environment not only check the current situation from getting exacerbated but also negate such possibilities in future. At last in this present scenario individual scientists, institution leaders and groups of institutions must get together and contribute to containing, mitigating, and pushing back this pandemic and develop implementable solutions that health-workers and communities need to get rid from this pandemic.

### Framework



This cycle completely shows that if we continue our illegal wildlife trade, deforestation, human being will be easily affected through virus but if we stop this and go for afforestation the balance between biodiversity will be maintain and we can negate such possibilities in future.

### Referencing

[1] Bherwani, H., Gupta, A., Anjum, S., Anshul, A., & Kumar, R. (2020). Exploring dependence of COVID-19 on environmental factors and spread prediction in India.

[2] Chakraborty, I., & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, 138882.

[3] Dangi, R. R., & George, M. (2020). Temperature, Population and Longitudinal analysis to predict potential spread for COVID-19. *Population and Longitudinal Analysis to Predict Potential Spread for COVID-19 (March 24, 2020)*.

[4] Gupta, S., Raghuwanshi, G. S., & Chanda, A. (2020). Effect of weather on COVID-19 spread in the US: a prediction model for India in 2020. *Science of The Total Environment*, 138860.

[5] <https://doi.org/10.1016/j.socscimed.2004.11.031>.

[6] <https://doi.org/10.1101/2020.02.22.20025791>.

[7] <https://doi.org/10.1101/2020.03.05.20031872>

[8] <https://www.airveda.com/blog/what-is-pm2-5-and-why-is-it-important>

**Figure 4 Conceptual framework to control the possibility of future pandemic**

- [9] <https://timesofindia.indiatimes.com/india/covid-19-noise-pollution-falls-as-lockdown-rings-in-sound-of-silence/articleshow/75309318.cms>
- [10] <https://www.businesswire.com/news/home/20200513005941/en/%C2%A0Implications-COVID-19-Environment-Sustainability>
- [11] <https://www.indiatoday.in/education-today/gk-current-affairs/story/covid-19-4-vital-environmental-changes-evidenced-in-india-since-lockdown-1673726-2020-05-02>
- [12] <https://www.investindia.gov.in/team-india-blogs/waste-management-essential-public-service-beat-covid-19>
- [13] <https://www.thehindu.com/sci-tech/energy-and-environment/covid-19-lockdown-like-interventions-may-help-combat-air-pollution-in-india-say-scientists/article31746151.ece>
- [14] <https://www.who.int/news-room/q-a-detail/q-a-on-climate-change-and-covid-19#:~:text=There%20is%20no%20evidence%20of,reducing%20transmission%20and%20treating%20patients.>
- [15] Luo, B., Liu, J., Fei, G., Han, T., Zhang, K., Wang, L., Shi, H., Zhang, L., Ruan, Y., Niu, J., 2017. Impact of probable interaction of low temperature and ambient fine particulate
- [16] Luo, Y., Zhang, Y., Liu, T., Rutherford, S., Xu, Y., Xu, X., Wu, W., Xiao, J., Zeng, W., Chu, C., Ma, W., 2013. Lagged effect of diurnal temperature range on mortality in a subtropical megacity of China. *PLoS One* 8 (2), e55280. <https://doi.org/10.1371/journal.pone.0055280>.
- [17] matter on the function of rats alveolar macrophages. *Environ. Toxicol. Pharmacol.* 49, 172–178. <https://doi.org/10.1016/j.etap.2016.12.011>.
- [18] Metz, J.A., Finn, A., 2015. Influenza and humidity – why a bit more damp may be good for you! *J. Inf. Secur.* 71, S54–S58. <https://doi.org/10.1016/j.jinf.2015.04.013>.
- [19] mortality. *Rev. Saude Publica* 48 (6), 881–888. <https://doi.org/10.1590/S0034-8910.2014048005218>.
- [20] Oliveiros, B., Caramelo, L., Ferreira, N.C., Caramelo, F., 2020. Role of temperature and humidity in the modulation of the doubling time of COVID-19 cases. medRxiv
- [21] Park, J.E., Son, W.S., Ryu, Y., Choi, S.B., Kwon, O., Ahn, I., 2019. Effects of temperature, humidity, and diurnal temperature range on influenza incidence in a temperate region. *Influenza Other Respir. Viruses* 14 (1), 11–18. <https://doi.org/10.1111/irv.12682>.
- [22] Pinheiro, S.D.L.L., Saldiva, P.H.N., Schwartz, J., Zanobetti, A., 2014. Isolated and synergistic effects of PM10 and average temperature on cardiovascular and respiratory
- [23] Sharma, S., Zhang, M., Gao, J., Zhang, H., & Kota, S. H. (2020). Effect of restricted emissions during COVID-19 on air quality

in India. *Science of the Total Environment*, 728, 138878.

- [24] Tan, J., 2005. An initial investigation of the association between the SARS outbreak and weather: with the view of the environmental temperature and its variation. *J. Epidemiol. Community Health* 59 (3), 186–192. <https://doi.org/10.1136/jech.2004.020180>.
- [25] Wang, C., Horby, P.W., Hayden, F.G., Gao, G.F., 2020. A novel coronavirus outbreak of global health concern. *Lancet* 395 (10223), 470–473. [https://doi.org/10.1016/S0140-6736\(20\)30185-9](https://doi.org/10.1016/S0140-6736(20)30185-9).
- [26] Wang, M., Jiang, A., Gong, L., Luo, L., Guo, W., Li, C., Zheng, J., Li, C., Yang, B., Zeng, J., 2020. Temperature significant change COVID-19 transmission in 429 cities. *medRxiv*
- [27] Wu, X., Nethery, R. C., Sabath, B. M., Braun, D., & Dominici, F. (2020). Exposure to air pollution and COVID-19 mortality in the United States. *medRxiv*.
- [28] Zambrano-Monserrate, M. A., Ruano, M. A., & Sanchez-Alcalde, L. (2020). Indirect effects of COVID-19 on the environment. *Science of the Total Environment*, 138813.

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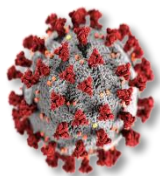
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# COVID - 19 Pandemic Workshop

Learning from grassroots with development lens

24<sup>th</sup> and 25<sup>th</sup> June 2020



## Impact of COVID – 19 Pandemic on Politics and Medicine

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### Introduction

According to WHO, COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally. It spreads primarily from person to person through small droplets from the nose or mouth, which are expelled when a person with COVID-19 coughs, sneezes, or speaks. These droplets are relatively heavy, do not travel far and quickly sink to the ground. People can catch COVID-19 if they breathe in these droplets from a person infected with the virus. This is why it is important to stay at least 1 meter) away from others. These droplets can land on objects and surfaces around the person such as tables, doorknobs and handrails. People can become infected by touching these objects or surfaces, then touching their eyes, nose or mouth.

The first case of COVID-19 in India was reported on January 30, 2020. As of April 14, confirmed cases of COVID-19 stand at 10363. While 1035 patients have recovered, 339 have died. Most of the cases in India are from local transmission, where people either travelled to COVID-19 infected countries, or came in contact with people who had travel history to these countries. Government believes that the stage of community transmission of COVID-19 has, so far, been avoided by virtue of the steps taken.

The health ministry has said that as per a ‘statistical rate of growth-based analysis’ by the Indian Council of Medical Research (ICMR):

Without a lockdown and containment measures, COVID-19 cases could spiral to 200,000 by April 11, and 820,000 by April 15.

Without a lockdown but with containment measures, COVID-19 cases could spiral to 44,000 by April 11, and to 120,000 by April 15.

### COVID-19 Case status

Table 1 Present Status of India COVID-19:

Active Cases	Cured/ Discharged	Deaths	Migrated
183022	258684	14476	1

(Source: <https://www.mygov.in/covid-19/>)  
[Accessed – 22<sup>nd</sup> June 2020]

Table 2 State wise Case status

State Name	Total Confirmed	Active	Recovered	Deceased
Maharashtra	139010	62848	69631	6531
Tamil Nadu	64603	28431	35339	833
West Bengal	14728	4930	9218	580

(Source: <https://www.mygov.in/covid-19/>)  
[Accessed – 22<sup>nd</sup> June 2020]

### Global politics

The coronavirus pandemic has impacted upon the political system of different nations causing postponing of legislative activities, isolation or even death of politicians and rescheduling of elections due to the panic about the spread of the virus.

