# MOVING TOWARD UNIVERSAL WATER & SANITATION ACCESS

A GROUND ASSESSMENT OF WASH REALITIES

**IN COVID- 19 TIMES** 



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November 2020

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#### LIST OF ABBREVIATIONS

	•
lpcd	Litres per capita per day
PHS	Pani Haq Samiti
MCGM	Municipal Corporation Of Greater Mumbai
ASHA	Accredited Social Health Activist
NOC	No Objection certificate
BDD	Bombay Development Department
МНА	Ministry of Home Affairs
MHUA	Ministry of Housing and Urban Affairs
PMJDY	Pradhan Mantri Jan Dhan Yojana
	•

#### **DEFINITIONS**

Pre-lockdown: Before March 20, 2020

During lockdown: March 20, 2020 till June 3, 2020

Post-lockdown: After June 3, 2020

Homeless: Homeless persons include persons who do not have a house, either self-

owned or rented, but instead live and sleep on pavements, at parks, railway stations,

bus stations and places of worship, outside shops and factories, at construction sites,

under bridges, in hume pipes and other places under the open sky or places unfit for

human habitation. (MoHUA 2018)

Hygiene: Hygiene refers to conditions and practices that help to maintain health and

prevent the spread of diseases, including handwashing, bathing, laundering clothes

etc. (Howard et. al. 2002)

NOTE:

Calculation of average water consumption in lpcd: In order to calculate the quantity of

water supplied to each household, capacity of water storage containers was calculated

along with the frequency of supply over a one month period. This figure was used to

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#### **EXECUTIVE SUMMARY**



Photo 1: Children bear the brunt of denied water access in Ganpat Patil Nagar, 2019 | Credit: by Prachi Desai | Source: PHS

#### Aim

This report documents the impact of the COVID-19 pandemic and related subsequent policy responses on the access to water and sanitation facilities among urban poor in Mumbai, especially vulnerable groups like women, migrant workers and the homeless. It also offers policy recommendations aimed at achieving universal water and sanitation access in Mumbai.

#### Introduction

The city of Mumbai sources and distributes over 4 billion litres of water everyday, (MCGM Hydraulic Engineering Department 2009). With an estimated population of 20.4 million in 2020, (World Population Review, 2020), Mumbai has the capacity to supply its residents over 195 litres per capita per day (lpcd). Despite this abundant supply, over 2 million people are denied legal water access in the city, and live amidst severe water uncertainty. The COVID-19 pandemic has increased the need for water and hygiene access. However, the lockdown, which was announced in the interest of public health, has had a devastating economic impact on urban poor in Mumbai exacerbating their already dire water and sanitation access.

#### Methodology

Pani Haq Samiti (PHS) is a collective of community leaders from 54 peoples' settlements across 17 administrative wards of Mumbai. Founded in 2007, PHS has been at the forefront of the movement toward universal water and sanitation access in Mumbai. It has documented 62 communities that are denied legal water connections. 292 households from 33 communities have been selected for the survey through a purposive sampling method. These households have applied for legal water connections to the Municipal Corporation of Greater Mumbai (MCGM) through PHS.

The survey focussed on the impact of COVID-19 pandemic and lockdown on the following aspects:

- 1. Background: Age, Gender, Household size, Type of house, Education, Social background, Language, Government entitlements
- 2. Employment and Income: Employment status, Type of employment, Monthly household income, Monthly household expenses, Access to aid during lockdown
- 3. Water access: Availability (Quantity and Frequency), Quality, Accessibility (Legality of source, Physical accessibility, Economic accessibility, Non-discrimination, Gender, Information accessibility)
- 4. Sanitation access: Type of toilet, Accessibility, Quality of facility
- 5. Solid Waste Disposal: Availability of Municipal services
- 6. Personal Hygiene: Awareness of safety measures, Ability to practice hygiene
- 7. Community response: Type of response

Universal access to water and sanitation is an imperative step on the way forward to collective health and recovery.

