

# Impact of Covid-19 in India's Urban slum and Informal Settlement

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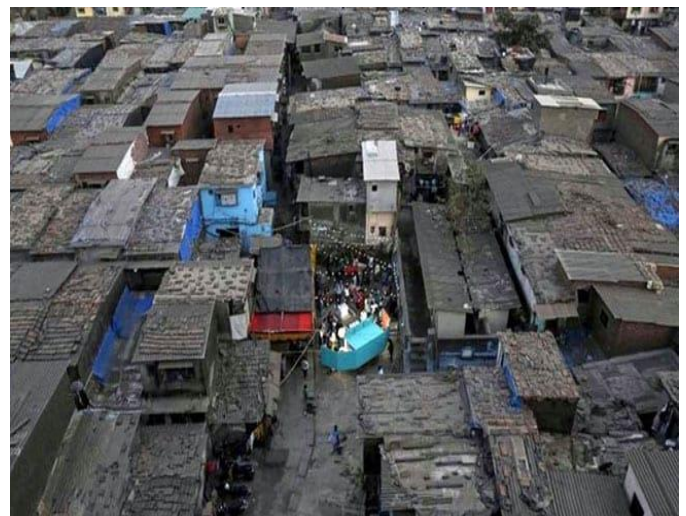
**Abstract** - As per census 2011 India's urban poor residents residing within informal settlements is over 65 million which is roughly 17 per cent of the entire urban population. In Andhra state one out of each three urban households is a slum nine out of each 10 slum families in Odisha do live either without a sewerage connection or connected to an open gutter. Six out of 10 slum inhabitants reside adjacent to unsanitary sewers and approximately four of each 10 do not receive treated water. The situation of urban slum is even going more vulnerable in the Covid-19 pandemic. While the affluent urban residents can afford to assure hygiene, access to essentials and non-essentials, physical distancing, work from home, and get protected under the social safety measures, urban poor are even struggling to survive in this pandemic. But though they are being the victims, they are even mainly blamed for spreading the coronavirus disease and become target of isolation, stigma, and social perception. Reaching to the immense uncertainties of the pandemic, we hold ill-famed examples like the relatively big outbreak in Dharavi, Mumbai, or the spread of the virus in the slum area of Bhopal, Delhi, and elsewhere.

**Key Words:** slums; global health; coronavirus; informal settlement; community health;

## 1. INTRODUCTION

The novel coronavirus disease (COVID-19) pandemic has changed everything. It has forced humanity to flex and evolve, both in real-time and in the long-term. Physical- and social-distancing are buzzwords and an integral part of daily life. In India, unprecedented urban sprawling already impedes intensification of complex, urban issues including but not limited to land, water and sanitation. Almost 65 million people or 17 per cent of the urban population live in informal settlements. These two factors, combined with the fact that India has a population density of 200,000 people per square kilometer in slums like Dharavi in Mumbai, mean that social distancing is almost impossible in the country. The urban slum population is more prone to deficiency of

basic amenities like safe drinking water, sanitation, housing and health care services.

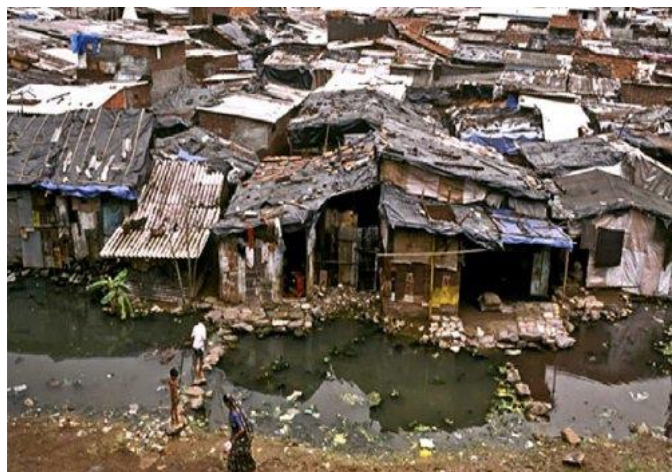


Dharavi, Mumbai

The unprecedented lockdown in the country to prevent the spread of the virus may be well-intentioned but not adequate for this section of the population. A lockdown may be an effective approach to stop the spread of virus. However, the impact of COVID-19 on informal workers, domestic workers, street-vendors etc. who are often 'invisible' during the normal days, will not just be restricted to them, but will have multidimensional risks to the country as a whole.

