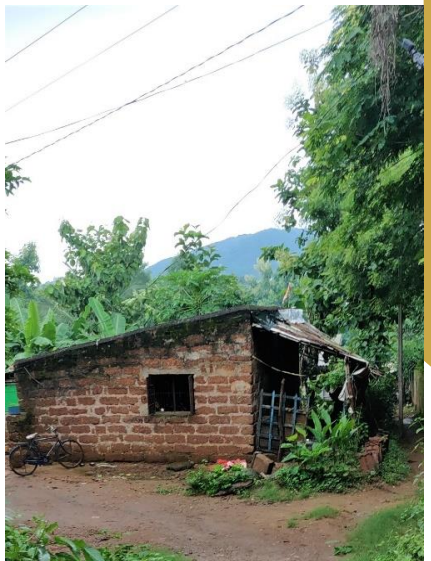

Margins

An assessment of slum infrastructure preparedness to withstand COVID-19 impacts

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SCI-FI
SCALING CITY INSTITUTIONS FOR INDIA
WATER SANITATION

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Glossary

1. Slum:

A slum area definition as per the NSSO, though broadly derived from Census, refers to "an agglomeration of densely inhabited poorly built and/or dilapidated structures predominantly made of kutcha and semi-kutcha building materials often irregularly or asymmetrically constructed in unhygienic surroundings on a patch of land having an area not less than 0.15 acre with poor accessibility and with no or grossly inadequate basic amenities like ventilation, natural light, sanitation, drainage, water and power supply."

- For the purpose of analysis, 'slums' would refer to all settlements reported as notified slums, non-notified slums and squatter settlements
- Squatter settlements are slum-like settlements with less than 20 households.

2. Tenurial status:

Tenurial Status has following categories as per NSS:-

- Owned: Freehold and leasehold
- Hired: Employer quarter, hired dwelling unit with written contract, hired dwelling unit without written contract -5;
- Others: Cases where tenurial status is unclear. Includes households with no dwelling.

3. Million Plus cities:

Million plus cities refers to all Indian cities with a population greater than 1 million. There were 45 such cities in 2012 which increased to 46 in 2019.

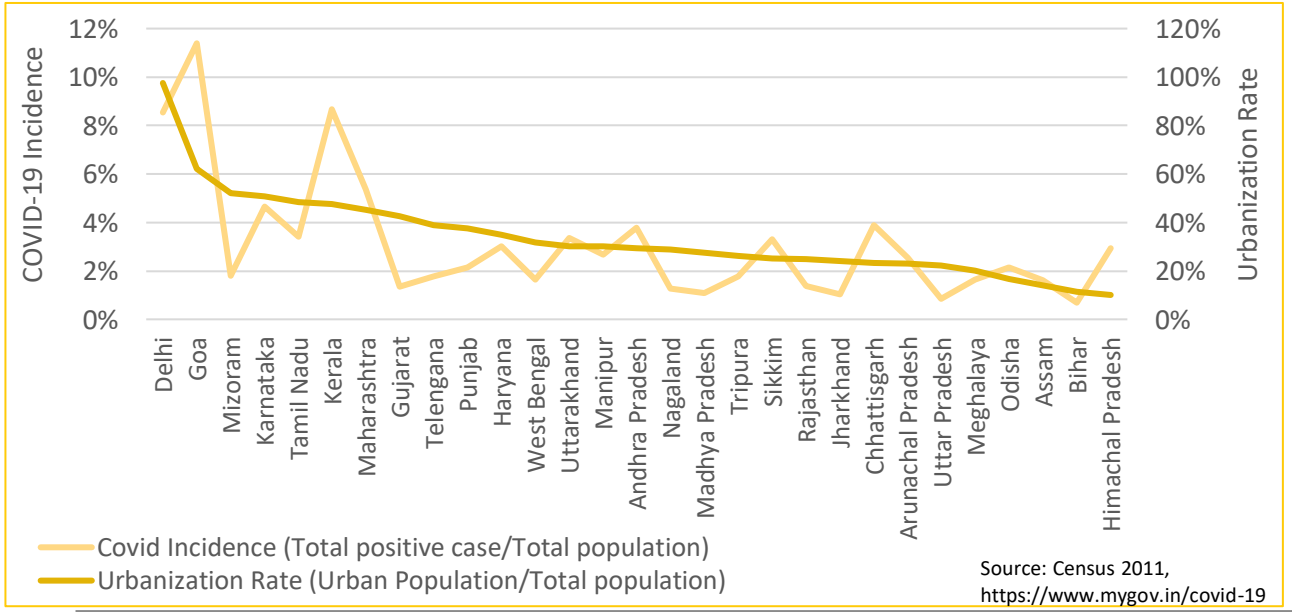
4. Externality:

Externality is present whenever the well-being of a consumer or the production possibilities of a firm are directly affected by the actions of another agent in the economy (and this interaction is not mediated by the price mechanism).

Setting the Context

Urban centers have remained at the forefront of the current COVID-19 crisis, with over **95% of the total COVID-19 positive** cases concentrated in urban areas[1]. These areas, by definition, are highly populated and dense settlements, acting as hubs of economic activity. These very characteristics make the urban regions vulnerable to spread of pandemic.

Assessing the condition of infrastructure in Indian cities is critical to its efforts to control this pandemic. **Housing and WASH related infrastructure** in any urban area would be an important factor in **determining if the COVID appropriate behaviour like frequent and proper handwashing, maintaining social distancing, stay at home guideline, quarantining patients etc. could be ensured effectively** in that area. Housing and WASH related infrastructure varies among and within different kinds of urban areas based on several factors.



Source: Census 2011, https://www.mygov.in/covid-19

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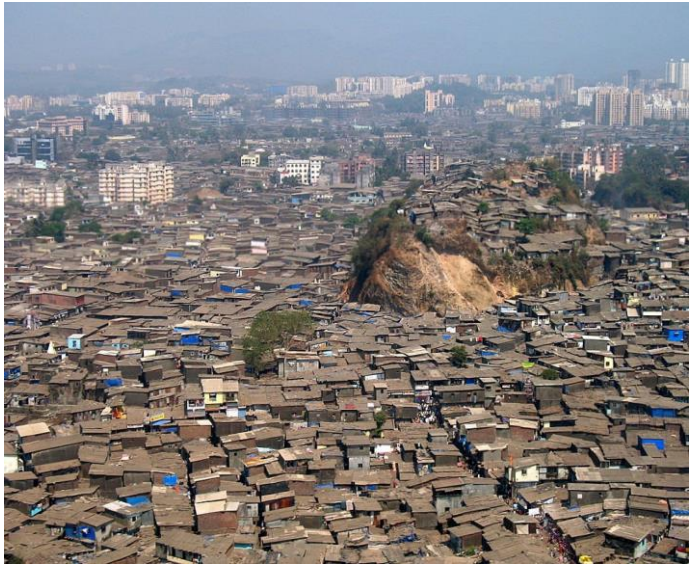
1. UN-Habitat COVID-19 Response Plan, 2020

SCI-FI WATER SANITATION

Setting the Context

The **urban slums have reported the highest seroprevalence** with 31.7 per cent, as per ICMR's third national serosurvey in January 2021. With highly infectious nature of SARS-Cov-2 virus, the densely populated urban informal settlements, which are perpetually constrained for space, are at greatest risk. The underlying reason of the residential vulnerabilities of slum dwellers are socio-economic in nature, which also affects their ability to access proper healthcare and treatment, in case of infection. Recurring lockdowns and the accompanying income loss worsens the coping capacity of slum dwellers, most of whom are daily wagers and self employed.



Slums and urban poor informal settlements in cities are characterized by overcrowded and unhygienic living conditions with high reliance on shared basic infrastructure. Data shows that about 45% of slum households share one room and another 5% have no exclusive room, high reliance on shared toilets with one toilet per 1,440 population in Mumbai and 833 population in Delhi[2].

Small towns, although less impacted by the pandemic, yet minimal access to basic infrastructure and weak healthcare system puts them at a greater risk. Their connections with rural areas make them critical in controlling the spread of COVID-19 into the rural hinterlands.

Non- availability of basic services like access to HH level piped water supply, HH latrines, solid waste management (SWM) system, housing conditions, deepen the household's vulnerability against the pandemic. Present analysis will give a good background to researchers studying the impact of COVID-19 in urban areas by comparing slums and non-slum households in million and non-million plus cities. This will help us understand the extent of vulnerability of households to the pandemic based on the size of the city and the location of household within the city.

2. How does Covid-19 aggravate the multidimensional vulnerability of slums in India? A Commentary; Science Direct

Study Objectives & Methodology

Objective

To assess the extent of vulnerabilities with respect to WASH and housing among the marginalised, based on the location and city sizes for ascertaining their ability to mitigate possible covid-19 impacts

Methodology

The condition of housing and WASH infrastructure in slums and non-slum areas in million and non-million plus cities over time are compared. It compares the following factors:

- Access and quality of water and sanitation services and
- Tenurial status and housing congestion.

Data

This document analyses the secondary data set of 76th NSS Round on household amenities released in 2019. This is the latest pre-pandemic survey on housing and WASH conditions that will help to understand the situation before the onset of the pandemic. We have also considered NSS data from 69th round, which was conducted in 2012, to understand the compare improvements in housing and WASH conditions, if any.

Other characteristics of NSS data that makes it suitable for the present study are:-

- Only country wide survey to periodically capture the living condition of households in such detail.
- Representative sample at national, state as well as million plus and non-million plus cities.