#### Results

The survey focussed on the impact of COVID-19 pandemic and lockdown on the following aspects-

- 1. **Background:** Average size of households is 5.46 members and 56.16% respondents are women. 69.11% had not completed matriculation. 53.45% lived in 'kacha' houses. 15.07% were homeless, of which 9.24% lived in the 'open' without any shelter. Though 91.09% had Aadhar cards, 78.08% did not have Jan Dhan accounts. 29.45% considered themselves to be migrant workers.
- 2. Employment & income: 3.42% respondents reported being unemployed since before the lockdown. 56.7% of respondents found themselves unemployed due to the lockdown. Only 14% of respondents received any income during the months of lockdown. A whopping 93.5% of respondents reported having Rs.0 savings left.
- 3. Water access: Respondents need to seek multiple sources of water to secure a bare minimum quantity, found to be on average insufficient to cover drinking and hygiene needs, pointing toward the daily struggle they must endure on being deprived of their constitutional right to water. Average water availability was 33.97 lpcd during the lockdown. Nearly 24.4% respondents did not receive daily water supply and 19.31% could not access safe potable water from any source during the COVID-19 lockdown. Average monthly expense for water supply increased from Rs.667.45 pre-lockdown to Rs.704.93 during lockdown and Rs.710.88 post-lockdown, amounting to over 8% of average income.
- **4. Sanitation access:** Only 9.25% of respondents had sufficient personal toilet facilities and 18.15% continued to rely on open defecation on account of having no access to any sanitation facilities. 75.34% respondents were dependent on shared toilets despite the fear of COVID-19 spread. The average monthly expenditure on sanitation access per family decreased from Rs. 281.39 pre-lockdown to Rs. 270.02 during the lockdown but has risen again to Rs. 283.93 post-lockdown.
- **5. Solid waste disposal access:** Respondents receiving garbage collection service from their home increased from 19.93% pre-lockdown to 20.34% during lockdown. Only 52.33% respondents reported a daily collection of garbage by the MCGM from common garbage disposal points during lockdown.
- **6. Personal hygiene:** The survey found 92.68% awareness among respondents about wearing a mask to prevent spread of COVID-19 but only 76.31% awareness about the need to wash hands for the same. The number of respondents who could bathe daily decreased from 67.47% pre-lockdown to 66.32% during lockdown. 83.73% respondents reported needing more access to water and sanitation facilities to be able to maintain the required personal hygiene for preventing the spread of COVID-19.
- 7. Community response: Instances of community organization were found in the midst of crisis. These included organising cleaning of the neighbourhood, COVID-19 testing camp, running a community kitchen, mask distribution and awareness building drives.

#### **Recommendation for Homeless communities**

- (a) As per the 74th amendment of the Indian constitution, the 12th Schedule was added which puts onus to provide universal water and sanitation on local self-governments. In this regard MCGM must:
  - provide public stand post water connections on humanitarian grounds as soon as possible and
  - provide free access to public toilets with issued passes to all families.
- (b) Maharashtra Government should ensure food security by providing Ration Cards to access the public distribution system. This will encourage the observance of lockdown measures.
- (c) Maharashtra Government should include homeless families in Integrated Child Development Schemes (ICDS) as beneficiaries to increase access to immunisation for children and ensure nutrition for vulnerable groups like children, elderly, pregnant and breast-feeding women and adolescent girls.

#### Conclusion

The COVID-19 pandemic presents an opportunity to understand the collective nature of health and hygiene and compels us to look toward long-term solutions to increase resilience of the city's population against communicable diseases. Efforts taken thus far to improve access to hygiene have proven insufficient. The economic impact of the COVID-19 lockdown has made market access to water, hygiene and sanitation unaffordable in Mumbai's informal settlements. The lack of state subsidised legal water and sanitation services is leading to unhygienic living conditions, endangering the collective health of the city, and making it more challenging and expensive for the city to contain the spread of disease. Therefore, water and sanitation must be considered a public good and its basic universal access must be ensured by the state. Universal access to water and sanitation is an imperative step on the way forward to collective health and recovery.

#### **Recommendations**

- 1. Assess ground realities with the help of Public Health Post volunteers (ASHA workers).
- 2. Adopt an inclusive MCGM policy for universal water and sanitation access: Increase network of water and sewage connections.

  Use public stand-post connections where necessary. Make all residents eligible for sanitation services irrespective of cut-off date of settlement.
- 3. Invest in preventive healthcare: Increase state expenditure on preventive healthcare strategies that involve ensuring universal water and sanitation access to improve public hygiene.
- **4. Make sanitation economically accessible:** MCGM to offer subsidies to toilet operators on water and electricity bills in addition to further financial support required for paying staff and ensuring supply of hygiene products. Create a monthly payment facility for resident families who regularly use pay-and-use toilets on account of lack of personal toilets.
- 5. Invest in new 'pyaus': MCGM must invest in installing and maintaining many more pyaus (drinking water fountains) in public spaces in order to make clean drinking water available to all citizens.
- **6. Establish accountability mechanisms:** Create information platforms open to all citizens about the delivery status of water and sanitation services to increase accountability of officials and ensure adherence to government directives.
- 7. Facilitating decentralised local governance: Implement Maharashtra Municipal Corporations Act to constitute Area Sabhas in order to dialogue with local communities and address grievances as soon as possible.
- **8. Remove bureaucratic hurdles:** No Objection Certificates should be granted by Central Government authorities to settlements located on Central Government land to gain access to water and sanitation facilities.