There has been increasing government approval in the countries like Italy, France, Germany and UK while US has seen drop in approval of the government. But the state governors have seen increasing in approval in New York, North

Carolina and also Michigan. More than 84 countries declared the situation as emergency. Around 40 countries has also restricted the freedom of the press and also mass protests, enforcing lockdown on opponents, handing out relief for political supports.

The Chinese government has been criticised by the US and Brazil government for its handling of the disease. Also the Chinese foreign affairs ministry claimed the US military is responsible for the spread. On the other hand, Australia suggested an enquiry for the origin of the virus and also threatened the economic retaliation with the Chinese embassy. The Chinese embassy to France has in turn claimed that French nursing homes were ""abandoning their posts overnight ... and leaving their residents to die of hunger and disease".

The head of the WHO has claimed that he has been discriminated and received death threats and racist abuses from Taiwan which was denied by the foreign ministry of the country. Also the US president has cut the funding to the organisation.

The OECD secretary general has added that this situation is the 3<sup>rd</sup> and greatest financial and economic shock of this century which demands a modern, global effort as the disease is having a strong global and regional impact so differentiated policy and governance response from international to local levels is expected and this coordinated response can minimise the crisis and failures.

### **Politics in India**

Till February the politics of India was all about CAA, NRC, NPR, Shaheen Bagh protests, Trump visit to India and economic decline but after a few days more than 100 days the politics of the country is revolving around, lockdown, migrant labours, testing, hospital beds, interstate movement, MGNREGA, Tablighi Jamat, Ladakh and centre relations and the increasing case counts. Thus it can be truly suggested that the pandemic has changed the country and its politics.

It was the first time in Indian politics that the public health has been this important. Testing capacity, personal protective equipment for health workers, increasing hospital bed capacity in public and private, public health and infrastructure were primary consideration this time. All citizens across

regions, castes, communities and classes today experience, simultaneously, the urgency of health care. Governments and parties will be judged on whether they were able to cope with the crisis; there will be louder demands for better health care; and India will need not just more doctors, but nurses, paramedical staff, and Accredited Social Health Activists (Asha workers).

Also it was the first time the migrant labourers were the central and public focus in the country. The workers started to return to their natives soon the lockdown was imposed as there were absence of income, food and deep yearning for the emotional security of family and communities. After 36 days of lockdown the government finally allowed their movements by trains and buses which again raised different controversies from transportation fares and lack of coordination among state and the centre. The challenge now is in providing opportunities to migrants who now want to stay home. For the opposition, the crisis presents an opportunity to channel the discontent of migrant workers.

The economic failures have also increased with the imposition of lockdown to prevent the spread of the disease. this influenced shutting down of factories and business, disruption of supply chains and increased unemployment. The government first announced a relief package of ₹1.7 lakh crore for the marginalised, and followed it up a month and a half later, with a cumulative ₹20 lakh crore stimulus. But the package has come under criticism for lacking a strong enough fiscal component. Economists believe that while the structural reforms announced are important, they may not solve the crisis at hand.

The political parties also had to innovate techniques to continue internal functioning as well retain their connection with people. To adhere to the norms of social distancing, large gatherings have been prohibited; even face-to-face meetings have declined. Political parties have turned to technology like digital rallies. Especially for elections parties will rely even more on the mobile phone to reach out to voters. Data will become even more powerful in the micro targeting of voters. Form of both political outreach and political communication will change.



The actual federalism in India will be put to test. India has always had a division of powers but rarely have states and the Centre had to work on a single issue, for weeks at end, together. This was most clearly reflected in the five meetings held between the PM and chief ministers (a sixth is scheduled this week). There have also been increasing differences between the Centre and Opposition-ruled states — especially on the duration of the lockdown, financial support, health protocols, and movement of migrant workers. Some states which have performed credibly will manage to enhance their political capital; other states which have struggled will see an erosion of their power and greater central intervention.

Still there will be several continuities like leadership will continue to be a critical component in parties and a key basis on which voters judge parties. Inter-community relations will remain fragile — as witnessed during the Tablighi Jamaat controversy, which was used by a section to introduce a communal element to the Covid-19 crisis. India's security challenges will persist. As we can see with the Chinese aggression in eastern Ladakh, Pakistan's continued efforts to create terror in Jammu and Kashmir, and now, Nepal's decision to pass a map which incorporates territory claimed and controlled by India, the neighbourhood will remain difficult. Indian institutions will remain under scrutiny. It took months for the judiciary to address the migrant crisis.

### **Steps taken by the Government of India**

The government has taken the following steps to prevent the spread of COVID-19 across the country:

On March 25, the government invoked the Disaster Management Act, 2005 and imposed a 21-day nationwide lockdown to prevent the spread of COVID-19 until April 14. On April 14, Prime Minister Narendra Modi extended the nationwide lockdown until May 3. All districts, localities, and states will be closely monitored till April 20 to see how strictly lockdown guidelines have been implemented. States who do not let hotspots increase could be allowed to let some important activities resume and certain restrictions may be eased.

All international flights are suspended, except for the ones that have been granted permission to evacuate foreign nationals. All existing visas, barring a few categories have been suspended till April 15.

All domestic flights are suspended, except those carrying essential goods across the country.

All bus, train, and metro services are suspended.

State borders are sealed, inter-state movement within the country stopped.

Camps have been set up at state borders to stop migrant workers walking back to their villages. According to the government, these camps are also providing workers with basic amenities such as shelter and food.

Several states have identified COVID-19 hotspots, and have taken measures to seal and sanitize such high-risk zones.

Dedicated COVID-19 quarantine sites have been set-up including hotels and railway wagons.

586 hospitals and 100,000 isolation beds designated exclusively for treatment and care of COVID-19 patients across the country. This number is continuously increasing with the measures being taken by the state governments and the health ministry.

INR 1700 billion (US\$24.3 billion) relief package in the form of food grains, cash transfers for the poor and vulnerable sections of the population announced to deal with the hardships caused due to the lockdown.

INR 150 billion (US\$2.14 billion) will be spent to set up isolation wards and intensive care units (ICUs), procure ventilators and personal protection equipment for medical professionals, and to train health workers to fight COVID-19.

The finance ministry has extended several compliance deadlines under the various corporate, mercantile and taxation laws, and allowed individuals to make partial withdrawals from their provident fund accounts.

PM-CARES fund launched to provide food and care to the poor. Donations being sought to augment resources for this fund.

The Reserve Bank of India (RBI) has taken a number of steps to ease the stress caused by COVID-19. This includes ease in interest rates, relaxation of cash reserve ratio, and other liquidity improvement measures such as moratorium on repayment of loans by businesses and EMIs by individual borrowers.

Aarogya Setu App has been launched by the government to disseminate information related to COVID-19 and to provide a platform for the population to reach out to the government.

### **Criticism on Government's Action**

#### **1. Covid-19 side effects spell trouble for India's democracy.**

**The muzzling of critical media and suspending labour laws are all worrying signs for Indian democracy.** As India lurches from one lockdown to another, the ruling party of Prime Minister Narendra Modi has confounded even sections of its own supporters with a slew of contentious long-term policy decisions that may have little to do with controlling the spread of the Covid-19 pandemic. Since March 25, when the first nationwide lockdown was announced until now when the fourth phase has commenced, the number of Covid-19 cases has seen a steady rise from a mere 618 to 101,139 at the time of writing.

#### **2. COVID-19: Future of pandemic will depend on India's response, says WHO**

The future of the novel coronavirus disease (COVID-19) pandemic was dependent on the response of India, a highly and densely-populated country, the World Health Organization (WHO) said on March 23, 2020. The trajectory of the virus would be determined by how aggressive and sustained the action of highly populous countries like India was in dealing with the outbreak, Mike Ryan, WHO emergencies programme director, said in a press conference at the organisation's headquarters in Geneva, Switzerland. "India led the world in killing two silent but very big killers — smallpox and polio — and gave a great gift to the world. It has tremendous capacities," Ryan said. He added these two diseases could be eliminated due to robust surveillance networks which now needed to be employed in finding suspected COVID-19 patients.