Limitation

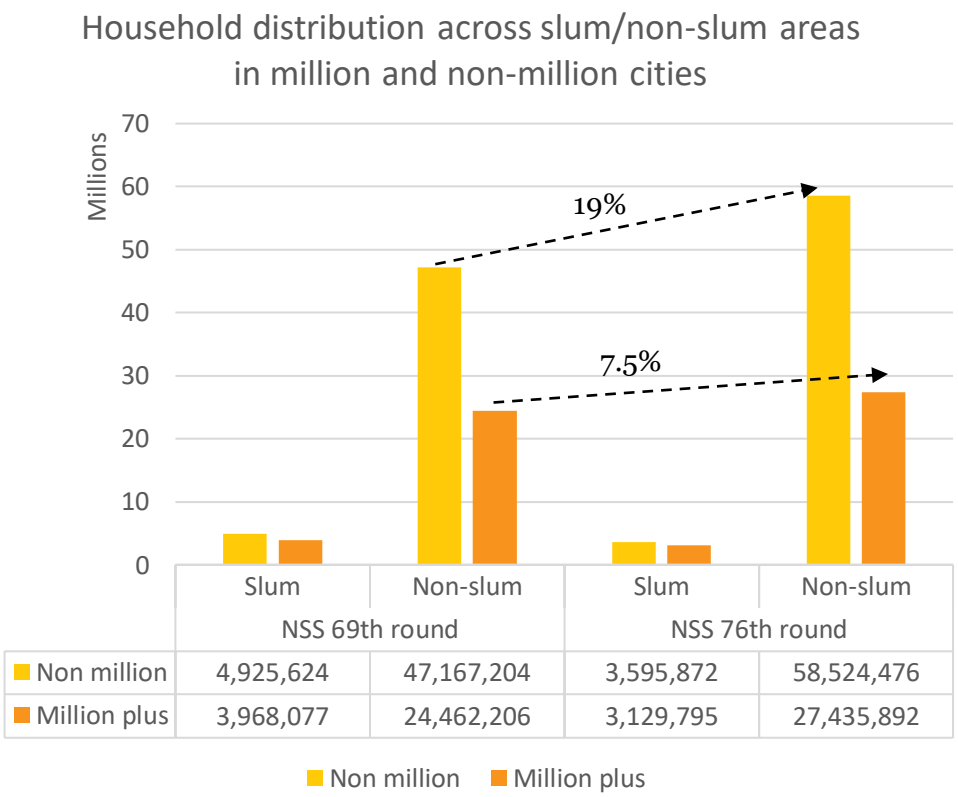
- According to NSS, households reported as residing in slum areas (notified, non-notified and squatter settlements) has decreased from 2012 to 2019. though it is not consistent with ground reality as shown by various studies.
- In this study we focus only on living conditions of the household and do not consider their access to health care and occupational vulnerability which also affects their ability to cope with the pandemic.
- Non-million plus cities is a broad category which includes census towns as well as class 1 cities and hence might not be able to capture the issues of urban areas with rural governance.

Macro Figures

City size	Million Plus city	Non-million plus city
Number of cities	46 cities	4041 STs 3894 CT
Total Households	30.5 million HHs	62 million HHs
Share in total Urban HHs	One-third	Two-third
Slum Households	3.1 million slum HHs	3.6 million slum HHs
Share of total urban HHs living in slums	**10.2%**	**5.8%**
Share of total slum HHs	**46%**	**54%**

Contrasted to roughly around 4000 statutory towns, there are only 46 million-plus cities in India. Thus, 1% towns account for 1/3 population of urban areas and roughly 46% of total slum households.

Growth Overtime



15% rise in Households in urban areas between 2012-19.

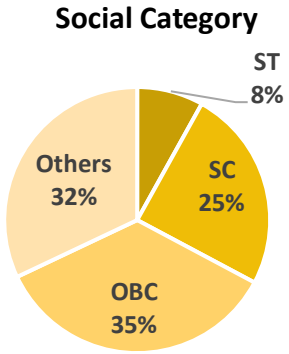
7.5% HH growth in non-slum settlements in million-plus cities while **19%** in non-million plus cities.

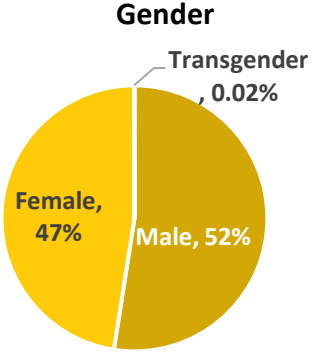
However, average increase in population per city in million-plus cities (≈64,641 households) is 23 times that of the non-million cities (≈ 2,839 households).

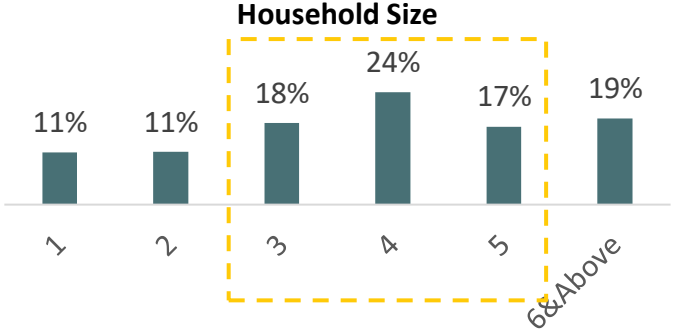
Proportion of households residing in slum areas has decreased during 2012 to 2019. This is observed in both million-plus cities and non-million cities.

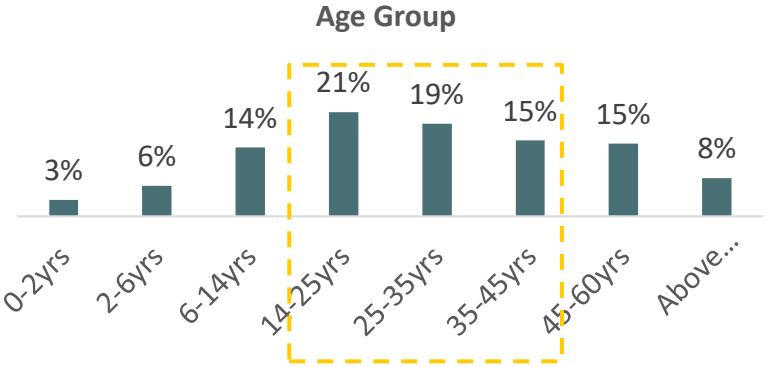
- Million-plus: 14% (2012) → 10% (2019)
- Non-million: 10% (2012) → 6% (2019)

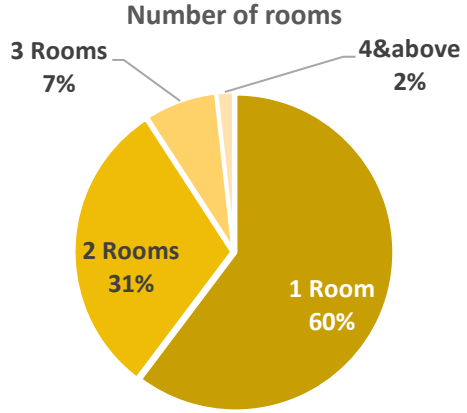
Slum Profile







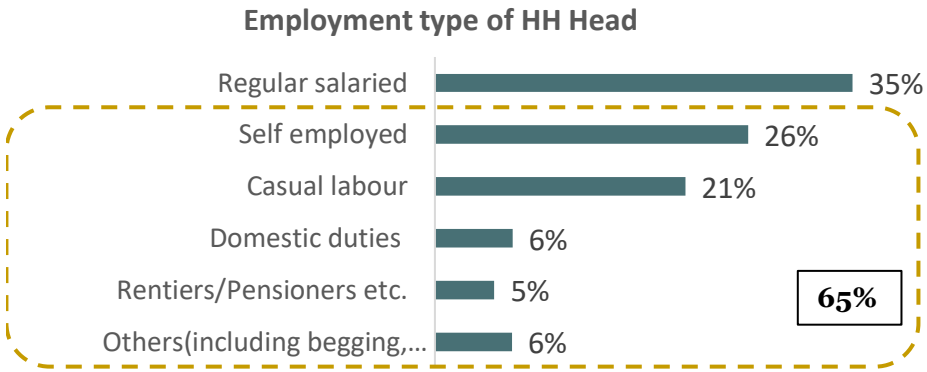


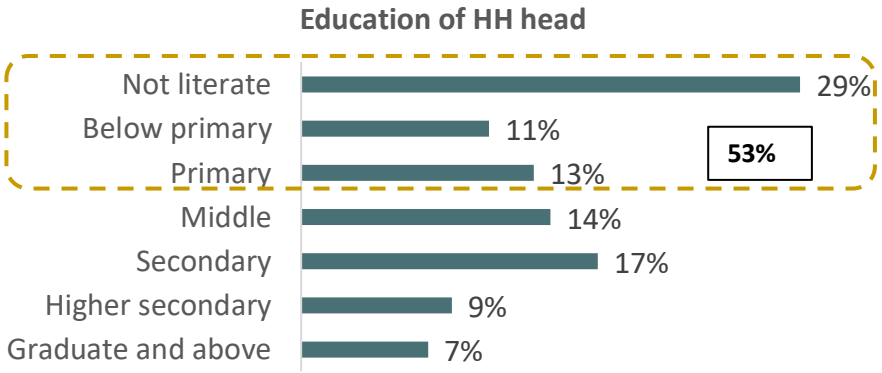


About 55% of population in slums are in the age group of 14-45 years, which is also the most productive and main income earning age-group.

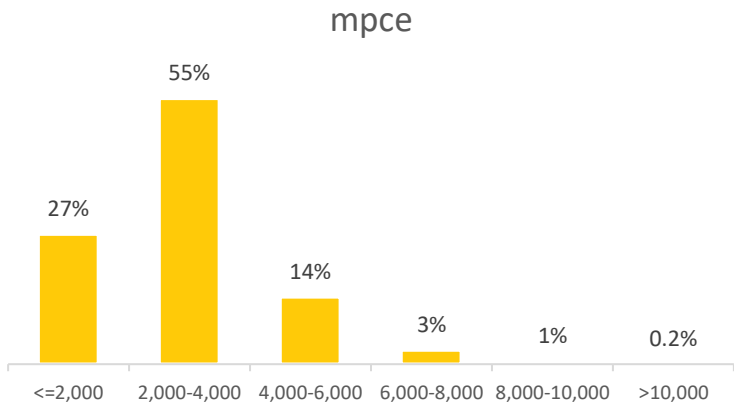
60% of the household in slum have 4 or more members in the family and majorly live in 1 room dwelling, preventing them from adequate hygiene maintenance and social distancing.