There are about 750 slums in Delhi which have a population of about 15 to 20 lakh. At a time when the Delhi government has asked people to home-quarantine themselves in a bid to contain the spread of novel coronavirus, how is it possible to maintain '2 gaj ki doori' in these areas where there are very small houses and a dense population. After the spike in coronavirus cases in Delhi, the government decided to quarantine coronavirus patients at home. While the decision is suitable for those living in houses which have two or three rooms, it is not feasible for those residing in 8x8 rooms in overcrowded slums.

According to a 2011 census report by the Ministry Of Housing and Urban Affairs, Bhalswa is home to more than 2 lakh people, making up a large portion of Delhi's total 24% urban population residing in different slums. Bhalswa is a part of a resettlement plan of 2000-02, when Jahangirpuri area was developed, modernized and urbanized with the introduction of the metro in Delhi. The residents were relocated to a distance of 2 kilometers and were promised basic amenities and other essential facilities but the poor people are suffering for food and water crisis at this time of covid-19 pandemic.

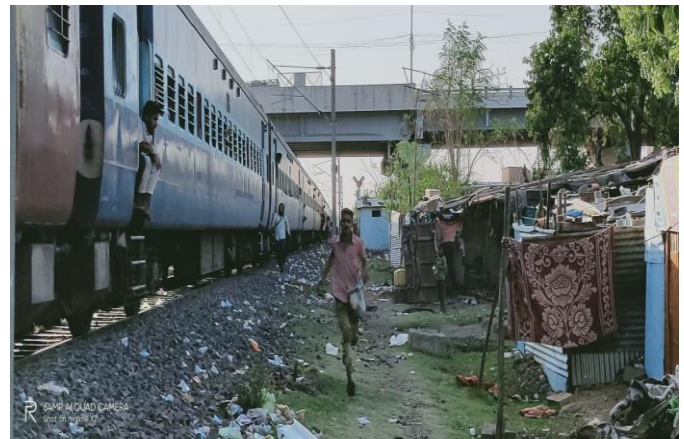


**Bhalswa slum Delhi**

In Bhopal the spread of the coronavirus disease in slums will be even faster than in the non-slum areas we seem to be tracking so far. Overcrowding, lack of clean water, poor sanitation, social dependency, larger number of human contacts, low disease immunity of dwellers, besides poor medical facilities make for tremendous speed and size of virus transmission in slums. The poor qualities of air in urban slums are a common cause for respiratory diseases that further reduces the respiratory tract's ability to shut the coronavirus down.

But some aspiring thing also came up with corona virus in the New Arif Nagar and Blue Moon colony Slums in Bhopal are located on both sides of the railway line they risk their own lives at times to serve the migrant workers who are on their way back home in the Shramik Special train. As the train arrives around 2 p.m., dozens of children rush towards it train with food packets and water.

For the last few weeks, they have been distributing between 200 to 250 packets of food and 150 liters of water on a daily basis with getting financial support and ration from different organization and common people. This all starts with when Shramik trains stopped by, the travellers asked for food and water. Seeing their pain and suffering, they pledged to feed the passengers from the next day.



**New Arif Nagar slum Bhopal**

A gist of vulnerabilities of housing and basic amenities of people in slums and squatter settlement in India can be gleaned from the Union government's latest National Sample Survey Office (NSSO) data on Housing and Sanitation in 2018.

### 1.2 Distancing

The data reveals that the ratio of a room to person in urban slum and squatter settlements is 1:1.41, which means more than one individual shares one room. In West Bengal, one room is shared by more than two individuals. In states like Maharashtra, Uttar Pradesh, Delhi, Gujarat and Assam, the ratios are higher than in other parts of India. This indicates the near impossibility of social distancing and quarantine in urban slums of the country.

### 1.3 Health and Hygiene

Another advisory of the WHO for reducing the spread of the disease is frequent hand-washing with soap and water. Only 53 per cent of slum and squatter households, however, wash their hands with water before having their meals and almost 17 per cent use only water to wash hands after defecation.