#### **3. When a News Article Vanishes, We Have More Than Just a Pandemic to Worry About.**

An article critical of the government's response to COVID-19 was published on The New Indian Express's website on May 8, and disappeared from its link within a day. The article was published on The New Indian Express's website at 7:09 pm on May 8, and it disappeared from its link within a day without any explanation. The page at the same link now has a short message: "Oops! Looks like you are looking for a page that doesn't exist or has been moved." In the absence of any explanation from the newspaper, there was speculation on social media about whether the New Indian Express pulled the article down on its own volition or had been asked to by someone — presumably in government — and quietly complied. An article in The Caravan on March 31 had described how Prime Minister Narendra Modi met several heads of media publications ahead of the first lockdown, and requested them to carry positive stories about the government's COVID-19 response. However, The Wire Science's questions to The New Indian Express's editor-in-chief G.S. Vasu, asking if government pressure was the reason the article was retracted, went unanswered. The author of the piece, health journalist Sumi Sukanya Dutta, also didn't respond to questions.

#### **4. Raghuram Rajan says Centre's economic package inadequate, giving free foodgrains not enough**

Former Reserve Bank of India Governor Raghuram Rajan on Thursday said that the Centre's Rs 20-lakh-crore economic package to counter the fallout of the coronavirus pandemic is inadequate. Rajan said that the government's challenge is not just to tackle the impact of the worsening health crisis but to repair years of "economic drift". "We have years of economic drift in which our growth had slowed, our fiscal deficit has gone up," Rajan told *The Wire*. "There is a lot more we need to do to put economy back on track. We have to pull all the stops. The package has some good points but it probably needs to do more." The former RBI governor added that the government's package had also proved insufficient in providing relief to distressed migrant workers. "It's important to both send more money and open foodgrain," Rajan said. "They need vegetables, they need oil to cook, they

need other stuff that means a certain amount of money along with foodgrain. They need shelter. Saving people is most important.” He said that the government needed to work on improving the condition in cities if migrant workers were to go back.

### **5. Modi’s BJP has found a way to beat coronavirus—by creating a make-believe India.**

Watch the 9:01-minute video clip that the BJP released on Saturday to celebrate Narendra Modi government’s sixth anniversary. You will think there is no coronavirus or any public health or economic crisis in India. The pictures of shining highways bustling with cars and swanky Metro criss-crossing a sparkling city take you into a different world. There are no migrants, no women delivering on the highways nor any emaciated children trudging with blistered feet. There are only happy faces all around — 70 lakh youngsters employed under Skill India programme, 24 crore MUDRA Yojana beneficiaries who are now self-employed, and those who are giving employment to others, and so on.

### **6. Coronavirus: Faced with an unprecedented challenge, how is India faring?**

Prime Minister Narendra Modi exhorted his countrymen to light candles and lamps as a gesture of a united fight against Covid-19, polarised reactions poured out on social media. Why is the PM focusing on a seemingly pointless ritual while he needs to be telling the nation the details of how we are fighting the pandemic, asked the sceptics? It’s extremely important to keep the morale of a nation high during trying times and this will inspire people and give them hope, countered others. Such debates — about the merits of the decisions India has made in tackling Covid-19 — are now legion. Everything, from India’s early handling of foreign travellers and airport protocols to testing strategies, ill-equipped healthcare workers, poor handling of migrant workers and meagre support for the industry, is being debated threadbare in locked-down drawing rooms and overheated social media. It’s understandable when the nation is at war with a deadly invisible enemy — a virus. Panic-stricken citizens, confined to their home bunkers, are closely monitoring grim news flowing in from home and abroad. Infections and death counts are

rising. Doctors are attacked. Healthcare staff demand masks and protective gears even as hotels and trains are converted into quarantine zones and hospitals.

### **Myths around COVID-19 in India**

There have been several myths around the disease, like consuming more garlic, curry leaves or cow’s urine would treat or protect one from the disease. The World Health Organisation has busted such misleading claims. On garlic, WHO said it is a healthy food that may have some antimicrobial properties but there is no evidence that it has prevented people from contracting the 2019 nCoV. Here are some other myths and the WHO’s response to them.

**Myth:** “COVID-19 virus can be transmitted in areas with hot and humid climates”

From the evidence so far, the COVID-19 virus can be transmitted in ALL AREAS, including areas with hot and humid weather. Regardless of climate, adopt protective measures if you live in, or travel to an area reporting COVID-19. The best way to protect yourself against COVID19 is by frequently cleaning your hands. By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth, and nose.

**Myth:** The new coronavirus can be transmitted through mosquito bites. To date there has been no information nor evidence to suggest that the new coronavirus could be transmitted by mosquitoes. The new coronavirus is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of saliva or discharge from the nose. To protect yourself, clean your hands frequently with an alcohol-based hand rub or wash them with soap and water. Also, avoid close contact with anyone who is coughing and sneezing.

### **India’s phenomenal response to Covid-19 pandemic**

Almost 3 months after the first Coronavirus case was reported to the world and one month after it was declared a global pandemic by the World Health Organization, India, the second most populous country in the world with 1.35 billion people, has just crossed 17,500 confirmed positive

cases out of which 2,547 patients have recovered fully although 543 of them have succumbed to the potentially fatal disease, which has no established treatment procedure, so far. The recovery rate in India is more than 16% while the death rate is about 3%. In comparison, death rate in Spain stands at 10%, it is 5% in the US and 13% in both UK and Italy. The death rate in Netherlands is 11% even though the number of positive cases is about 33,405. At present, the rate at which the virus is spreading in India is comparatively slower than most of the severely-hit countries, with about 9 infections in a million. Benchmarked at 8,000-16,000 cases, the numbers in India are doubling every 8 days where as it took just 4 days in Italy, UK and France and only 2 days in the US. The death ratio per million in India is less than 0.3 against the global average of 17.3.

**COVID-19: What did India gain in nationwide lockdown?**

India is witness to the biggest lockdown of people in the world, since it was announced. As many as 1.3 billion people were confined to their homes to contain the spread of the novel coronavirus disease (COVID-19). After the two phases of lockdowns ended, government officials claimed significant achievements were made. One of the most significant gains, according to them, was cutting the chain of transmission as they say the doubling rate — the number of days in which the cases double — has gone up.

**Can India’s emergency response to Covid-19 be more systematic?**

The scenario is generally described as a ‘lockdown’, with much at stake, including a potential public health disaster on one hand and massive economic costs and various consequences

from imposed social restrictions on the other. The government’s handling of the situation until now has generally been appreciated for being proactive, with a section remaining critical, viewing its response as unnecessarily excessive.

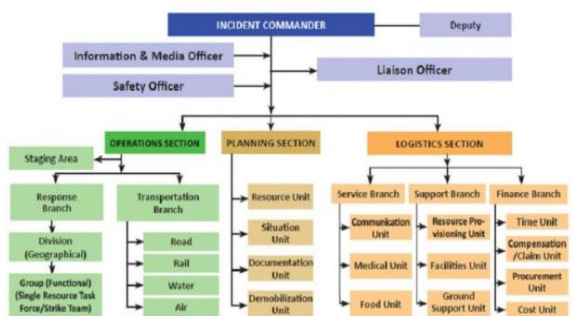
Incident Response System or IRS is an emergency response management system ideally suited for an extraordinary situation as being seen now. Drawn from the United States model of Incident Command System, it was adapted for Indian condition and is actually recommended by the National Disaster Management Authority (NDMA). Yet, inexplicably, there is little evidence to suggest that IRS is being applied in the current situation. The goal of such a system is to coordinate the overall actions in a systematic manner so that there is clarity over employed action plan, planning rationale, operational effectiveness, scope for course correction, fixing of accountability etc.

**COVID-19 & Medicine**

Coronavirus pandemic has killed over 4.7 lakh people across the globe. In India, the death toll is over 13,000. The COVID-19 may present with mild, moderate, or severe illness. Among the severe clinical manifestations, there are severe pneumonia, ARDS, sepsis, and septic shock. The clinical course of the disease seems to predict a favorable trend in the majority of patients.