Slum Profile

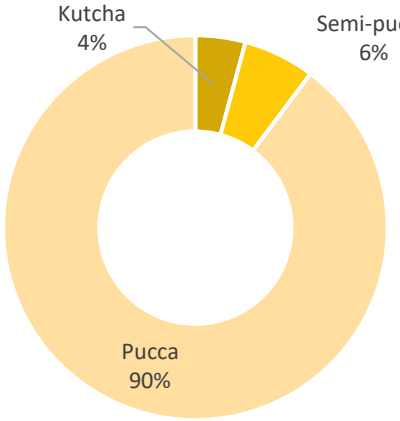




Monthly Expenditure (INR)



House Type



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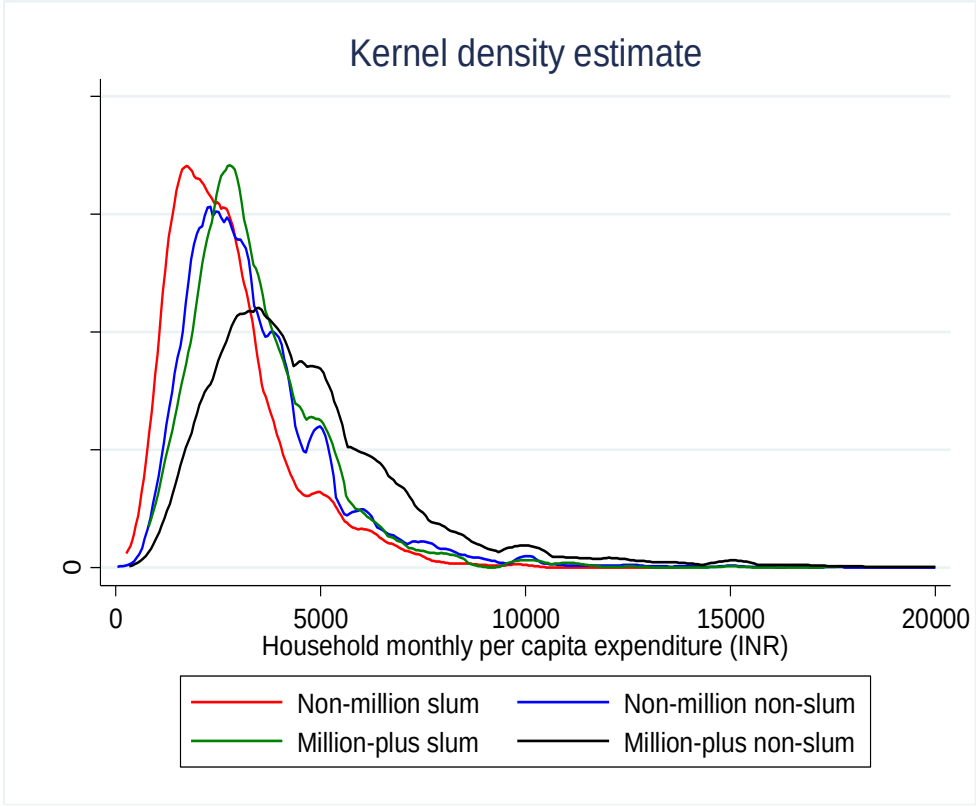
Inequalities across settlements



Median MPCE	Non-million		Million-plus	
	Non slum	Slum	Non slum	Slum
69th Round	1,946	1,350	3,000	2,000
76th Round	3,175	2,500	4,500	3,097

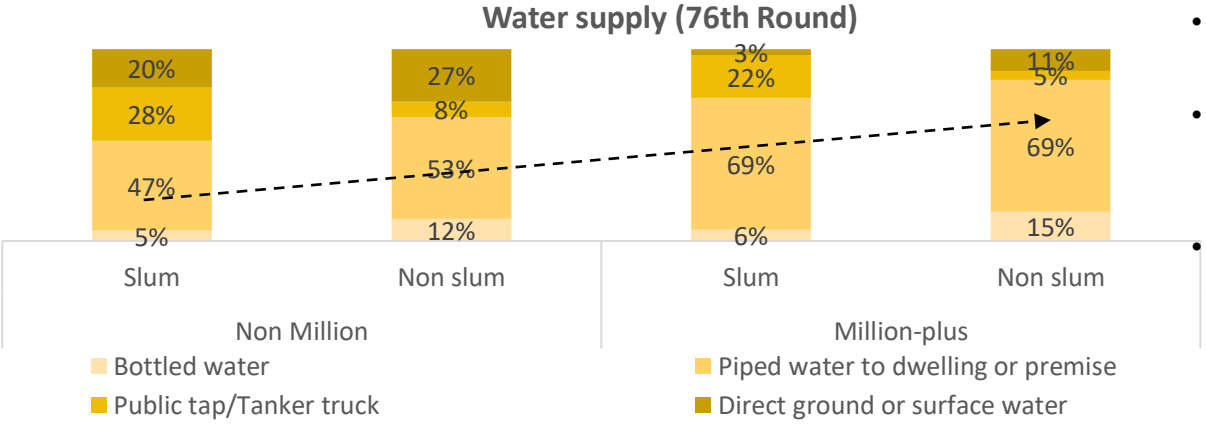
There are differences in economic well-being of households residing in the four settlement categories.

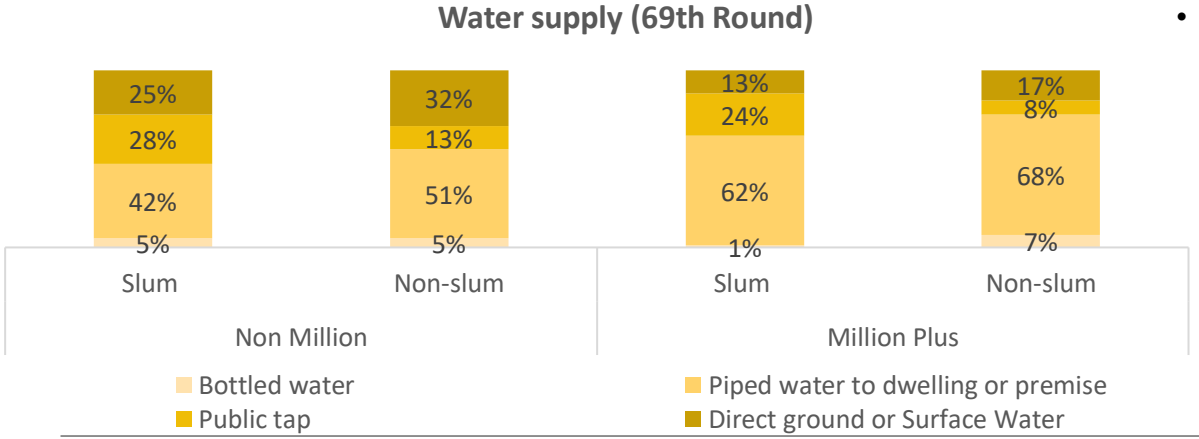
- These distinctions are more acute in million-plus cities where despite the opulence of economic opportunities inequalities remain deeply entrenched.
- Slums of large towns are very similar to non-slum areas of small towns in terms of monthly per capita expenditure.

While such comparisons highlight the inequalities in a very objective manner, they don't necessarily ascertain a better standard of living, as is shown in the coming slides that highlight variations in existing WASH and housing-related infrastructure, across these four settlement types.

Assessing access to Water and Sanitation in slums

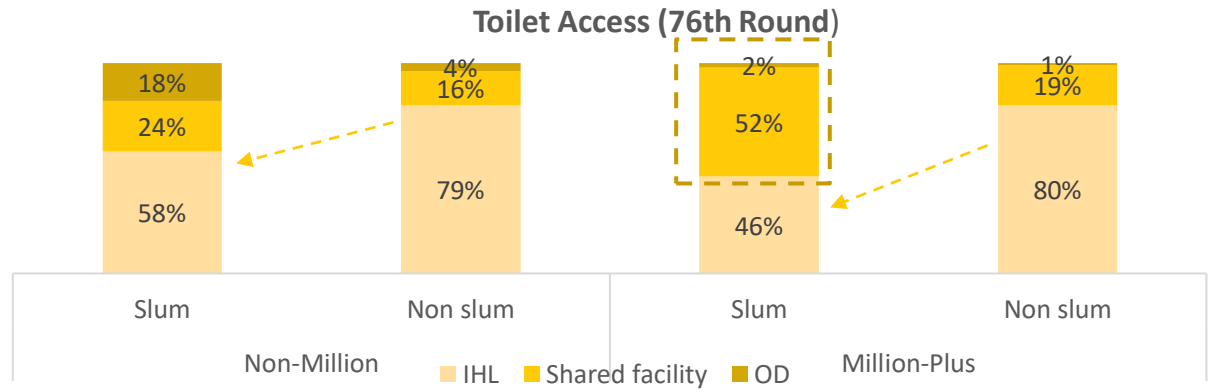
Around 50% HHs in small city slums rely on shared or non-piped water sources.