#### 1

#### I. INTRODUCTION

The city of Mumbai sources and distributes over 4 billion litres of water everyday. Despite this abundant supply, over 2 million people are denied legal water access in the city, and live amidst severe water uncertainty. The COVID-19 pandemic has increased the need for water and hygiene access while the lockdown, announced in the interest of public health, has exacerbated this already dire water access scenario. This report is an attempt to understand the impact of the COVID-19 pandemic and related subsequent policy responses on the access to water and sanitation facilities among urban poor in Mumbai.

## "Right to water is a precondition to Right to life"

- Bombay High Court Judgement 2014

## I.a Water & Sanitation access in Mumbai - Pre-COVID-19

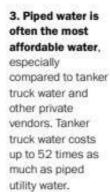


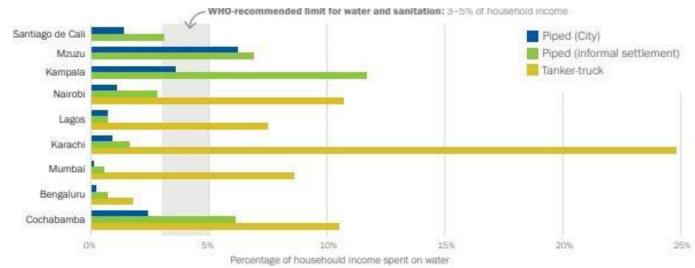
Photo 1: The perilous of life of denied water | Credit: Suraj Katra | Source: PHS

Municipal Corporation of Greater Mumbai (MCGM) is responsible for ensuring universal water and sanitation access within its municipal boundaries. Despite the MCGM being the richest civic body in Asia and sourcing upto 4 billion litres of water everyday (MCGM Hydraulic Engineering Department 2009), it has failed to secure water and sanitation access to over 2 million citizens (Fig: Table 1), amounting to a whopping 16% of the city's population of 12.5 million, as per census 2011. Being denied access to legal water connections and sanitation facilities forces citizens to depend on informal, intermittent water suppliers which provide compromised water quality at unaffordable prices.

Table 1: No. of people denied legal water access in Mumbai					
Description	No. of households	No. of people	Source		
Residents denied water on the basis of cut-off date 1- 1-1995	284309	1421545	Maharashtra CM, Vilasrao Deshmukh in 2009		
Residents denied on authorities-	the basis of la	nd ownership	by Central Government and other		
Railway land	30000	150000	Estimate from PHS as no population figures are available from any government / non-government source		
Forest department	14198	70990	Chief Conservator and Director Sanjay Gandhi National Park, Borivali wrote letter to CMO Maharashtra in Aug 2014		
Bombay Port Trust	14369	71845	MbPT report from 2002 reported by Indian Express https://indianexpress.com/article/cities/mumba i/mumbai-port-trust-snaps-out-of-slumber-slumswake-up-to-bulldozers/		
Salt Pans	10000	50000	Estimate from PHS as no population figures are available from any government / non-government source		
Homeless		57416	census 2011 Note: Civil society organisations estimate this number to be 150,000 in 2020		
Pavement dwellers	16500	82500	Mahatma Gandhi Pathakranti Yojana Maharashtra government (only takes Mumbai city into account, not westerns + Eastern suburbs)		
Total	369376	1904296			

#### Water & Sanitation access in Mumbai - Pre-COVID-19 (cont.)





Source: Based on the WRI Ross Center for Sustainable Cities' Water and Sanitation 15-City Study, 2018.

Members of communities denied legal water access belong to economically and socially weaker sections of society and are employed in informal sectors doing essential jobs like domestic work, auto-rickshaw driving, sanitation work etc. Despite their economic conditions, they are forced to pay a high cost for water, a basic human right. There exists ample literature highlighting the inequitable and fragmented access to water and sanitation facilities in Mumbai.

Mitlin et. al. (2019) provide the above graphical representation based on findings from WRI Ross Center for Sustainable Cities' Water and Sanitation 15-City Study, (2018). In Mumbai, people who are dependent on tanker-trucks pay nearly 10% of their household income toward water and sanitation access.