So far there are many myths related to treatment of Corona disease like giving antibiotics will cure the Corona but WHO has been declared that there are no antibiotics work against Corona if any person hospitalized, they may receive antibiotics because bacterial co-infection is possible. As per WHO, there is no specific medicine recommended to prevent or treat the new coronavirus. And also, WHO declared that there are no vaccines will bring effect on Corona such as BCG, pneumonia, etc.

There are no approved treatments or vaccines for the coronavirus, but researchers are testing a slew of existing drugs to see if they may work. Chloroquine is a widely prescribed anti-malaria pill that was first approved in the US in 1949. Meanwhile the drug companies are rushed into research projects to develop the antibodies, chloroquine stands out as a potentially simple, cheap, and scalable treatment. If any clinical data proves that with the biological results, the corona



**Figure 1 COVID- 19 action body hierarchy**

become one of the simplest and cheapest to treat and prevent among infectious respiratory diseases. And it has recommended by the Indian Council of Medical research, chemoprophylaxis with hydroxychloroquine (400 mg twice on day 1, then 400 mg once a week thereafter) for asymptomatic health-care workers treating patients with suspected or confirmed COVID-19, and for asymptomatic household contacts of confirmed cases.

Glenmark Pharmaceuticals has launched the antiviral drug Favipiravir, under the brand name FabiFlu, for the treatment of mild to moderate COVID-19 cases on 22<sup>nd</sup> June 2020. But mostly from the researchers said that we still do not have any proof that those medicine can be a treatment for COVID-19 and these are considered as a supportive treatment said by Dr Avi kumar, Consultant Pulmonologist, Fortis Escort Heart Institute.

The CEO of *Patanjali* had claimed that an Ayurvedic medicine developed by the company has been able to cure COVID-19 patients in a few days. According to Acharya Balkrishna, clinical trials of the drug has shown 100 per cent favorable results. The medicine called Coronil, with this medicine he also declared that within 5-14 days it can be cure the COVID-19.

However, those infected with the virus should receive appropriate care to relieve and treat symptoms, and those with severe illness should receive optimized supportive care. Some specific treatments are under investigation, and will be tested through clinical trials. World Health Organization (WHO) is helping to accelerate research and development efforts with a range of partners. And WHO has declared that, several drug trials are ongoing, there is currently no proof that hydroxychloroquine or any other drug can cure or prevent COVID-19. The misuse of hydroxychloroquine can cause serious side effects and illness and even lead to death. WHO is coordinating efforts to develop and evaluate medicines to treat COVID-19.

#### Chronology of medicine in India on COVID-19

On 2 April, Government announced plans to convert trains and stadiums into isolation wards for a total of 320,000 patients.

On 8 April, Supreme Court of India orders that private medical laboratories not charge patients for testing COVID-19.

On 27 April, the Indian Council of Medical Research has advised state governments to stop using coronavirus testing equipment from two Chinese companies Guangzhou Wondfo Biotech and Zhuhai Livzon Diagnostics due to their unsatisfactory performance.

On 22<sup>nd</sup> June, Glenmark Pharmaceuticals has launched the antiviral drug Favipiravir, under the brand name FabiFlu, for the treatment of mild to moderate COVID-19.

On 23<sup>rd</sup> June, The CEO of Patanjali had claimed that 'Coronil' an Ayurvedic medicine developed by the company has been able to cure COVID-19 patients within 5-14 days.

#### **Practice guidelines for Corona Prevention**

Protecting yourself and others from the spread COVID-19

You can reduce your chances of being infected or spreading COVID-19 by taking some simple precautions:

Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.

Maintain at least 1 metre (3 feet) distance between yourself and others. When someone coughs, sneezes, or speaks they spray small liquid droplets from their nose or mouth which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person has the disease.

Avoid going to crowded places.

Avoid touching eyes, nose and mouth.

Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately and wash your hands.

Stay home and self-isolate even with minor symptoms such as cough, headache, mild fever, until you recover. Have someone bring you



supplies. If you need to leave your house, wear a mask to avoid infecting others.

If you have a fever, cough and difficulty breathing, seek medical attention, but call by telephone in advance if possible and follow the directions of your local health authority.

Keep up to date on the latest information from trusted sources, such as WHO or your local and national health authorities.

### **Coronavirus: 10 life lessons we learned from the COVID-19 outbreak**

1. You should be willing to trade some your freedom for the greater good of the public.
2. You should wash your hands, whether there's a virus or not.
3. Working from home should be an option for many.
4. Taking that sick day could save lives.
5. The Internet should be a basic right.
6. Doctors and researchers need to be paid better.
7. Everyone should know how to cook.
8. The importance of talking to friends every day.
9. Learn to appreciate nature.
10. Learn how to be content alone.

### **References**

- [1] 100 days of Covid-19: Pandemic presents a new political paradigm <https://www.hindustantimes.com/india-news/100-days-of-covid-19-pandemic-presents-a-new-political-paradigm/story-ByKnMOm7C0NaZFKpjiqiyJ.html>
- [2] Can politics shape revival of economy after Covid-19? <https://www.hindustantimes.com/india-news/can-politics-shape-revival-of-economy-after-covid-19/story-rksCLp6r0V9X4LtpqUJgO.html>
- [3] Coronavirus: Faced with an unprecedented challenge, how is India faring? [\[india-faring/articleshow/74986805.cms?from=mdr\]\(https://www.hindustantimes.com/india-faring/articleshow/74986805.cms?from=mdr\)](https://economictimes.indiatimes.com/news/politics-and-nation/coronavirus-faced-with-an-unprecedented-challenge-how-is-</a></li></ol></div><div data-bbox=)

- [4] COVID 19 current status in Maharashtra [https://www.google.com/search?q=covid+19+current+status+in+maharashtra&rlz=1C1CHZL\\_enIN807IN807&oq=covid&aqs=chrome.1.69i57j35i39j0l5j5.4204j0j15&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=covid+19+current+status+in+maharashtra&rlz=1C1CHZL_enIN807IN807&oq=covid&aqs=chrome.1.69i57j35i39j0l5j5.4204j0j15&sourceid=chrome&ie=UTF-8)
- [5] COVID 19 political impact in India [https://www.google.com/search?q=covid+19+political+impact+in+india&rlz=1C1CHZL\\_enIN807IN807&oq=covid+19+politics&aqs=chrome.3.69i57j0l7.33899j0j15&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=covid+19+political+impact+in+india&rlz=1C1CHZL_enIN807IN807&oq=covid+19+politics&aqs=chrome.3.69i57j0l7.33899j0j15&sourceid=chrome&ie=UTF-8)
- [6] COVID 19 political news [https://www.google.com/search?q=covid+19+political+news&rlz=1C1CHZL\\_enIN807IN807&oq=covid+19+political&aqs=chrome.3.69i57j35i39j0l6.9677j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=covid+19+political+news&rlz=1C1CHZL_enIN807IN807&oq=covid+19+political&aqs=chrome.3.69i57j35i39j0l6.9677j0j7&sourceid=chrome&ie=UTF-8)
- [7] Covid-19 could fundamentally change India's political economy <https://www.hindustantimes.com/analysis/covid-19-could-fundamentally-change-india-s-political-economy/story-DgWaagkkxBmB2OokrxORqL.html>
- [8] Covid-19 impact: Government responds to criticism on DA hike freeze <https://economictimes.indiatimes.com/news/economy/policy/covid-19-impact-government-responds-to-criticism-on-da-hike-freeze/articleshow/75380574.cms?from=mdr>
- [9] COVID-19 Is a Unique Test of National Decision Making the Modi Govt Can't Afford to Fail <https://thewire.in/government/covid-19-modi-govt-national-decision>
- [10] Covid-19 Pandemic & The Socio-Economic & Political Impact On Women <https://feminisminindia.com/2020/04/29/covid-19-pandemic-socio-economic-political-impact-women/>
- [11] Covid-19 side effects spell trouble for India's democracy. <https://www.trtworld.com/opinion/covid-19-side-effects-spell-trouble-for-india-s-democracy-36441>