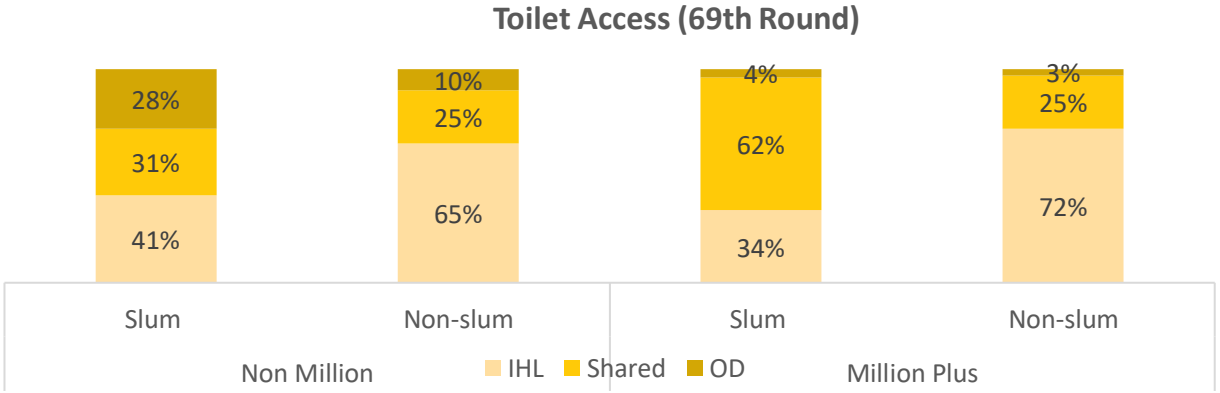




- Million plus cities have higher access to piped water than smaller towns.
- Across city sizes, slums are worse off compared to non-slum areas in accessing piped water supply at HH level.
- All 4 settlement types witnessed improvement in piped water access overtime (2012-19). Use of unsafe water declined by 10 percentage points in million plus city slums and by 5 percentage points in small city slums.
- Data from the 69th round shows that slum dwellers wait for longer duration at the principal source of drinking water. Compared to 15 minutes waiting time in non-slum areas, 17 minutes and 20 minutes is the average waiting time in small city slums and large city slums, respectively . Though the average time has declined overtime, on average by 10 minutes for all settlements, it is still the highest for million-plus city slums. This indicate the intensity of stress on the limited shared water sources in the densely settled slums.

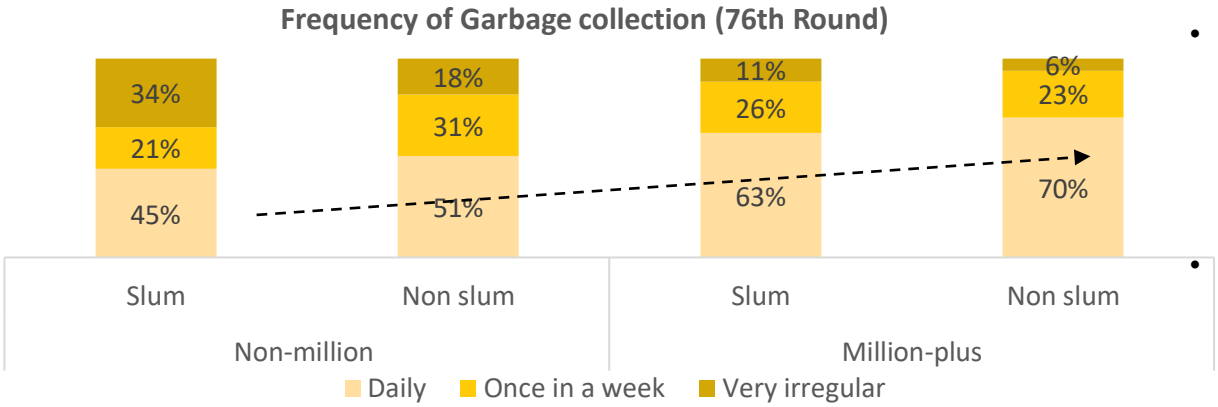
Access to IHL increased in slums of both large and small cities

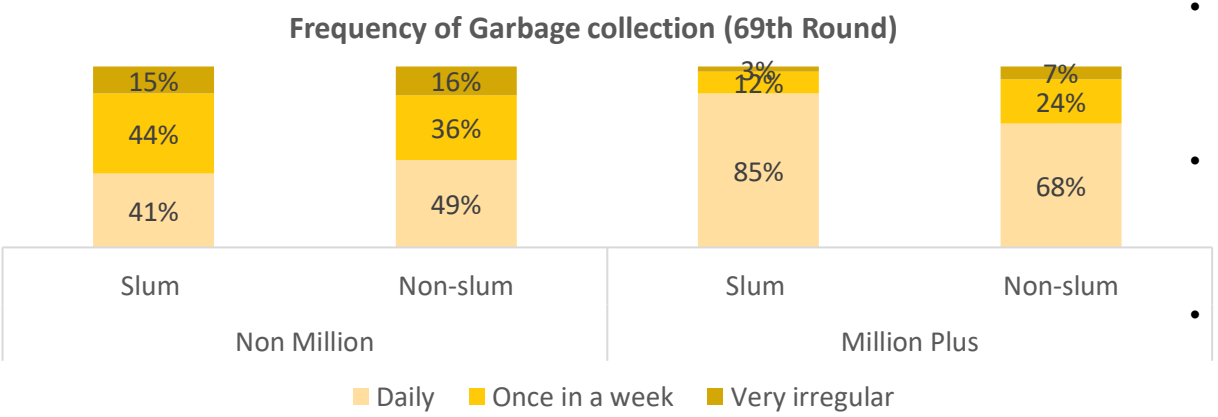




- Access to IHL improved in all 4 settlement types overtime, small towns has recorded a higher percentage increase than million-plus towns.
- The gains reported have been largest for small city slums where OD has reduced by 10 percentage point between 2012-2019.
- Despite increased access to IHL, there is high reliance on shared toilets and OD. 54% of the million city slums remain dependent on shared facilities for accessing sanitation.
- Similarly, 2 in every 10 households in smaller city slums resorts to Open defecation as of 2019.

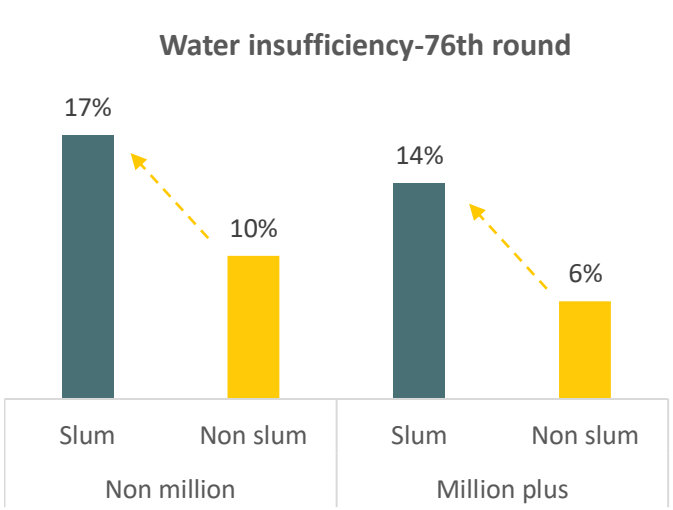
Garbage collection is irregular in the small towns, specially in the slums





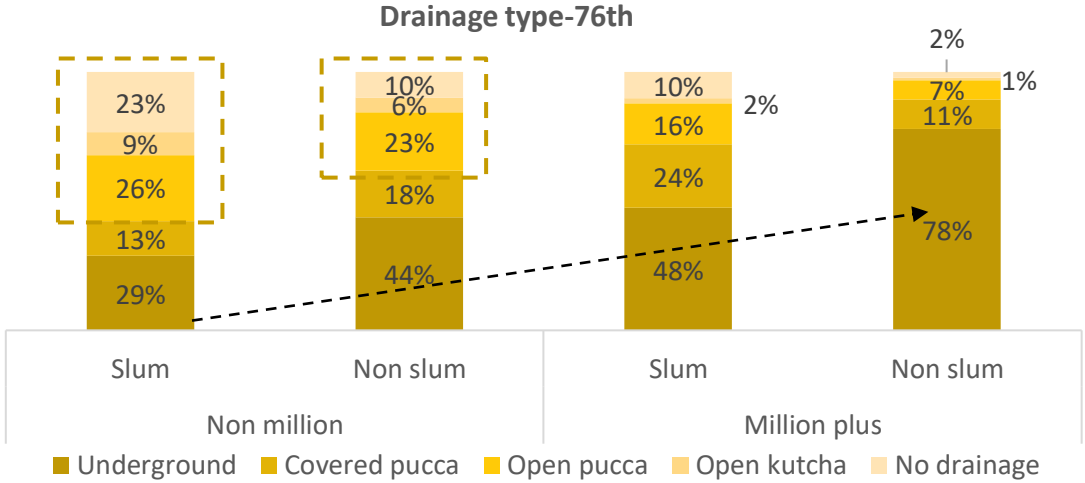
- More than 60% households in million-plus cities dispose garbage at community dumping points. In small towns, disposal is majorly at community bins (40%), but disposal in open spaces is also quite high (39% in slums, 25% in non-slums settlements).
- Collection agency is ULB for the majority in both big and small cities. However, one-fifth HHs in small towns, also reported to have no arrangement in place.
- With respect to frequency of garbage collection, it was found that there is more regular collection of garbage in million plus cities than small towns.
- Slums have limited access to regular collection of solid waste compared to the other non-slum areas for both small and large towns.
- Garbage collection became more irregular in large city slum settlements between 2012-19. Not much change seen in non-slum areas.

Slums are facing water insufficiency



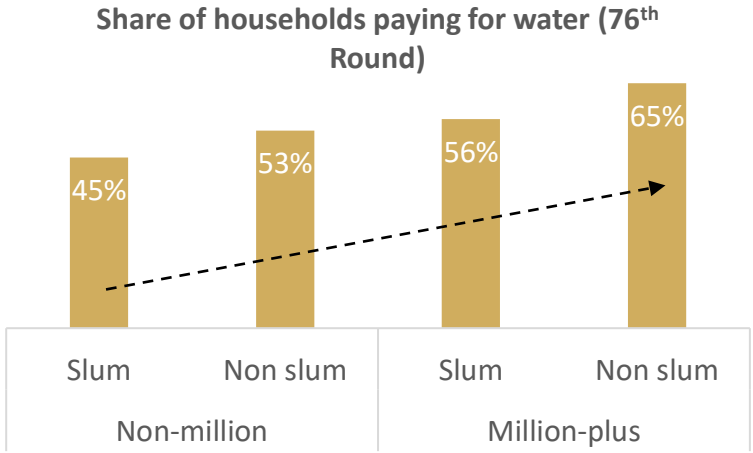
- 17% slum HHs across small towns reported water insufficiency while the same was 14% in million plus.
- Water insufficiency is also faced by non-slum areas across city sizes with the smaller ones reporting higher degree of insufficiency.