Further, we find evidences from two different communities; First, from Janata nagar, a mix of pre & post 2000 slums, lyer (2020), reported that its residents, paid upto Rs. 190 for 1000 litres of water, while the standard municipal charge for the same amount of water is only Rs. 5.22 "among the cheapest in megacities across the globe". Further she noted that a large family with a monthly income between 8000 - 15,000 rupees could pay upto 2500-3000 rupees only for access to water through informal suppliers. The second in Kaula Bandar, a post 2000 slum, Subbaraman et al. (2015) found that the portion of household budget spent on water was so substantial that it compromised the money spent on food, forcing residents into debt. Studies have also found exclusion of communities from the city's water supply network on the basis of communal

identity. In an ethnographic study of Shivaji Nagar in M-East ward, a predominantly Muslim slum locality constituting 80% of the population, Contractor (2012) noted the differential water access between Shivaji Nagar and its neighbouring slum area called Mandala, with a majority Hindu population, while Muslims constitute 40%. Although Mandala is under a constant threat of demolition by the MCGM, it does not face an acute water shortage like Shivaji Nagar. A local politician at the time of the study attributed the water shortage in Shivaji Nagar to its high concentration of Muslims and north Indians. These multiple elaborations highlight the unequal supply of water among the residents of Mumbai leading to the deprivation of water rights of citizens.

The maintenance of hygiene is intrinsically linked with not just awareness and individual practices but also the availability of adequate water and sanitation facilities which determine the ability of individuals to practice hygiene. Focusing on sanitation, Biswas et. al. (2020) found that in Machimar colony, which is the biggest informal settlement of Colaba in Ward A, a population of over 10,000 people were being serviced by a total of only 48 toilet seats, of which 24 were for men and 24 for women. Therefore, most residents chose the seashore to practice open defecation instead of standing hours in the queue. Desai (2018) noted that an estimated 50 lakh residents of "notified" slums, those eligible for water and sanitation

access as per the current MCGM policy, are served by a mere 750-odd community toilet blocks with 26,379 seats. This adds up to an average of 190 people dependent on 1 toilet seat, in violation of MCGM-accepted WHO norms that mandate a minimum of 1 toilet seat for 50 people. Further, he noted that not only did residents have to walk long distances to access the community toilets but also had to wait in long queues for their turn. Desai (2020) noted that even this inadequate access to sanitation comes to the urban poor at a great cost. A revenue of Rs. 3.37 billion per year, i.e. approximately 1 million rupees per day, is generated by the combined public and community toilet economy.

This abysmal lack of access to water and sanitation facilities has a gendered impact. The responsibility of collecting and carrying water largely falls on the shoulders of women. Additionally, they must often wait to use the toilets until they have finished their household work, Appadurai (2002) noted that women faced humiliation of going to the toilet in full public view which led them to wait for the cover of darkness to relieve themselves. They even reduced the amount they ate and drank to minimise the need for toilet use. Despite the change in MCGM water policy following 2014, and the Swacch Bharat Mission announcing Mumbai to be open-defecation free in 2016, this situation has barely improved. Biswas et. al. (2020) found that due to safety concerns, women

of Machimar colony neglect health hazards and defecate in plastic bags inside their homes without appropriate means of disposal. Since such living conditions deprive residents of basic human dignity and are in violation of international resolutions, these desperate scenarios give reason to believe that residents of informal settlements are not treated on par with "proper citizens", as has been argued by Chatterjee (2004). Ironically, there are legal reasons for these conditions. The state considers a full recognition of legitimacy to informal settlements as a threat to the structure of legally held property. However, due to other social, economy and political reasons, services are "extended on a case-to-case, ad hoc, or exceptional basis, without jeopardizing the overall structure of legality and property".

#### 1.b Water Access - A Policy overview

The fight for universal access to water and sanitation in Mumbai is a long-standing struggle. Prior to 2014, certain informal residents were not permitted to receive water connections as per city rules. Pani Haq Samiti (PHS), a collective of community leaders from 54 peoples' settlements across 17 administrative wards of Mumbai, filed a PIL in Bombay High Court in 2012. In 2014, the Bombay High Court gave a judgement upholding the Right to Water as a precondition to Right to Life. (Bombay High Court - Pani Haq Samiti & Ors. Vs. Brihan Mumbai Municipal Corporation & Ors., 2014)