- [12] Down to Earth - <https://www.downtoearth.org.in/search/criticism-of-government-response-to-covid-19-in-india>
- [13] Experts Consulted, Fine-Tuning COVID-19 Plan, Says Centre Amid Criticism. - <https://www.ndtv.com/india-news/coronavirus-experts-consulted-fine-tuning-covid-19-plan-says-centre-amid-criticism-2242341>
- [14] Facing criticism for 'under reporting' of COVID-19 deaths, Delhi issues SOP for hospitals- <https://www.thehindu.com/news/cities/Delhi/facing-criticism-for-under-reporting-of-covid-19-deaths-delhi-issues-sop-for-hospitals/article31550790.ece>
- [15] Five COVID-19 Policy Mistakes India Could Have Done Without- <https://thewire.in/health/five-covid-19-policy-mistakes-india-could-have-done-without>
- [16] Government on Covid-19 trends: This week is critical, virus spread could recede early May - <https://economictimes.indiatimes.com/news/politics-and-nation/this-week-critical-spread-could-recede-early-may/articleshow/74998924.cms?from=mdr>
- [17] Government takes decisions unrelated to Covid-19, drawing criticism from all quarters <https://kathmandupost.com/national/2020/04/17/government-takes-decisions-unrelated-to-covid-19-drawing-criticism-from-all-quarters>
- [18] How Covid-19 is changing Indian politics - <https://theprint.in/opinion/covid-19-changing-indian-politics/391118/>
- [19] [https://economictimes.indiatimes.com/news/economy/policy/view-india-has-been-forced-a-reset-by-covid-19-especially-its-political-economy-of-reform/articleshow/75854581.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/news/economy/policy/view-india-has-been-forced-a-reset-by-covid-19-especially-its-political-economy-of-reform/articleshow/75854581.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
- [20] [https://economictimes.indiatimes.com/news/politics-and-nation/this-week-critical-spread-could-recede-early-may/articleshow/74998924.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/news/politics-and-nation/this-week-critical-spread-could-recede-early-may/articleshow/74998924.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
- [21] [https://en.wikipedia.org/wiki/Timeline\\_of\\_the\\_COVID-19\\_pandemic\\_in\\_India](https://en.wikipedia.org/wiki/Timeline_of_the_COVID-19_pandemic_in_India)
- [22] <https://www.businessinsider.in/science/news/could-a-malaria-pill-from-the-1940s-treat-the-coronavirus-early-results-for-chloroquine-have-caught-the-eyes-of-doctors-analysts-and-even-elon-musk/articleshow/74698558.cms>
- [23] <https://www.downtoearth.org.in/news/governance/covid-19-centre-s-financial-package-through-dbt-attracts-criticism-71062>
- [24] <https://www.downtoearth.org.in/news/health/covid-19-what-did-india-gain-in-nationwide-lockdown--70922>
- [25] <https://www.indiatvnews.com/fyi/coronavirus-covid-19-medicine-covifor-fabiflu-cipremi-treatment-drugs-in-india-628125>
- [26] <https://www.ncbi.nlm.nih.gov/books/NBK554776/>
- [27] <https://www.ndtv.com/india-news/medical-experts-on-remdesiver-favipiravir-for-covid-treatment-no-game-changers-2250529>
- [28] <https://www.thelancet.com/journals/laninf/article/PIIS1473-30992030313-3/fulltext>
- [29] <https://www.timesnownews.com/health/article/covid-19-drug-patanjali-to-launch-ayurvedic-medicine-coronil-to-treat-coronavirus-infection-today/610441>
- [30] <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
- [31] <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>
- [32] <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>
- [33] India COVID-19 coronavirus by city and state - <https://www.pharmaceutical->

[technology.com/news/india-covid-19-coronavirus-updates-status-by-state/](https://technology.com/news/india-covid-19-coronavirus-updates-status-by-state/)

[34] India has been forced a reset by Covid-19, especially its political economy of reform. - <https://economictimes.indiatimes.com/news/economy/policy/view-india-has-been-forced-a-reset-by-covid-19-especially-its-political-economy-of-reform/articleshow/75854581.cms?from=mdr>

[35] India: SimpliCity founder detained for criticism of government's Covid-19 response- <https://www.ifj.org/media-centre/news/detail/category/press-releases/article/india-simplicity-founder-detained-for-criticism-of-governments-covid-19-response.html>

[36] India's government is better at curbing critics than covid-19 - <https://www.economist.com/asia/2020/05/09/indias-government-is-better-at-curbing-critics-than-covid-19>

[37] Indian Govt Trots Out Meaningless Data As COVID-19 Cases Rocket Despite Lockdown [https://www.huffingtonpost.in/entry/india-coronavirus-cases-response-data-crisis\\_in\\_5ec49658c5b6956f4169fb4f](https://www.huffingtonpost.in/entry/india-coronavirus-cases-response-data-crisis_in_5ec49658c5b6956f4169fb4f)

[38] Lockdown or not? Covid-19 raises key questions on decision-making in a democracy, like India - <https://theprint.in/opinion/lockdown-or-not-covid-19-raises-key-questions-on-decision-making-in-a-democracy-like-india/391725/>

[39] The Political Fix: Post Covid, will India push back against China – or does it need Beijing's cash?- <https://scroll.in/article/960285/the-political-fix-post-covid-will-india-push-back-against-china-or-does-it-need-beijings-cash>

[40] The politico-economic impact of Covid-19 <https://economictimes.indiatimes.com/news/politics-and-nation/the-politico-economic-impact-of-covid-19/pandemic/slideshow/74929165.cms>

[41] When a News Article Vanishes, We Have More Than Just a Pandemic to Worry About - <https://thewire.in/health/india-media-coronavirus-government>

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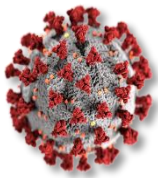
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# COVID - 19 Pandemic Workshop

Learning from grassroots with development lens

24<sup>th</sup> and 25<sup>th</sup> June 2020



## COVID-19 & Migrant Workers

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### Introduction

The total number of internal migrants in India, as per the 2011 census, is 45.36 crore or 37% of the country's population. This includes inter-state migrants as well as migrants within each state, while the recent exodus is largely due to the movement of inter-state migrants. Most migrants in the country originate from Uttar Pradesh and Bihar, followed by Rajasthan and Madhya Pradesh. The cities of Mumbai and Delhi attract the highest number of migrants. Migrant workers majorly comprise of daily-wage labourers working in the manufacturing and construction industries. They are often denied adequate healthcare, nutrition, housing and sanitation, since many of them work in the informal sector. They are mostly from rural areas but live in cities for work for most of the year. Many have no savings and lived in factory dormitories, which were shut due to the lockdown. Additionally, there was no central registry of

migrant workers, despite the existence of the Inter-State Migrant Workmen Act, 1979.

Maharashtra has the largest number of migrants, according to the 2011 Census of India. The State Government imposed a lockdown on 20 March in Pune, Pimpri-Chinchwad, the Mumbai Metropolitan Region and Nagpur, leaving the migrant workers with no work. Thousands then gathered at the train termini and bus stations, seeking transport to their hometowns. With the nationwide lockdown, all transport facilities were closed.

### The Condition of Migrant workers during Lock down period

On 27<sup>th</sup> of March the migrant workers walking movement came into the newspaper.

"Nobody thought of people like us, with small children, no money, no food and no way to get

home," said Singh to Saajha Manch, a hotline migrant workers can call for advice.

### **Food shortages**

According to government reports, there was enough food grain stocked up in the FCI godowns to feed the poor for at least a year-and-a-half. While government schemes ensured that the poor would get additional rations due to the lockdown, the distribution system failed to be effective as the ration cards are area-specific and fair price shops were largely inaccessible. Additionally, the 'One Nation, One Ration Card' system has been implemented in very few states, as of mid April. While the scheme allowed migrant workers to retrieve foodgrains for free anywhere across the country, very few were aware of the scheme. In addition to this, the scheme also required biometric authentication, which was discontinued due to fears of spreading the virus through common fingerprint sensors. In Telangana, many could not avail of the ration due to a lack of Aadhaar cards. As such, many were left without food and money due to the lockdown.