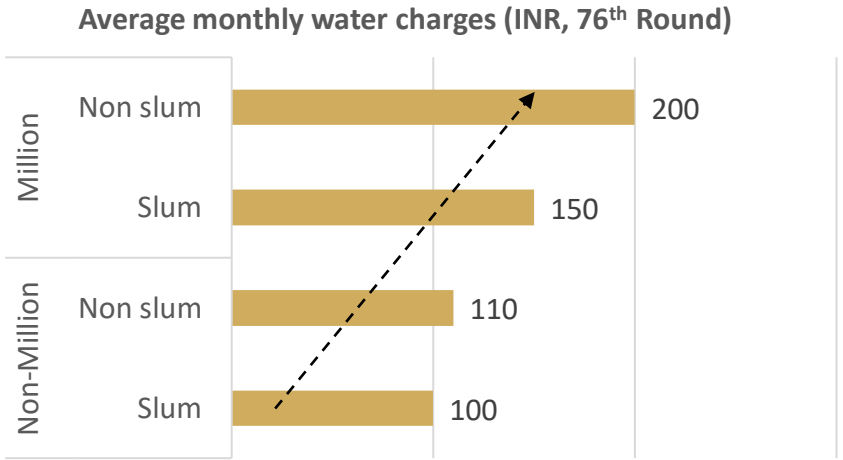
Low access to drainage, especially in smaller city slums



- Drainage infrastructure is poorer in small towns, both in slum and non-slum settlements.
  - Non-slum areas of small towns are comparable to the slums of big cities.
  - 23% households in small town slums reported no access to drains
  - Access to covered drainage infrastructure is limited to 42% in slums and 62% in non-slum settlements
- However, small towns saw larger improvement in drainage infrastructure overtime in comparison to big cities. Underground drainage increased from 20% to 29% in small city slums, while there was no change witnessed in case of big city slums.

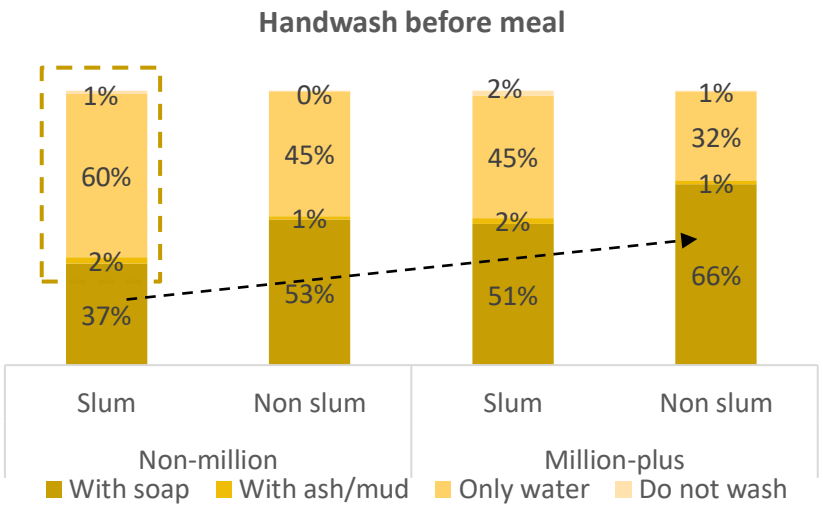
Higher water charges in big cities

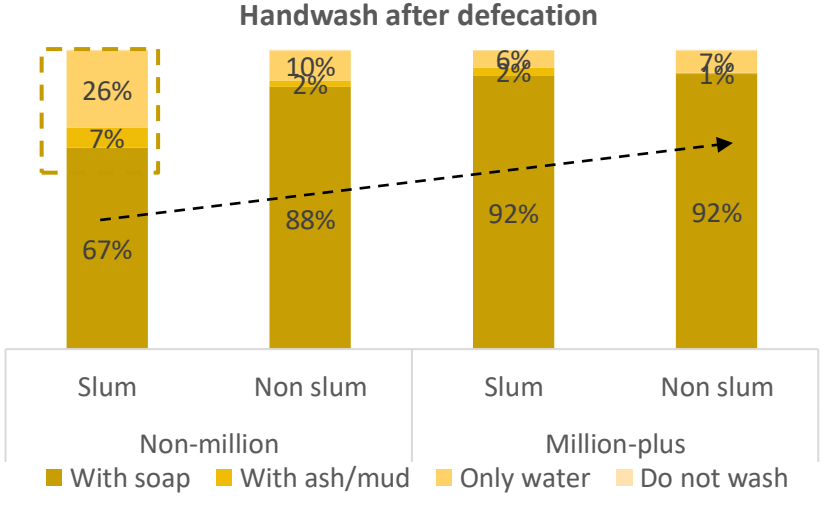




- Larger share of households pay for water in million-plus cities. 64% households pay for water in big cities compared to 52% households in small towns.
- A higher share of households pay for water as we move from slum to non-slum areas. 45% slum residents of small towns pay for water while 56% slum residents pay in million plus cities
- The water charges in million plus cities for non-slum HHs and slum HHs is INR 200 and INR 150, respectively, which is higher in comparison to the amount paid by the households in small towns.
- Water costs vary widely across settlement type in large cities, unlike the small towns. The mean monthly charges are marginally change across settlement type in small towns, unlike in big cities where mean charges increase by INR 50 per month as we move from slum to non-slum areas.

Small city slums fare poorly in handwashing practices





Washing hands with soap is less common in slum settlements. This is true for both large and small towns

- 1 in 2 households in big city slums do not wash hands with soap before meals. Situation is worse in small cities where close to two-third households do not wash hands with soap before meals.

Use of soap is not part of regular handwashing. Though handwashing after defecation entails high usage of soap, it is quite low for handwashing before meals

- 92% households in big city slums use soap for handwashing after defecation. However, the share drops to 51% in case of handwashing before meals.
- Similarly, in small town slums, the share of households using soap after defecation is double the share using soap before meals.
- Due to social desirability bias, overreporting is likely in this case.

Key Takeaways

Inadequacy of water and sanitation infrastructure

Across city sizes, **slums are faring poorly with respect to existing water and sanitation infrastructure.** Slums show low access to piped water and in-house toilet, more shortage of water, deplorable drainage infrastructure and lower usage of soap for handwashing in comparison to non-slum settlements.

Limited access to services in small town slums

Compared to million-plus city slums, **the services are poorer in slums of small towns.** The latter show high OD, greater use of unsafe water, irregular garbage collection, high share of open drains and much lower use of soap for handwashing, as compared to the former.

High reliance on shared facilities

- **Slums in both big and small cities show high reliance on shared facilities**. Shared infrastructure for water and sanitation can become potential breeding grounds of transmission in slum settlements as they make social distancing often impossible.
- Fear of contracting the virus while using community toilets can push people towards open defecation

Key Takeaways

Pre-exiting shortage intensifies water insecurity

Following COVID-19 measures has led to an increase in frequency of handwashing and corresponding water requirements. **Pre-existing water shortages in slums can intensify water insecurity**.

- Water shortage can be further compounded by joblessness specially in big cities where water costs are higher.
- Water shortages often lead to panic situations where people are seen flouting covid norms. For instance, common to see crowding of water tankers in times of shortages.
- Shifting water use towards handwashing can reduce water availability for toilet, again incentivizing OD.

Constraints limit sanitation activities

Restricted use of soap among slum households

- Although awareness around handwashing increased manifold , their ability to afford sustain supply of soaps in the event of limited income opportunities require further verification. Both **financial and spatial constraints** make installation of handwashing stations or purchasing soaps a challenge for the slum dwellers.

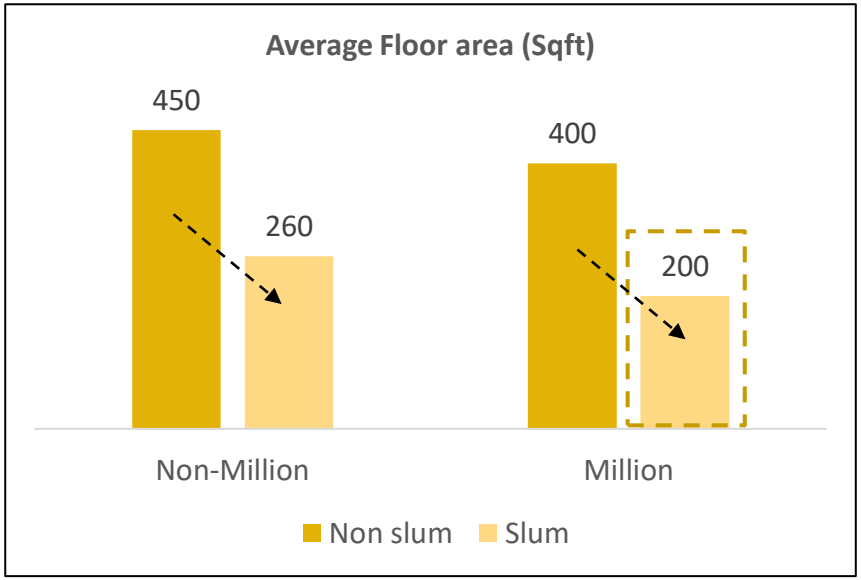
Inadequacy of infrastructure prevent hygiene practices

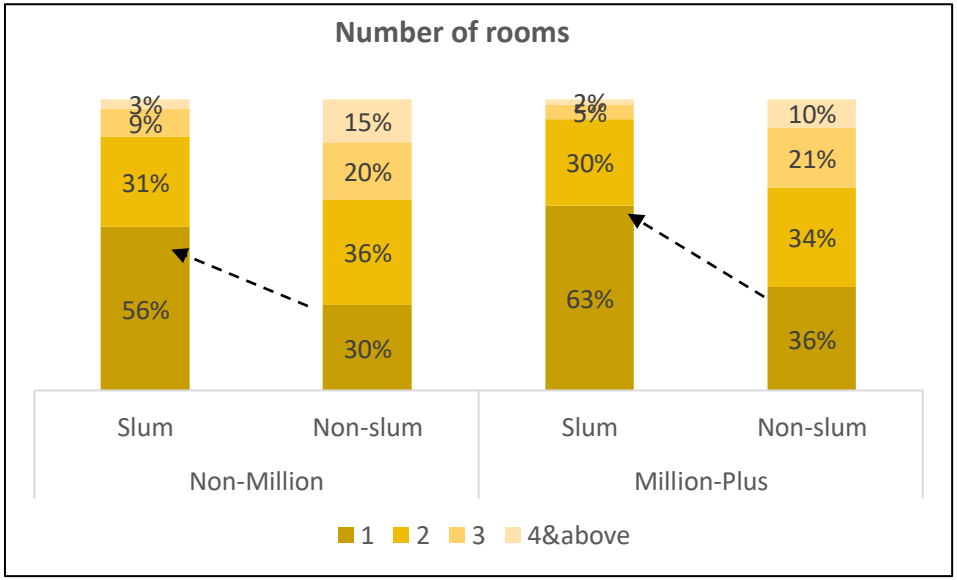
Systems and infrastructure to maintain hygiene in slums are weak

- Regular collection of waste with proper segregation has become more important since the onset of COVID-19 given increased generation of bio-medical waste, including masks and PPE kits. Safety of sanitation worker is also a concern in this respect.
- Drainage infrastructure is poor is small towns, specially the slum settlements. They can reduce the overall cleanliness of the environment, making people prone to other infections too.