The Municipal Corporation of Greater Mumbai (MCGM), the richest civic body in Asia, was directed to provide water to all people living within municipal boundaries irrespective of the date of their arrival in the city and legality of their residential structure. Subbaraman et. al. (2015) observes that this decision of the Bombay High Court makes clear that the greater obstacles to water access, especially for the urban poor, are legal, institutional and political, rather than solely monetary or technical. Following this ruling, MCGM developed a new policy for distributing water which begins with a list of excluded citizens. Those living on Central Government land, private land, homeless and pavement dwellers, people living "near the sea shore" and people residing on land where a "vital project" is planned require a NOC from the respective authorities to receive legal water connections. These conditions exclude up to 1.5 million people which constitutes a whopping 16% of the city population as per census 2011 data. Another estimated 0.5 million people, who were previously denied water by the MCGM because their settlements came into existence after 1st January 1995, but are now included in the new policy, continue to face administrative and political blocks in their application procedures for water connections. Out of the 1200 water applications filed by PHS on behalf of over 6000 families between 2017 and the start of the COVID-19 lockdown in March 2020, only 785 have been accepted for processing. Of these 96 applications have been successful, granting water to a mere 400 families, i.e. under 7% of the families that applied for legal water connections.

Sanitation infrastructure is usually neglected but has been given a lot of political rhetoric in the last six years in India through Swachh Bharat Mission (SBM). SBM phase 1 aimed to make India open defecation free by 2019 by providing toilets for all. According to government statistics, between 2014 and 2019, the basic sanitation coverage went up from 38.7% to 100% in a matter of 5 years, approximately 61% rise in the coverage. Under the 74th amendment to the constitution, sanitation-related functions are supposed to be devolved by the municipal governments. Although SBM policy guidelines direct municipal governments to provide "Sanitation for All", i.e. formal as well as informal settlements, MCGM issued a circular in May 2015 announcing that it will not consider settlements in Mumbai formed after the January 1, 2000 cut-off date as eligible to receive basic sanitation services.

The Indian constitution does not specifically recognise the Right to Water and Sanitation as a Fundamental Right. However, the Supreme Court of India has incorporated Right to Water under Right to Life (Article 21) in various verdicts such as in Chameli Singh v State of UP (AIR 1996 SC 1051 and A.P. Pollution Control Board II v. Prof. M. V. Nayadu (2000 Supp. (5) SCR 249). In addition, denial of water access to any settlements is a violation of the Resolution 64/292 of the United

Nations General Assembly, voted for by India in 2010, which "explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of all human rights." (UN General Assembly 2010). The denial of this right results in poor capacity of the city to maintain public hygiene.

#### I.c Impact of COVID- 19

The COVID-19 pandemic has simultaneously revealed the importance of universal water and sanitation access for maintaining public health and hygiene while bringing muchneeded attention to the poor status of public hygiene in Mumbai. Even as public service announcements were issued reminding people to wash their hands regularly with soap, at least 2 million people in Mumbai wondered how to follow such recommendations without regular, adequate, and affordable water access. International, as well as national health agencies, issued notices on multiple occasions and through various mass media platforms emphasising the importance of hygiene in order to contain the disease. Frequent hand washing has been deemed as one of the "cheapest, easiest and most important ways to prevent the spread of a virus" (UNICEF 2020). Bhowmick (2020), writing for the National Geographic, noted that if one was to follow UNICEF recommendations, one would



How often would you wash your hands if your family got only

litres water a day?



NSIDE >> IN MMR TODAY AND NEW CASES 287 DEATHS 12

350 CLINICS

Photo 3 | Report in Mumbai Mirror by Alka Dhupkar in April 2020

## ...frequent hand washing is one of the "cheapest, easiest and most important ways to prevent the spread of a virus"

- UNICEF 2020

need to wash their hands at least 10 times a day. A 20-second handwash - as per WHO recommendations to prevent the spread of the virus - requires a minimum of 0.5 litres. A family of 5 living in a notified-slum of Mumbai, receiving less than 60 litres of municipal water supply per family per day, would use 25 litres or over 40% of their water supply just for washing hands. The remaining water would then have to be split between all other domestic uses like drinking, cooking, washing and bathing. Iyer (2020) reported the case of Urmila Maurya, a mother of 3 and resident of Janata Nagar in Mandala, a slum of 4000 shanties. Maurya was unable to follow any COVID-19 preventive measures and scoffed at the idea of washing hands frequently since she was sometimes compelled to skip bathing in order to save water for cooking. Mandala has neither household nor stand-post water connections and has also reported the death of 3 residents in 2017 due to the collapse of a community toilet slab on them. (Koppikar 2017)

Further, the ensuing lockdown resulted in the collapse of informal water supply systems that catered to the needs

of citizens excluded from the city's water supply. Dhupkar (2020), reported the case of Sharda Shinde, a resident of Rohidasnagar near Sitaram Mill Compound in Lower Parel. Shinde's family was facing a severe water crisis since all seven members were staying home the whole day because of the lockdown. Previously, she and her neighbours depended on the nearby BDD chawls for water which they filled in jerry cans and brought home. However, access to BDD chawls had been blocked due to the fear of COVID-19, making the settlement dependent on a water tanker that only came once a week. Raman et. al. (2020), reported that during the lockdown, water tankers had become unavailable or intermittent. This not only forced people to walk long distances to fetch water but also resulted in desperate crowding and chaos when the tankers finally arrived.