### **Exodus**

With no work and no money, and lockdown restrictions putting a stop to public transport, thousands of migrant workers were seen walking or bicycling hundreds of kilometres (or even more than a thousand kilometres) to go back to their native villages, some with their families. Many did so while hungry. Social distancing was not possible for these migrants since they travelled together in large groups. According to some of them, they would rather die from the virus at their own village than starve because of no work in the city.

Many were arrested for violating the lockdown, after being caught at inter-state borders, forests between states and even on boats to cross rivers. Some of the migrants died of exhaustion. Others died in accidents on the roads after walking or hiding in vehicles. On 31 March, as many as 120 migrant workers were allegedly beaten up by the police in Gujarat and forcefully rounded up in a single lorry and dropped in Maharashtra, despite being wounded.[28] In Aurangabad, 16 migrants were killed on 8 May after a freight train ran over them while they were sleeping on the tracks, exhausted from walking. 26 migrants were killed in

an accident between two trucks carrying migrants in Auraiya on 16 May. Later in May, a 15-year-old girl carried her ailing father on a bicycle for 1,200 kilometres (750 mi) from Bihar to Gurugram over the course of a week. She was later approached to try out for the National Cycling Academy by the Cycling Federation of India, and received praise from Ivanka Trump.

Later in May, despite the launching of special trains and buses by the government, the migrant workers chose to either travel together in large groups in the cargo compartments of trucks and containers, or travel by foot. They did not wait or their turn to board the government-arranged transport, mainly due to starvation. Additionally, they felt that going back to their hometowns, they could return to farming and take up small jobs under the MGNREGA.

### **Death**

Due to the lockdown, more than 300 deaths were reported till 5 May, with reasons ranging from starvation, suicides, exhaustion, road and rail accidents, police brutality and denial of timely medical care. Among the reported deaths, most were among the marginalised migrants and labourers. 80 died while travelling back home on the Shramik Special trains, in the one month since their launch.

Notably, on 8 May, a freight train killed 16 migrants who had stopped to rest on railway tracks near Aurangabad in Maharashtra. On 14 May, eight migrant workers were killed and nearly 55 injured when the truck they were in collided with a bus near Guna, Madhya Pradesh. On 16 May 24 migrant workers were killed and many more were injured when a trailer carrying migrants (along with sacks of lime) rammed into a stationary truck, also carrying migrants, in Auraiya district of Uttar Pradesh. According to data collected by SaveLIFE Foundation, an NGO working in road safety, 198 migrant workers were killed in road accidents, as of 2 June.

### **Govt. Initiatives for Migrant Workers Shramik Trains**

Even as the Ministry of Home Affairs has directed the Indian Railways to operate Shramik special trains to move migrant workers, pilgrims and



students, stranded in various States during the lockdown, the Railway Board has announced extra charges, in addition to the normal sleeper class fare, to be collected from the passengers. The extra charges came into force from May 1.

Although the Railways has said that special trains would be operated only based on requests from the State governments, it has announced that an additional charge of ₹50 per passenger would be collected, along with the sleeper class fare, in the special trains to be operated between various States.

## **Government response**

### **Directives**

On 27 March, the Home Ministry ordered the states to ensure that migrants would not move during the lockdown, permitting the states to use the National Disaster Response Fund (NDRF) for providing food and shelter to the migrants on 28 March.

On 29 March, the government issued sweeping orders directing that the landlords should not demand rent during the period of the lockdown and that employers should pay wages without deduction. It also announced that those who violated the lockdown were to be sent to government-run quarantine facilities for 14 days, and that it had asked state governments to set up immediate relief camps for the migrant workers returning to their native states. However, the order regarding payment of wages was withdrawn in the guidelines for the lockdown extension issued on 17 May.

On 16 May, the government announced the National Migrant Information System (NMIS), an online database created by the National Disaster Management Authority (NDMA). This was to help streamline the movement of the migrant workers. It will help states find the current number of stranded migrant workers and their location. The government planned to keep the workers updated by feeding their phone numbers in the system.

### **Relief camps**

Soon after the central government directive in late March, state governments set up thousands of camps to house lakhs of migrants and stop the

exodus. Delhi government provided free food to 4 lakh people every day, as of late March. Over 500 hunger relief centres were set up by the Delhi government. By 5 April 75 lakh people were being provided food across the country in food camps run by the government and NGOs. As of 12 April, 37,978 relief camps and 26,225 food camps had been set up.

To cater to the needs of the migrants and prevent them from leaving the camps, the government of Kerala changed the food being provided by adding north Indian dishes to the menu, providing carrom boards and recharge facilities for phones, as well as providing other medical essentials such as masks, sanitizers, and medicines.

### **Transport arrangements**

As of 28 May 91 lakh migrants had travelled back home in government-arranged transport facilities. However, according to the Stranded Workers Action Network (SWAN), migrants were confused about the exact procedures to register themselves for travel. Additionally, many state registration portals were either in English or the local language of the states they lived in, which very few migrants could understand. Further, general lack of information from the government to the migrants had resulted in them paying large sums of money to register themselves.

### **Buses**

In late March, the Uttar Pradesh government decided to arrange buses at Delhi's Anand Vihar bus station to take the migrants back to their villages for free. Large crowds then gathered at the bus station. However, with the extension of the lockdown, many remained stranded till the last week of April, when the state governments were permitted by the central government to operate buses, but not trains. As of 23 May 40 lakh migrants had travelled to their homes by buses. Condition in the buses is generally poor, with social distancing being impossible due to overcrowding and higher fares being charged than promised.

### **Shramik Special trains**

Stranded migrant workers rushing to New Delhi railway station to reach native village by "Shramik Special" train.

On 1 May, the central government permitted the Indian Railways to launch "Shramik Special" trains for the migrant workers and others stranded. On 3 May, the Ministry of Home Affairs mildly reprimanded the state governments for hurriedly requesting for trains to transport migrants, stating that the trains were primarily mainly meant for those who were stranded due to the sudden lockdown, and not the migrants. Additionally, this service was not free, with additional charges over the normal fares. The central government then faced criticism from the opposition, with the Indian National Congress promising to sponsor the tickets of the migrants on 4 May. The government then announced that the Railways would offer an 85% subsidy on the train fares, with the state governments funding the remaining 15%. However, the migrants were still forced to pay an undisclosed amount in some cases. The central government initially declined to share the details regarding this with the Supreme Court, but later confirmed that it was not paying for anyone's fare. Additionally, the central governments directives regarding which states should pay for the migrants' travel resulted in disagreement between Maharashtra and other states.

A few days after the Shramik Special trains were introduced, the Karnataka government cancelled the trains (reportedly supporting the construction industry) and the Bihar government did the same to trains coming from Kerala (refusing to provide a No-Objection Certificate). The two states later reverted their decisions.

Further, migrants faced many hardships while travelling by these trains. Many reported to have no food and water arranged for them while they travelled. A train from Goa to Manipur reported a 58-hour delay, no proper food or sanitation facilities on the train, and stone pelting. Others who received food packets and water reported that the provisions were simply dumped at the entrances, leaving workers fighting with each other for their share. Some migrants also died during the train journeys, but the Railways stated that most of them had existing illnesses. According to Railway Protection Force, there have been almost 80 deaths on board the Shramik Special trains between 9 and 27 May.

50% of the coaches converted into COVID-19 care centres were used for these trains. As per a report given by the Indian Railways on 23 May, migrant labourers from Bihar and Uttar Pradesh comprised 80% of the train travellers. Additionally, it was expected that 36 lakh migrants would be travelling in the ten days after the report. 4,277 Shramik Special trains had transported about 60 lakh people, as of 12 June.

### **Relief measures**

Soon after the nationwide lockdown was announced in late March, Finance Minister Nirmala Sitharaman announced a ₹1.7 lakh crore (US\$24 billion) spending plan for the poor. This consisted of cash transfers and steps to ensure food security. By 3 April, the central government had released ₹11,092 crore to states and UTs under the NDRF, to fund food and shelter arrangements for migrants. To help provide jobs and wages to workers, the average daily wages under the MGNREGA were increased to ₹202 (US\$2.80) from the earlier ₹182 (US\$2.60), as of 1 April. ₹1,000 crore from the PM CARES Fund was allocated for the support of migrant workers on 13 May. On 14 May, FM Sitharaman further announced free food grains for the migrant workers, targeting 80 million migrant workers by spending ₹35 billion (US\$490 million).