Inadequacy of Housing, Congestion and Security of Tenure

Large city slums have smallest houses

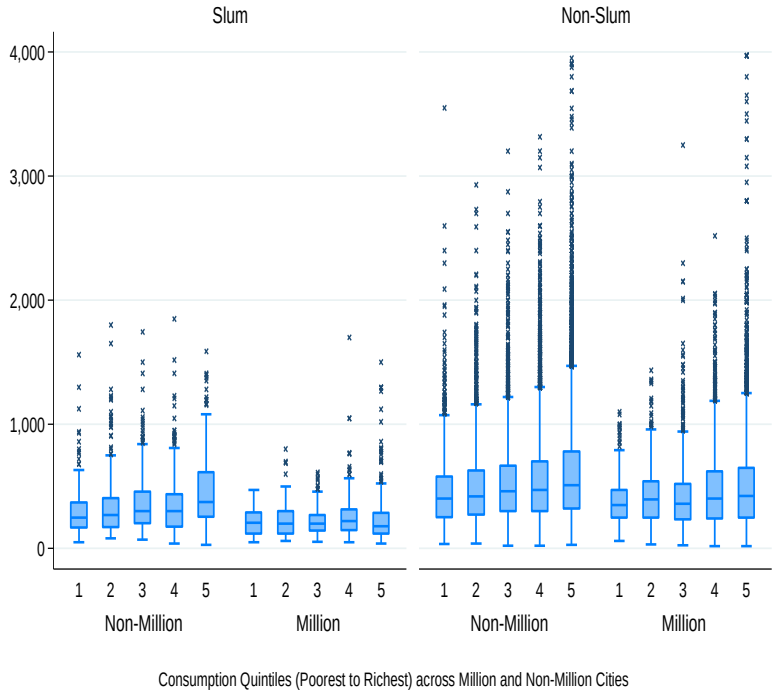




- Slums have smaller houses compared to non-slum areas, for both small and large towns.
  - Only one-third households reside in single room dwellings in non-slum areas, while this share doubles in case of slum settlements.
- There are variations in slums across city sizes.
  - Million-plus city slums have average floor area of 200 sqft, lower than small city slums with average house are of 260 sqft.
  - 63% household in large city slums and 56% households in small cities slums have single room dwellings.
- Small towns have bigger dwellings (both slum and non-slum) than million-plus cities. However, with respect to number of rooms, there is not much difference, implying smaller room size in the latter.

Million plus slum HHs are getting smaller overtime for lower consumption quintiles

Size of dwelling across Consumption quintiles (76th round)

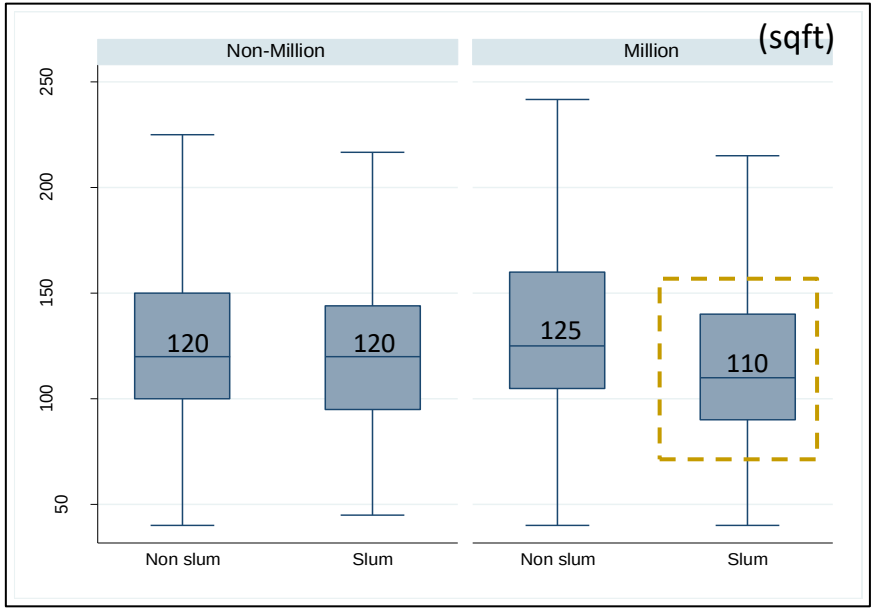


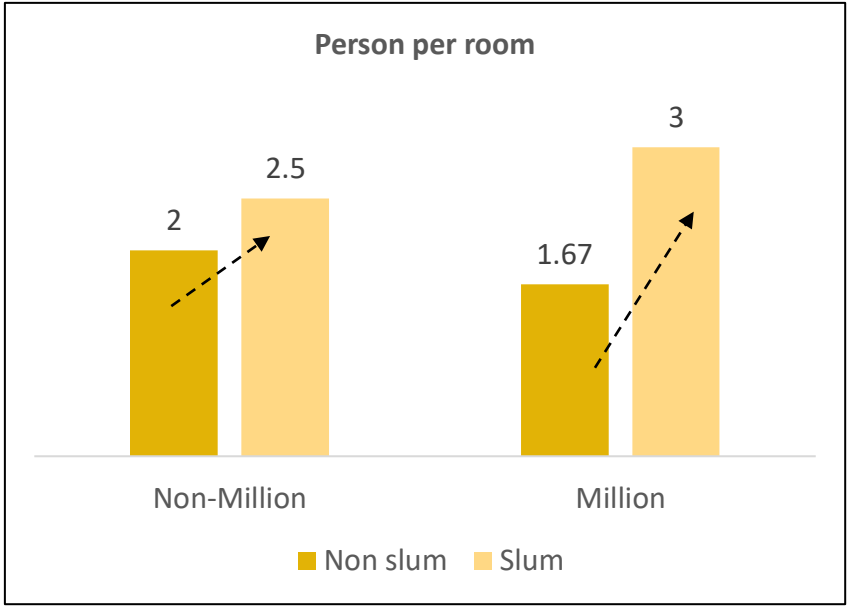
Median Floor Area				
69th round	Non-million		Million-plus	
MPCE Quintiles	Non slum	Slum	Non slum	Slum
1	275	200	275	170
2	295	200	230	230
3	320	220	240	160
4	370	265	293	164
5	460	295	440	170
76th round	Non-million		Million-plus	
MPCE Quintiles	Non slum	Slum	Non slum	Slum
1	380	238	282	**140**
2	370	250	340	**160**
3	406	270	330	200
4	440	252	348	225
5	510	330	440	183

The size of the dwellings increases as we move up the expenditure quintiles. This is true for all settlements except big city slums which do not show any income effect on floor area.

The dwelling size do not show much change overtime, the inequalities persisted. Big city slums are the only exception, where floor area among the lower consumption categories decreased overtime .

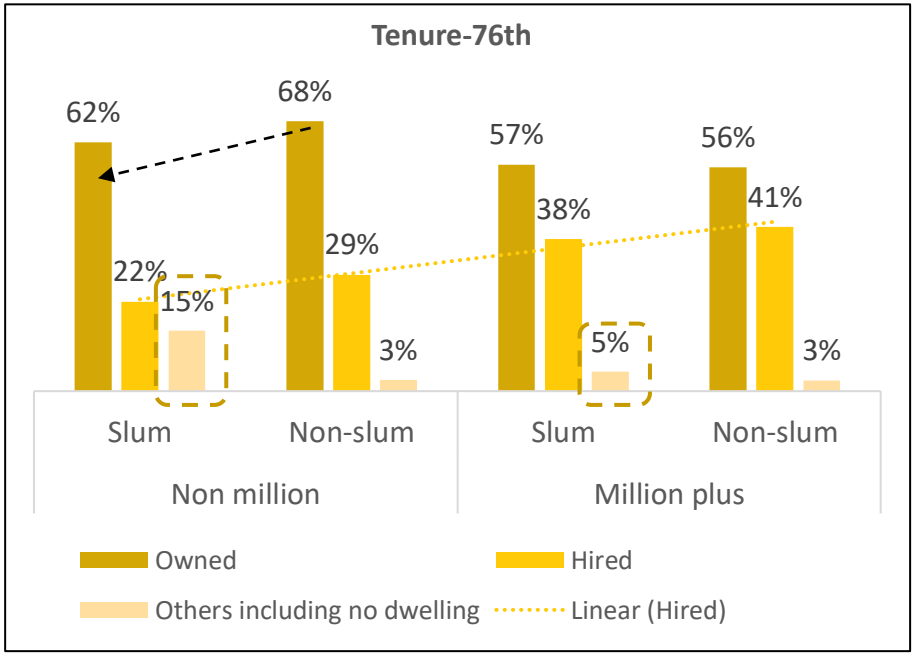
Million-plus city slum houses are more congested