The lockdown restrictions resulted in a reduction or loss of income for the majority of people employed in the informal work-force, worsening their already poor water and sanitation access. Residents were unable to afford to pay for community-shared toilets. Hakim and Dhupkar (2020) found that residents are charged Rs. 2-5 per toilet use and Rs. 15-25 for bathing in addition to the cost of soap which they must purchase personally. They reported the case of Ramesh Jadhav, a cook in Dongri who hadn't bathed in over 10 days because he could not afford it. "Is it too much to ask that we be provided

basic facilities at least, if we are not being allowed to earn?", he questioned the city. In response, the MCGM declared that the use of public toilets must be free of charge. However, in absence of state financial support, this directive was soon disregarded by operators who were unable to cover the costs of maintenance as the city charges them with commercial water and electricity rates.

COVID-19 and the subsequent measures disproportionately affected women. In the peak of summer with soaring temperatures household water needs swelled and all family members were home throughout the day with increased hand wash requirements. Women had to spend more time in queueing to collect water that arrived at erratic timings, sometimes in the wee hours of the morning, even though they faced verbal and sexual harassment while doing so (Shah et. al. 2020).

Shantha (2020), reporting on the plight of 250-odd evicted families taking shelter outside the Jogeshwari Railway station during the lockdown, noted that families were not just unable to practice hygiene but were desperate for even drinking water as access to neighbouring bastis and buildings had been blocked. Those trying to fetch water had been subjected to police brutality, women were having difficulties accessing toilets and menstruating women were unable to find sufficient water for sanitary purposes.

#### II. RATIONALE

## II.a Engaging with urban governance during COVID-19 lockdown

PHS, along with 4 other petitioners, filed a Public Interest Litigation in the Bombay High Court in the first week of April demanding redressal of grievances of migrant labourers in Maharashtra in light of the then 21-day lockdown announced by the Government of India which would put restrictions on movement of migrants and homeless persons. The court impressed upon the State government that it must be their endeavor to ensure that "no victims go hungry and the food/ food-grains reach all victims (even in remote areas), and drinking water, medicines, healthcare and hygienic toilette facilities are provided to them." The court permitted petitioners to represent by e-mails to concerned Collectors the areas where such basic facilities were not provided. The concerned District Legal Services Authority was asked to "ascertain the grievances made in the representation by deputing appropriate person/s and shall bring them to the notice of the concerned Authorities and file a report before this Court".

The dire living conditions in 32 informal settlements, housing over 70,000 families, aggravated by the breakdown of informal water supply systems and loss of income due to the sudden lockdown, were described in letters written by community leaders and submitted to concerned Collectors via PHS. On April 15th, as the first phase of lockdown came to an end,

PHS noted the lack of improvement in hygiene access and proposed recommendations via a citizen's charter drafted in conjunction with other civil society groups. However, these petitions and recommendations only resulted in minimum impact on the ground. After a decade-long struggle led by residents, a total of 25 water connections, each catering to 5-6 households were secured. The benefitting households were saved from the severe water insecurity that descended on the residents of slums and footpaths. PHS volunteers continued rigorous follow-up with the MCGM authorities to ensure that water tankers were sent to vulnerable groups, public toilet facilities were sanitised and garbage was cleared from settlements.

## II.b Making a case for Universal Water and Sanitation Access

Mumbai has come to be known as "India's COVID-hotspot" (Shaikh 2020) and has reached Stage III of the Coronavirus outbreak when contact-tracing is no longer possible, making it imperative for the city to improve public hygiene and increase resilience to the disease.

Individuals who are denied legal water connections and are therefore dependent on informal, unaffordable and limited water access, are ill-equipped to maintain personal hygiene, thereby being at a greater risk of infections. Further, because of the highly infectious nature of the novel

Coronavirus, a population segment's inability to maintain personal hygiene puts at risk the public health of the city as a whole, with a population of over 22 million people. This strengthens the case to immediately secure adequate water and sanitation access to all citizens of Mumbai.