### **Labour laws**

The governments of Uttar Pradesh, Madhya Pradesh and Gujarat sought to temporarily revise their labour laws in early May with the purpose of attracting industries and investments. Labour unions criticized this as being harmful to the migrant workers while giving more authority to the employers. Ten of them then wrote to the ILO on 14 May regarding the same, to which the ILO responded by reassuring them that it had contacted Prime Minister Narendra Modi.

### **Quarantine measures**

Many states reported high numbers of positive cases of COVID-19 among the migrants returning home as lockdown restrictions eased. State governments opened thousands of quarantine centres to house them, with some states imposing mandatory institutional quarantine. States also

imposed strict measures for migrants to follow, either while leaving or after entering state borders.

## How myths affected Migrant workers

### Bandra

The leading Marathi News channel spread the news that the Sharmik Trains are starting and that pulled the big crowd at Bandra Station in Mumbai.



### Delhi

In Delhi because of fake news that the buses will run to UP, Bihar and Uttarakhand the thousands of migrant workers came out on the road.



These two fake news stories affected migrant workers and they faced serious problems like police did lathi charge and the money and energy was wasted.

Also it is another myth that Migrant workers were spreading Novel CORONA The policy Brief of ILO noted that as,

*“Migrant workers are among the most vulnerable. Reports document rising levels of discrimination and xenophobia against migrants and in some cases food insecurity, layoffs, worsening working conditions including reduction or non-payment of wages, cramped or inadequate living conditions, and increased restrictions on movements or forced*

*returns (where they may be stigmatized as carriers of the virus).”*

## Annexure

- ♣ Pradhan Mantri Garib Kalyan Yojana (PMGKY)
- ♣ It is a multi pronged approach to fight Coronavirus (COVID) and its main features are as follows:-
- ♣ **PM Garib Kalyan Ann Yojana 2020-21 – 10 Kg Ration + 1 Kg Pulses Free**
- ♣ **Medical Insurance to Paramedic / Nurses / Asha Workers & Others fighting COVID 19**
- ♣ **Rs. 2,000 DBT for Farmers under PM-KISAN Scheme**
- ♣ **MGNREGA Workers Wage Raised**
- ♣ **Free Cylinders to PM Ujjwala Yojana Beneficiaries**
- ♣ Under the Pradhan Mantri Ujjwala Yojana, govt. will provide 3 free cylinders (14.2 Kg) for three months to 8.3 crore below poverty line (BPL) families. This scheme will be implemented for the next 3 months i.e April, May, June 2020 with an outlay of Rs. 13,000 crore.
- ♣ Collateral Free Loans upto Rs. 20 Lakh to Women SHGs
- ♣ The women self help groups (SHGs) will be able to take collateral free loans upto Rs. 20 lakh (previously Rs. 10 lakh) with immediate effect. This initiative to provide Collateral Free Loans to Women SHGs will impact 7 crore households.
- ♣ Home Delivery of Medicines
- ♣ CCEA on 26 March 2020 has also approved the scheme for home delivery of medicines to ensure that people gets essential medicines at their homes. To ensure social distancing and prevent buyers lines in front of medical shops during lockdown, govt. has approved this scheme.
- ♣ Govt. to Pay EPF Contribution for Employer & Employee (Organized Sector)
- ♣ The central govt. wants to ensure money in hand and money in Provident Fund Accounts for the organized sector. Accordingly, the central govt. will now pay EPF contribution for both employer and employee. This would be around 24% for next 3 months in establishments in which upto 100 people are

employed. Moreover, around 90% of the employee earns less than Rs. 15,000 a month. EPFO Scheme regulation is also going to be amended to allow non-refundable advance of 75% of the amount or 3 months wages (whichever is lower).

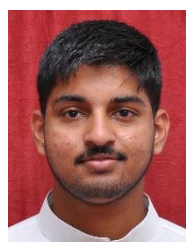
- ♣ Full Salary to Contractual Workers of Government
- ♣ Another major announcement stated the centre and state tax subsidy will continue for apparel export. All the contractual workers of the government will be paid full salary, irrespective of the disruption caused by the coronavirus scare.
- ♣ Recapitalization of Regional Rural Banks (RRBs)
- ♣ Cabinet Committee on Economic Affairs (CCEA) has approved the recapitalization of regional rural banks with Rs. 1340 crores. This recapitalization of banks will improve their capital adequacy ratio (CAR). As Rs. 670 crores would be given by the central government, Rs. 670 crore would be collected from different banks.
- ♣ The proposal to permit non-refundable advance to employees out of their PF balances will help employees to tide over their liquidity issues. At present, non refundable advances are permitted only for specified purposes such as housing, marriage etc. Even these are permitted where the employee has put in a minimum services period.
- ♣ The central govt. has also given directions to state governments to utilize construction workers fund of Rs. 31,000 crore. This scheme will protect 3.5 crore registered workers against economic disruption as many building and construction has been stopped. The state govt. can also use District Minerals Fund for medical testing, screening activities and other requirement to prevent the spread of the Coronavirus.
- ♣ 3 Months Advance Pension to Old Age / Widow / Differently Aabled
- ♣ Central govt. has decided to provide 3 months advance pension for senior citizens (old age pension scheme), vidhwa (widow pension scheme) as well as differently abled (pension scheme for persons with disabilities). The details of this can be accessed using the link:-

- ♣ 3 Months Advance Pension to Old Age / Widow / Disabled
- ♣ This amount would be transferred under the flagship National Social Assistance Programme (NSAP). The amount would be received in the same pension account in banks through direct benefit transfer mode.

## References

- [1] Anand Vihar: Latest News, Photos, Videos on Anand Vihar
- [2] Bandra station news: Large crowd of migrant labourers gather at railway station in Mumbai - India News
- [3] COVID-19 pandemic lockdown in India
- [4] Indian migrant workers during the COVID-19 pandemic
- [5] Policy Brief for Migrant Workers During Lockdown - ILO
- [6] Social Protection Monitor on COVID-19 – ILO

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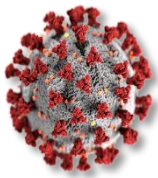


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# COVID - 19 Pandemic Workshop

Learning from grassroots with development lens

24<sup>th</sup> and 25<sup>th</sup> June 2020



## COVID-19 and Human Behaviour

### Correct Information and Behaviour is the Way to Defeat the Infection

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**Introduction-** Corona, it is a virus that derives the people towards death in all over the country and the whole world is in the peak of panic. This virus was originated in China but it's believed and scientifically proved that it has spread from bat since research have find that this virus is also having the same similarity of SARS (severe acute respiratory syndrome) by which thousands of people lost their life which also spread from animal and birds. There are many types of virus such like Hepatitis, Fungi, Small pox which commonly called as microorganism.

#### Corona outbreak and its effect

Wuhan, a small city of China, this is the place where the virus broke out for the first time where people and government was not that much aware about it. But soon within few days of February month itself it starts threatening the whole world. This issue is going uncontrollable since the virus have the ability of spreading through the air by the droplets of one to another where a human being or an animal. So, when affected person sneeze or cough, the virus

travels on air through the droplets to another person and settle in the cells of our body to start activate. Soon it destroys the sell and move to another sell. Usually it will be in activate when it is no open environment. Only with living and nonliving characteristic, it activates and caused to lose. Though it is a long process but it can spread in a second when a person drops his saliva since nearly 8 to 13 Corona can be settle in one droplet of human being. Scientifically one corona tine can spread it to 2 to 2.5 person but at every second it gets multiply through the affected person. The main problem is that this disease doesn't have any specific symptom. The symptom is like dry cause, sneezing, fever, nose flowing and also it takes too much time to reveal its symptom of 4 to 15 days sometimes it takes more than that due to the lack of awareness among the people about this issue. So before identifying is itself the affected person can spread his virus to many others. This is the reason behind the outbreak of this Corona from china to all other country in the world. Till now 200 countries have affected.