In slum and squatter settlements, 16 per cent of the households are estimated to have no sufficient availability of drinking water from principal sources, while 14.51 per cent of households are estimated to have no sufficient water throughout the year for purposes other than drinking. Nearly 37 per cent of the households use common bathrooms, while 10.32 per cent of the households have no bathroom facilities, that is, open defecation takes place. Additionally, 27 per cent of the slum and squatter settlement households reported availability of water, but not soap / detergent in and around the bathroom.

**Possibilities of health and hygiene among slums and squatter households**

Regularly wash their hands before meal				Regularly wash their hands after defecation			
With water and soap / detergent	With water and ash / mud / sand etc.	With water only	No	With water and soap / detergent	With water and ash / mud / sand etc.	With water only	No
43.63	2.27	52.59	1.51	78.63	4.70	16.59	0.08
Availability of water in or around the latrine used							
Water is available with soap / detergent		Water is available with ash / mud / sand etc.		Only water is available		Not available	
63.36		2.04		27.28		7.31	
Agency made arrangement for collection of garbage of the household							
Panchayat / municipality / corporation		Resident / group of residents		No arrangement		Other	
74.78		2.39		20.61		2.22	

Source: Estimated from NSSO 76th round Housing Data

The drainage system in slum and squatter settlement is also vulnerable with 27 per cent of households having open drain and 17 per cent with no drainage system. Regarding wastewater disposal, 14.16 per cent households are estimated to dispose to open low land areas / streets and 13.37 per cent households are estimated to dispose to the nearby river. Similarly, in case of disposal of garbage, 33.13 per cent of households are estimated to use a common place (excluding community dumping spot) which includes open areas, streets or open drains. Again, 21 per cent of slum and

squatter settlement households are estimated to have no arrangement of collection of garbage of the households by any agency. Therefore, the foregoing analysis of housing and basic amenities in slums and squatter settlements proves that people live in urban slums and squatter settlements to meet their immediate need for shelter without any safeguard for disasters and diseases. These numbers clearly demonstrate the unpreparedness of slums and squatter settlements to face any pandemic of this intensity or even less.

**Shared Basic amenities in slums and squatter settlements**

Piped water into Dwelling,28.55%	Piped water to yard/Plot,25.51%	Public Tap/Standpipe,22.65%	Other,23.29%
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**Principal Source of Drinking Water**

Within Dwelling,31.78%	Outside Dwelling but within the Premises,29.31%	Outside Premises, Less than 200 Meters,30.29%	>200 METERS,8.62 %
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**Distance of the principal source of Drinking Water**

Less than 15 Minutes,60.92%	15 minutes or more,39.08%
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**Time taken for a Single trip to reach the principal source of Drinking water from principal source**

One or No Trip,41.53%	More than one Trips,58.47%
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**Number of Trip required in a Day for Fetching Drinking Water from principal source**

Piped water into Dwelling,34.42%	Piped water to yard/Plot,23.03%	Public Tap/Standpipe,18.13%	Others,25.42%
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**Principal source of water for all Household Activities for Cooking, Washing, Bathing etc. (Excluding drinking)**

Daily,78.9%	Once in Two Days to a week,21.1%
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**Frequency of Supply of water**

Yes,58.99%	No,41.01%
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**Bathroom and Latrine both are within the Household premises**

Exclusive Use of Household,59.97%	Common Use,14.97%	No Bathroom, 25.06%
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**Access to Bathroom**

*Source: Estimated from NSSO 76th round Housing Data*

The data shows while a few use mud and ash to wash their hands before the meal, many do it only with water. States like Jharkhand, Bihar and UP have the highest number of people who do not use soap after defecation. To keep the risk of catching coronavirus infections at bay, washing hands with soap water and using sanitizer are two of the most important steps, as recommended by the World Health Organization (WHO). But the latest survey reveals India has a dismal record when it comes to maintaining hygiene. In slum area drainage and drinking water, the

common amenities for which people are suffering for and we are talking to make our city inclusive. Our first step should be to make all the basic civil amenities available for all especially for the poor's

While a century has passed since then, the present conditions of dense living and a weak public health care system makes the possibility of the rapid spread of the current COVID-19 Pandemic and heavy loss of life of urban slum.