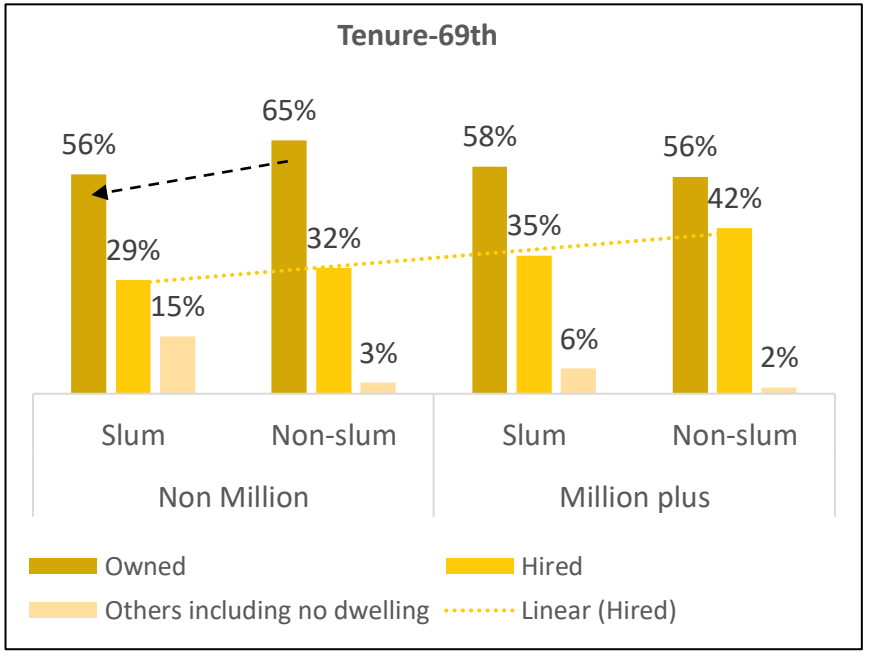




The average size of living room in the slums of million plus cities is 110 sqft which is smaller in comparison to the slums in small towns with an average room size of 120 sqft. At the same time, in slums of million plus cities, the persons to rooms ratio is 3 while it is 2.5 in slums of small towns. This highlights that not only the big city slums have smaller house but also have more number of people sharing one room, leading to congested living.

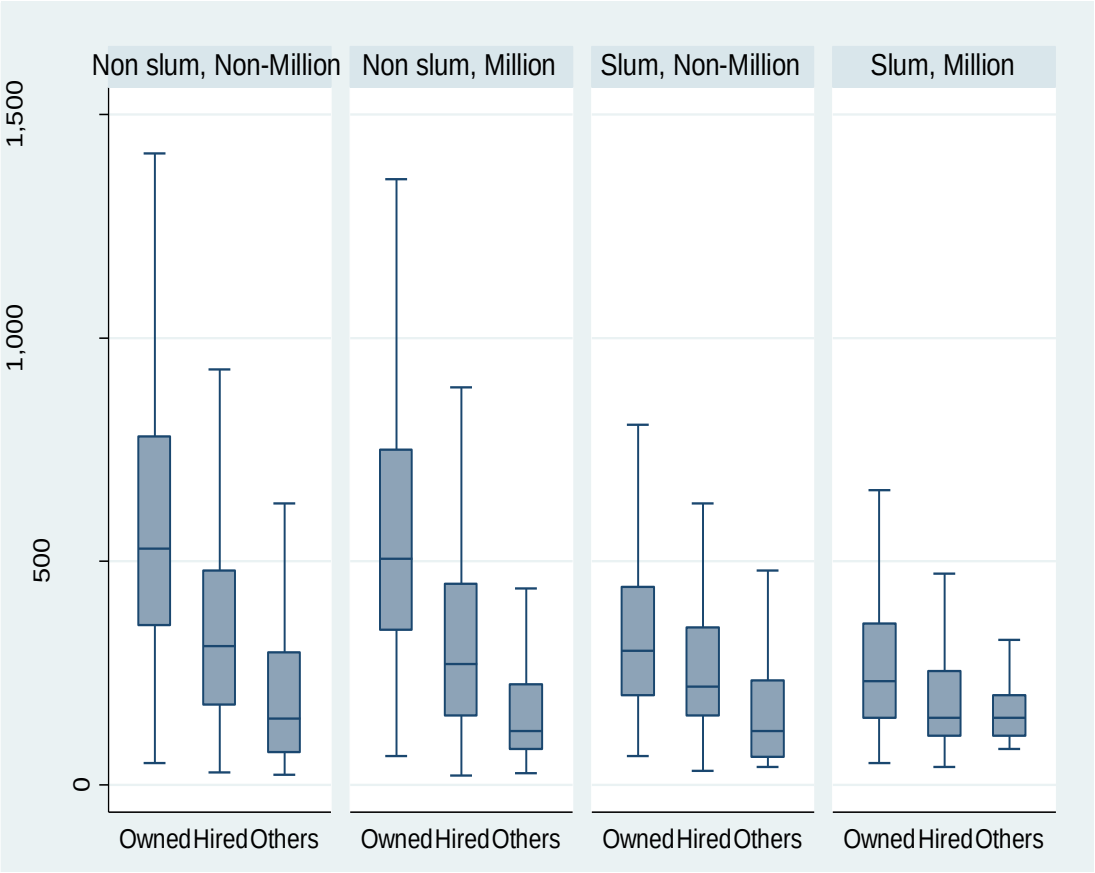
Rented accommodation is more common among the slum dwellers in big cities





- Compared to small towns, a larger share of people live in rented accommodation in the million-plus cities, both in slum and non-slum settlements.
- Overtime, owned dwellings increased in small towns, owing to govt housing schemes and programs. However, in million-plus cities ownership remained stagnant while there a marginal rise in hired dwellings in slums.
- Slums also show higher share of dwellings with unclear tenurial contracts (including no dwelling), especially in small towns.

Hired dwellings are much smaller than owned ones, both in non-slum and slum areas



Tenure	Median floor area (sqft)			
	Non Million		Million plus	
	Non slum	Slum	Non slum	Slum
Owned	528	300	505	232
Hired	310	220	270	150
Others including no dwelling	147	120	120	150

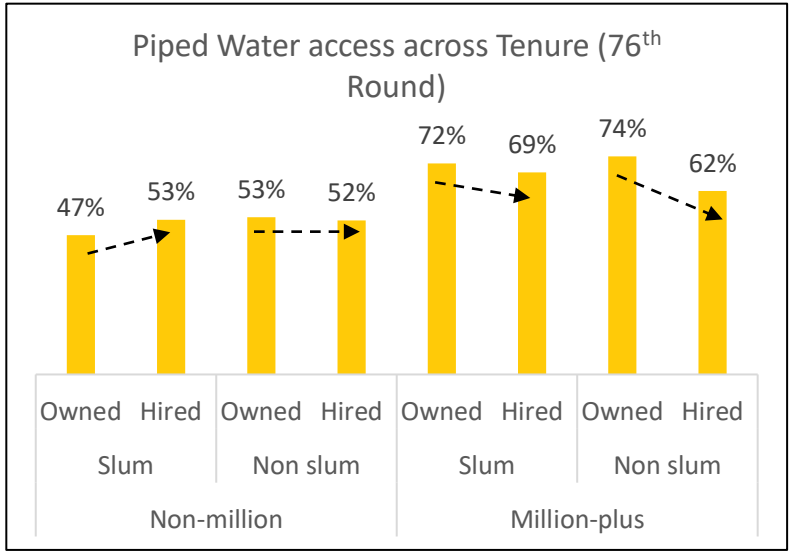
The floor area of hired dwellings is lower than owned ones in all types of settlements.

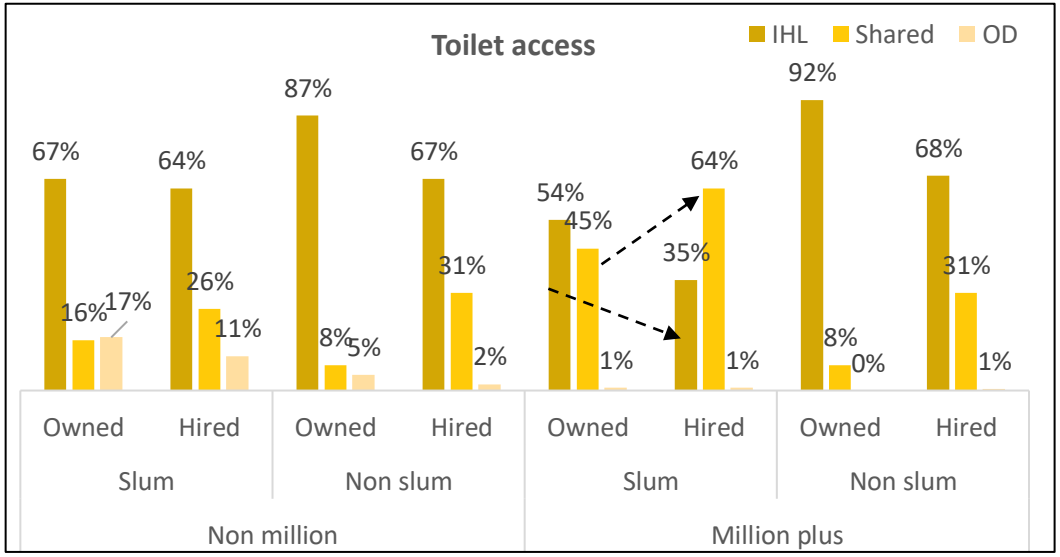
- Hired dwellings in slums of big cities are the smallest
- Congestion (persons per room), however, is almost same as that of owned dwellings, due to slightly lower average family size among renters (Average HH size is 3 among renters while it is 4.4 among home owners in urban areas).

The difference in floor area between owned and hired dwellings is less pronounced in slum settlements as compared to its non-slum counterparts.

- Difference is around 80 sqft in case of slums (in both large and small cities) whereas, hired dwellings in non-slum areas are more than 40% smaller across city sizes.