But Italy, china, USA are in extreme situation of how to solve this issue since it has witnessed the lose the life of its thousands and thousands of people.in Italy itself 16000 people have died and 65000 people have affected. Same situation exciting in USA. Comparatively in India only 565 cases have identified and one died in Tamil Nadu. This virus is spreading from country to country only through migrants who have gone or return from chine to their home town. Still any treatment or medicine have not found for curing this but to prevent and to stop spreading government have taken many initiatives to implement 144 act, lockdown which can be better option as of now but still poor people struggle due to not having money to fulfill the basic necessity such like food . country's economy also will decline which may take too long to come back. So, it is our responsibility to follow the instructing given by the government to 'social distancing 'and stay home. Because country is populous and having less hygiene practice. And as known Italy which ranked 2<sup>nd</sup> in medical technology, even that itself couldn't save its people and not having enough infrastructure facility to treat 30% of the affected people. Then we have thought about India and people if we happen to be in the situation of Italy and USA, a developed country of the world..

### **How citizen have been behaving**

Very positive manner, 99% people supported Janata curfew even though India is one among

the poorest country with daily wages with 135 crore population. But still when government announced curfew and lock down and all, people fully cooperated and supported the idea of lock down and played drum for the cops. It may have many reason behind the people cooperation to fight against the novel corona. But the major reason that was concern is fear of the virus. How our politicians behaved, what they have preached others, they have also followed in our Indian context. But if we see other country British prime minister and many ministers and senior government official across the country so called developed countries got COVID. India is fair good compared with any other democratic country. Main reason for unlock is on the economic focus. If we see any other country which have unlocked are less populous compared to even the states of India. If we want to follow the country which reduced it cases even after unlock, then we have to unlock ours after six month. There are many debates for the decision of lock down between many groups of people. Especially few were telling that government could have lock after moving all migrant to their own cities and then announced it. If it's so, then now the cases must have gone all over the country. So the was the success of lock down. If we see corona cases, it is only limited to only few states and or metropolitan city which is off more urbanized. Guiding 135corore is not very easy and they are also not much literate, they have different political belief.



We are witnessing massive behavior change at a scale and speed that we've never seen before, sparked by fear, proselytized by social media, encouraged by government. Such change includes frequent handwashing, working from home and discouraging bad behavior

But it's a long battle fight that citizen has to be more aware. Today government of India is opening continuously shops, malls, and industries. so in this time of case citizen need to be more self-regulated. So like government has given them the 60days kind of practice that wear mask, use sanitizers, wash hand 20 seconds, wash your cloths, don't go picnic place or the crowded area. So we cant simply blame the government. Emergency or a civil right and that also will not be acceptable in India like a country. civil society have to play very active role to give a proper information and proper knowledge to the normal citizen about how to follow some and how not to be scared or panic for this. Because our death rate is very less, for example if 100% have corona, only 3% are dying, remaining are getting recover. So that awareness we have to give to the society.

### **Why Social distancing is difficult to follow in a country like India**

The average population density doesn't capture the fact that India's population is concentrated in specific areas. For instance, according to the 2011 Census, India's population density was

382. While population density in major states such as Delhi, Bihar, West Bengal, Kerala and Uttar Pradesh was over double that number, hilly states such as Uttarakhand, Himachal Pradesh, and the northeastern states (except Tripura and Assam) had less than half that density. These population density figures highlight how closely people might be living in some regions of India. If the density is high in an area, maintaining a distance of one meter in public might be more difficult. For example, the Gandhi Nagar sub district of Delhi (the most densely populated state in 2011), had a population density of 89,185 persons per square kilometer. This means that even if Gandhi Nagar was flat ground and no resident had any belongings, a person would have only a square of 3.4 meters available to them

Human behavior refers to the range of behaviors exhibited by humans and which are influenced by culture, attitudes, emotions, values, ethics, authority, rapport, hypnosis, persuasion, coercion and/or genetics. ... The traits vary from person to person and can produce different actions or behaviour from each person. Human behavior, the potential and expressed capacity for physical, mental, and social activity throughout human life. One personal benefit of good hygiene is having better health. Keeping your body clean helps prevent illness and infection from bacteria or viruses. Maintaining good hygiene also helps you have better self-esteem. In other

words, when you take care of how you look, you feel better about yourself. A study on human behavior has revealed that 90% of the population can be classified into four basic personality types: Optimistic, Pessimistic, Trusting and Envious. However, the latter of the four types, Envious, is the most common, with 30% compared to 20% for each of the other groups. And here the more focus is on the self-regulation of the citizens during the fight against COVID crisis. So the Self-regulation can be defined in various ways. In the most basic sense, it involves controlling one's behavior, emotions, and thoughts in the pursuit of long-term goals. More specifically, emotional self-regulation refers to the ability to manage disruptive emotions and impulses. So here some example has been identified between the group of people who all are self regulated and who were not self-regulated. Tablighi jamaat conference in Nizamuddin, Delhi. The spread of cases from this one spot is best example. Which shows the carelessness of the people that led to the cases to increase on its peak then before. But in Dharavi it's too different. Because it's most populous area with people living in less spacious. Dharavi- crisis spot which had more density with small space. Commend toilets, more numbers of family members, less hygiene and sanitation. But Dharavi is turning out to be real success story which in Maharashtra. Rise of positive case in Dharavi is now 1.57% against Mumbai's 3%. Its doubling case days is 44 days

where it is 22 days for Mumbai. Mumbai municipal cooperation, they set up group of people for Dharavi. BMC team screened 47000 household and nearly 7lakh people door to door initially.

### **Myth and facts**

**Statement:** with the summers coming up, the coronavirus will be killed

**Fact:** covid-19 has been detected in all areas, including areas with hot and humid weather. The best way to

Protect yourself against covid-19 is by frequently washing your hands with soap and water, covering

Your coughs and sneezes and avoiding crowded places.

**Statement:** having a bath with hot water will kill the virus

**Fact:** the virus lives inside the body where the temperature is maintained at 37°C and is not affected by a

Hot water bath that you have.

**Statement:** getting the pneumonia vaccine will protect you against the virus

**Fact:** while vaccines for pneumonia will certainly protect you against other organisms that cause

Pneumonia, the vaccine for novel coronavirus is under development.

Statement: spraying alcohol or disinfectant over your body can prevent infection

Fact: spraying with alcohol or sanitiser on clothes and body will not prevent you from getting infection.

Infection spreads when the virus enters the body through nose or mouth. Cleaning and wiping hands with Alcohol is to prevent the germ from entering your system through infected hands when you touch your Mouth or you eat food with infected hands.

Statement: regularly rinsing the nose with saline will prevent the infection

Fact: rinsing nose with saline has in few cases helped in containing common cold, but has no evidence to

Suggest it is effective against the novel coronavirus infection

Statement: coronavirus can be passed through chicken and meat

Fact: no! There is no such evidence of coronavirus spreading through meat and poultry

Products. However it is always advised to have properly cooked meat and chicken.

Statement: a person with coronavirus can recover fully and be no more infectious.

Fact: 80% of the people have recovered from the disease without needing special treatment.

But information on the virus treatment is still being researched

Statement: eating raw garlic, sesame seeds will protect you against the virus

Fact: garlic is a healthy food that has other benefits but does not protect you against the Coronavirus.

Statement: the virus can die easily once it is out of the body

Fact: we do not know about this particular virus as of now. Similar viruses (sars, mers) survive From 8 to 24 hours depending on types of surfaces.

Statement: you can get covid-19 through mosquito bites

Fact: the coronavirus cannot be spread through the bite of a mosquito. It is spread thorough Droplets spread when an infected person sneezes or coughs

### **ADVISE COMMUNITY MEMBERS TO**

- Volunteer for supporting the Community help-desk set up by local municipality
- Support the task of distributing masks in the community, ensuring that they are given to those who most require. Mask management to be taught while distribution
- Community representative to ensure that community cleaning and disinfection drive to

be taken up regularly by the Municipal Corporation

- Give information through local political and religious leader's involvement
- Give information out through common essential services like garbage vans, milk Supply van etc.
- Free distribution of bleach/sodium hypochlorite solution and use of the disinfectant to be planned in the community

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