## 2.1 Economic Effect

Migrant workers, who are anchors of a slum population, started returning to their native places due to fear, anxiety and hunger. Most of them were daily wagers and did not maintain cash liquidity for this kind of uncertain situation. According to the latest India 2020 publication, the unorganized sector in India accounts for 97 per cent of the workforce and the majority of them are inter / intra state migrants. Reverse migration of these workers will adversely affect sectors, including but not limited, to real estate, manufacturing, milling, textile, travel and tourism, e-commerce delivery, private security and facilities management. Once the curve of COVID-19 flattens, the reverse migration will have a notable economic impact on both, the states that the migrant workforce belongs to and the ones to which they go to. States like Uttar Pradesh, Bihar, Odisha and West Bengal, which are the native places of most migrants, may witness a sudden flood of people, creating an unusual burden on the economic and social infrastructure, whereas states such as Delhi, Haryana, Punjab, Gujarat, Karnataka, Maharashtra and Tamil Nadu will witness a sudden ebb tide of workforce, leading to reduction in production capacity.

## 2.2 Social Impact

A random telephonic survey conducted by Afridi et al in Delhi indicates the social stigma faced by low income families living in urban slums. Eighty five per cent of respondents stated they had lost their primary source of income due to lockdown while half (53 per cent) of those did not receive full salary from the month of March 2020. Undoubtedly, there is support from government in terms of providing free food /ration and direct infusion of cash into bank accounts, but these provisional measures are grossly inadequate to ensure social security. The uncertainty to resume the normalcy of life invites anxiety, stress and fundamental concerns about financial well-being. Though there are less-reported instances, but based on psychological theories, a high degree of possibility exists to support the prediction of increased incidences of domestic violence, crimes against women, theft, dacoity and robbery etc., due to emotional and financial stress. This pandemic raises a pressing need of policy level reform to ensure holistic inclusiveness and preparedness of the country to develop a more responsive framework to mitigate urban inequality during any similar outbreaks in future.

## 2.1 Health Impact

The Healthcare institutions, the government and the World Health Organization have been delivering lessons on hand washing and social distancing since the start of the pandemic. However, in most slums of the country, where a shared tap is the only source of water, it is unclear as to how this segment of the population will adhere to the preventive guidelines. Poor-resourced settings are most vulnerable to

any communicable disease. In the absence of a curated strategy to control the pandemic among the urban poor, India cannot boast of flattening the curve. Primary healthcare center, which are at the bottom of the healthcare system pyramid, are already in short-supply or facing infrastructural deficits. They are not adequate to shoulder the burden of a pandemic. Apart from those who are active COVID-19 patients, the virus creates a passive challenge for those who are suffering from other critical ailments such as cardio-vascular, renal etc. They are not adequate to shoulder the burden of a pandemic. Apart from those who are active COVID-19 patients, the virus creates a passive challenge for those who are suffering from other critical ailments such as cardio-vascular, renal etc. Most importantly, it impacts the scheduled care of expecting mothers and children whose routine check-ups, immunization and treatments are disrupted. Malnutrition among children below five years from the urban poor population is still a persistent problem in India. Lack of income due to the lockdown may result in further dependency on food from government or charitable organizations and if this is not taken seriously, this may result in a bigger outbreak of multiple diseases caused due to nutritional deficiency. Considering the epidemiology of COVID 19-transmission through physical contact, droplets, contaminated surfaces and aerosols, the government should create community-specific detection, containment and treatment plans. The standard procedure of testing, containment and treatment followed in a well-resourced society cannot work in an urban poor settlement.

## 3. CONCLUSIONS

The government should ensure access to food, shelter, healthcare and basic needs of the urban poor population as an interim relief. In addition, it should learn from this pandemic and focus on social determinants of healthcare by creating a robust, equitable and sustainable infrastructure that should be inclusive for all levels of society and ensure strong grassroots level partnership with communities. The government should create a communication strategy that ensures preventive measures such as basic sanitation practices and hygiene get blended into day-to-day culture rather being promoted as a temporary situational treatment. The current situation demands for a social innovation framework where every citizen is an actor of change and having certain roles and responsibilities towards creating a safer, healthier nation.

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