#### II.c Objectives

- To document and understand the impact of the COVID-19 pandemic and subsequent lockdown on access to water and sanitation facilities of Mumbai's informal settlements.
- 2. To highlight the plight of vulnerable groups like women, migrant workers and the homeless.
- 3. To formulate recommendations to the MCGM for longterm solutions that improve water and sanitation access, thereby improving public hygiene and increasing resilience of the city against the pandemic, as the lockdown eases under economic pressure.

#### III. METHODOLOGY

#### III.a Area selection and sampling

This report is an assessment of ground realities in Mumbai's informal settlements as impacted by the COVID-19 pandemic and subsequent policy responses. PHS has documented 65 communities of informal residents and homeless persons that are denied legal water connections.

Of these, 292 households from 33 communities have been selected for the survey through a purposive sampling method. Respondents have been selected on the basis of availability from the network of families that have applied for legal water connections to the MCGM through PHS. 56.16% of the respondents are women to ensure a fair representation on the basis of gender. Majority of survey interviews were conducted over the phone due to travel restrictions of the COVID-19 lockdown. Fig: Table 2 below shows a list of areas selected and sample sizes. Photo 3 shows locations of selected settlements.

#### III.b Survey design

The survey focussed on the impact of COVID-19 pandemic and lockdown on the following aspects:

- Background: Age, Gender, Household size, Type of house, Education, Social background, Language, Government entitlements
- 2. Employment and Income: Employment status, Type of employment, Monthly household income, Monthly household expenses, Access to aid during lockdown
- 3. Water access: Availability (Quantity and Frequency),
  Quality, Accessibility (Legality of source, Physical
  accessibility, Economic accessibility, Non-discrimination,
  Gender, Information accessibility)
- **4. Sanitation access:** Type of toilet, Accessibility, Quality of facility

Area	PHS Ne	twork	Sample Size			
	No. of communities	No. of households	No. of communities selected	Name of community	No. of households	
Mumbai city	11	780	2	Transit Camp Kokari Agar	20	
nombal city	3.5	700		Kaula Bandar New Tank Bander R	25	
				Total	45	
-	1			Bhim Nagar	1	
				Sahyadri Nagar	1	
				Adarsh Nagar	2	
-				Chamunda Nagar	22	
Eastern	10	1.75	10	Chikhhalwadi	49	
Suburbs	19	1475	10	Indira Nagar, Mandala	5	
				Matanghrushi Nagar	1	
			9	Rafi Nagar	3	
				Shyam Nagar	6	
				Sanjay Nagar	1	
				Total	91	
	22			Ambedkar Nagar, Malad	12	
				Amboojwadi Malvani Gate No.8	8	
				Barrjara Pada	6	
				Ganesh Nagar, Bandra	3	
Western		5000000	692.	Ganpat Patil Nagar	16	
Suburbs		1670	10	Gautam Nagar	7	
Marine Company				Jamhrushi Nagar	1	
				Kranti Nagar	13	
				Sialhharth Nagar	30	
				Sialhharth Rahivashi Sangha	3	
				Total	99	
				Baradevi Footpath	2	
				Bislery Company	1	
				Chikuwadi Boriwali	7	
			9	Dattani Park	5	
				Bita Garden	2	
	122	220	927	Indra Bharti Nagar, King Circle	5	
Homeless	13	371	11	Poisar Gym Khana	8	
				Poonam Park Zopadpatti	1	
			1	Sitaram Mill Compund	15	
				Saileela Zopadpatti	5	
				Vallabhabhai Patel Road Vilparle	6	
				Total	57	
Total	65	4296	33		292	

- 5. Solid Waste Disposal: Availability of Municipal services
- **6. Personal Hygiene:** Awareness of safety measures, Ability to practice hygiene
- 7. Community response: Type of response



Photo 4: Map showing locations of settlements denied legal water access in Mumbai | Source: PHS

#### IV. FINDINGS

#### IV.a Background

292 households are represented by this survey via primarily telephonic interviews conducted in the months of August and September 2020, of household heads with an average age of 35.92 years, of which 56.16% are women. The average household has 5.46 members.

69.11% of all respondents have not completed their matriculation with 35.78% having never been to school. Only 7.36% of respondents hold a graduate/diploma degree, making them eligible to join the formal workforce. 15.75% respondents live in rental accommodation and 53.45% live in 'kacha' houses. 19.52% are homeless of which 9.24% live in the 'open', making it impossible for them to "stay home" as instructed by the state.