Home-owners have higher access to IHL than renters but not necessarily to piped water





Access to piped water show marginal change across tenurial categories

- In the million-plus city slums, 72% of owned dwellings have access to piped water while 69% hired dwellings have it.
- On the other hand, small city slums show higher piped water access among renters (53%) as compared to home-owners (47%).

Hired dwellings rely highly on shared toilets

- Owned dwellings have higher access to in-house toilets. This is true for all four settlement categories.
- Reliance on shared toilets is higher among renters in both slums and non-slums. Large city slums particularly stand out where majority of renters (64%) use shared toilets.
- OD is lower among households living on rent compared to owners.

Slums witnessed a higher percentage increase in rent than non-slum areas

Median Rent	Non-million		Million-plus	
	Non slum	Slum	Non slum	Slum
69th Round (2012)	1200	800	1700	800
76th Round (2019)	2270	1800	3000	2200
Percentage increase	89%	125%	76.5%	175%

Rents have increased for all four settlement types. However, slums in both small and large towns show higher percentage increase between the two rounds of NSS.

Further analysis revealed that higher rents ensure better services.

- Share of piped water access increases as we move upwards to higher rent quintiles, except second quintile in case of million-plus city slums.
- In small cities, IHL share increases with rent. However, for the million plus city slums, there is only an initial increase as the dependence on shared toilet remains high for all rent quintiles.

Does higher rent ensure better access to services in slums?

Share of piped water		
Rent quintiles	Non-million city slums	Million-plus city slums
Low	35%	60%
Second	42%	33%
Third	67%	68%
Fourth	64%	78%
High	74%	93%

Access to Toilet				
Rent quintiles	Non-million city slums		Million-plus city slums	
	IHL	Shared	IHL	Shared
Low	36%	35%	14%	85%
Second	56%	33%	46%	49%
Third	69%	27%	45%	55%
Fourth	88%	9%	40%	59%
High	99%	1%	43%	57%

Key Takeaways

Overcrowding and congestion in slums

Congested living is a major concern for big city slums which are highly populated urban centers and in proximity to some very crucial economic centers of India. These can easily become COVID-19 hotspots, if not kept under check, with the potential to impact the entire city.

- Not only are the dwellings overcrowded but also getting smaller in size overtime, for the lower income quintiles.
- Would be difficult to undertake home isolation of any family member that show COVID symptoms or has come in contact with any outsider.
- Often the haphazard and continuous growth of slum size and density leads to negligible room left for any community spaces. Even the lanes between houses are often too narrow for any social distancing to be possible. Setting up quarantine facilities for return migrants, or maintaining social distancing while stepping out for daily supplies or services can be a challenge in such conditions

Renters live in smaller dwellings than home-owners

Renters form a significant share of the total slum population, especially in million-plus cities. They are worse off when it comes to size of the dwelling, in comparison to those who own houses in the slums. However, due to lower average family size, their congestion levels are comparable to the owned ones.

Key Takeaways

High vulnerability among migrants residing on rent

A high share of renters are migrants which increases their vulnerabilities in case any crisis strikes

- Data show increasing rents with time, more for dwellings with in-house access to amenities. This not only adds to the financial vulnerabilities of the renters but also incentivizes them to rely on shared and unsafe resources.
- As economic activities stay suspended, day labourers, those in informal employment, petty businessmen etc. will lose their income. This can result in people being forced to leave their homes due to their inability to pay the rent, especially with around 40% renters working as casual labourers or are self employed, as per the data.

Draft of national rental housing policy, 2015

Vision for housing policies in India since 1970, focused solely on ownership of houses for all residents. In contrast, rental housing acts as the first entry point for migrants in a city as it enables them to avoid locking their financial resources in real estate and offers them flexibility. Although the Ministry of Housing and Urban Affairs had set up a Rental Housing Task Force (RHTF) in 2013, the ensuing Draft National Rental Housing Policy, 2015, and the recently launched Model Tenancy Act, 2021, renounced to explicitly take into account the urban poor renters in their prescriptions.

Positive externalities generated by in-house WASH and housing in COVID times makes them classify as Merit Goods

Private benefits of health, hygiene and shelter, enjoyed exclusively by the household

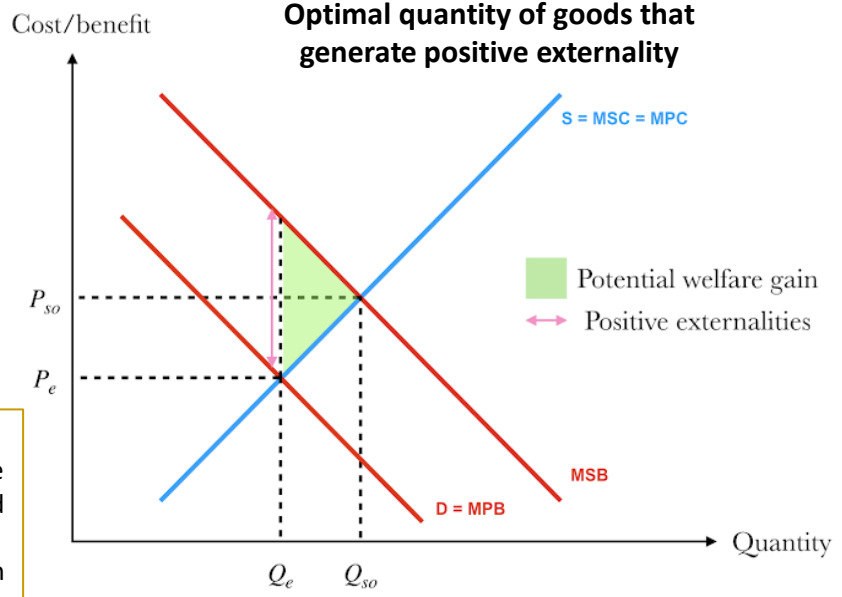
Increase in Social benefits, in the wake of COVID-19, by acting as first line of defense, thereby, controlling the transmission and benefiting the whole society

Washing hands, maintaining social distancing and staying indoors have proved to be most effective ways of controlling the spread of coronavirus. Thus, access to in-house water and toilet facilities and improved living conditions produces greater positive externalities for the whole society. Therefore, government should invest more in providing universal access to water and sanitation and improving living conditions.

Economics of Increased Positive Externalities

- The diagram shows that increase in marginal social benefit will further increase the gap between socially optimum quantity of housing and basic services required and actual quantity of housing and basic services supplied.
- Higher an urban area is at risk to the pandemic more will be the difference between socially optimum quantity and provided quantity of public good.
- The state must invest in housing and WASH infrastructure in more vulnerable areas like non-million cities because the opportunity cost of not investing in housing and wash infrastructure will be higher in these areas.
- Governments, at all levels should focus on policies which incentivize higher supply of housing and WASH infrastructure , (eg. through subsidies, targeted programs etc.) in order to reap in the potential social **gain**.

Optimal quantity of goods that generate positive externality



MPB- Marginal private benefit
MPS- Marginal social benefit (Private benefit +External benefit)
MPC-Marginal private cost
MSC-Marginal social cost (Private cost+ External cost)
Q_e- Optimal quantity when there is no social benefit
Q_{so}- Optimal quantity after taking into account the positive externality generated by the good

Recommendations

Conventionally, evacuating and resettling the residents formed essential steps in disaster risk mitigation. However, biological disasters e.g. the ongoing pandemic necessitate people to stay in their house to remain unexposed as well as maintain minimum hygiene standards. Accordingly, **ensuring access to adequate housing, and in-house water and sanitation** emerged as crucial, especially for the people at the margins.

Meagre pre-existing infrastructure in the informal settlements marginalises urban poor from the first line of defense against COVID-19. This puts these urban poor neighbourhoods at an increased risk of becoming breeding grounds for covid. In order to make these neighbourhoods safe places to live, we recommend:

- **Prioritization of in-house water supply and individual toilets** to ensure exclusive access and reduction in the number of households relying on shared facilities thereby minimizing exposure in the event of any future pandemics.
    - Delink access to water and sanitation with tenurial status
    - Special arrangements for additional water supply, whenever required, and routine repairment of non-functional public services to ensure their uninterrupted access.
- **Address challenges specific to slums in small towns**, which are most deprived settlements in terms of access to amenities. There is a need for higher financial devolution to the smaller city urban local bodies alongside sustained capacity enhancement measures.

Use of IEC strategies to nudge slum dwellers towards improved use of soap and sanitizers. Apart from financial support, installation of taps for handwashing and promotion to community level arrangements may be focused on.

Recommendations

Improve **SLWM services in urban poor neighborhoods by incentivizing private players for door-to-door collection of solid waste and emphasizing the importance of waste segregation through IEC.** At the same time, proper training to sanitation workers regarding waste collection from houses under quarantine/or infected or waste segregation requires to be undertaken.

Greater decentralized control over basic services and infrastructure, especially pertaining to WASH and health, could contribute towards slowing the spread of pandemics by cutting down disaster-response time.

Ongoing public housing programme i.e. PMAY launched in 2015 emphasised slum rehabilitation only through private sector participation. Only 4% of sanctioned houses till date under PMAY are under ISSR. Though the PMAY targets are reached, only limited slum households could access subsidy. Successful examples like **JAGA needs to be replicated, where land right grants have spurred beneficiary-led house constructions.**

Rental housing policies should take adequate cognisance of the urban poor – with specific provisions for creating para-legal structures for grievance redressal, minimizing/ costly processes for registration and getting into a contract among others.

Developing innovative **planning and expansion models that focus on compactness, connectivity and access to public spaces.**

THANK YOU

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Aastha Jain
Aditya Bhol

SCI-FI
SCALING CITY INSTITUTIONS FOR INDIA

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The Scaling City Institutions for India (SCI-FI) programme aims to better understand 'governance scale' in Indian cities in tandem with 'sector specific socio-economic scales'. Through research, the programme aims to inform stakeholders, including the three tiers of the government, to develop better informed policies and programmes enabling improved governance and service delivery. It has two key thematic focus in areas of Land, Housing and Planning, and Water and Sanitation. The SCI-FI programme is nested at the Centre for Policy Research (CPR) since 2013.