91.09% of the respondents are in possession of Aadhar cards, making them eligible for receiving welfare from the state. 67.81% have voter cards for Mumbai. However, only 66.67% have ration cards and 42.51% have electricity bills. 38.69% have a receipt from the slum survey conducted in the year 2000. Only 3.08% are in possession of eviction notices although 8.69% faced evictions or eviction threats and demolitions of their shelters.

As of 19th August 2020, the Government of India claimed to have spent 40.35 crore rupees on the Pradhan Mantri Jan Dhan Yojana (PMJDY 2020). However, 78.08% respondents did not

have Jan Dhan accounts to avail these benefits. 97.5% stated that they migrated to Mumbai in order to find livelihood and 90.31% migrated along with their families. 29.45% respondents consider themselves to be migrant workers.

#### IV.b Employment and Income

63.3%

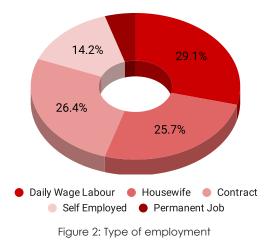
56.7%

CURRENTLY UNEMPLOYED

LOST JOB DUE TO LOCKDOWN

Figure 1: Unemployment due to lockdown

Only 4.83% respondents have permanent jobs that offer financial security, including 2.6% respondents who also work in the informal economy simultaneously. 26.21% respondents are housewives.



71.04% are employed in the informal economy, including 26.09% having contractual jobs, 29.66% working for daily wages and 14.48% that are self-employed. Only 27.73% of the respondents are currently employed in paid labour. 41.78% of respondents found themselves unemployed due to the lockdown and 3.42% had lost their jobs already before the lockdown began, showing the precarious financial condition these people were in pre-COVID. 9.26% of the employed respondents reported pending salary payments for work done before the lockdown which their employers were unable to pay due to the lockdown.

This scenario emerged despite multiple advisories from the Ministry of Labour and Employment, Government of India, urging all "Employers of Public/Private establishments" to "extend their coordination by not terminating their employees, particularly casual and contractual workers from job or reduce their wages." (Ministry of Labour & Employment - GOI 2020). This was followed by an order from the Ministry of Home Affairs, Government of India issued on March 29, 2020 which instructed all employers to "make payment of wages of their workers, at their workplaces, on the due date, without any deduction, for the period their establishments are under closure during the lockdown." (Ministry of Home Affairs - GOI 2020). However, on May 18 the MHA withdrew this order as the Supreme Court noted that small companies may not be able to pay wages in the absence of financial assistance from the government. (PTI

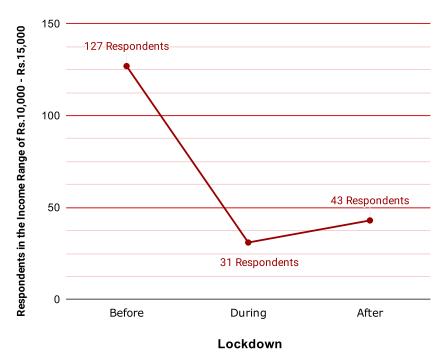


Figure 3: Monthly household income

2020). In the midst of these changing orders, workers suffered severe economic consequences.

41.43% of the respondents had a household monthly income of less than Rs. 10,000 before the lockdown. With an average family size of 5.58, this amounted to approximately Rs. 60 per capita per day, barely above the much questioned Poverty Line which stands at Rs. 47 per capita per day in urban areas. (Drishti 2019) Only 14% of respondents received any income during the months of lockdown and of these 36.5% received reduced salaries.

43.49% of respondents fell in the monthly income bracket of Rs.10,000 - Rs. 15,000. This number dropped to 11.39% during the lockdown and has marginally increased to 15.35% postlockdown. Respondents earning a monthly household income of over Rs.15,000 was 15.06% pre-lockdown but reduced to 5.88% during the lockdown. This number has only marginally improved to 7.85% post-lockdown. These numbers show that household incomes among the urban poor in Mumbai are barely recovering to even their pre-lockdown insufficient levels as a result of the largely ravaged informal economy. This is pushing families below the poverty line. A whopping 93.5% of respondents reported having Rs.0 savings left, 2.1% with savings less than Rs.1000, 2.7% with savings between Rs.1000-3000 and a meagre 1.37% =/> Rs.10,000. Consequently, 46.91% of the respondents had to take loans to survive the lockdown of which 29.1% needed to mortgage their gold jewellery.

93.5% HAVE 'ZERO' SAVINGS

under Rs.1000 (2.1%)

Rs.1000-3000 (2.7%)

above Rs.10,000 (1.37%)

Figure 4: Savings

96.57% respondents received relief through NGOs and civil society groups, of which 100% received ration supplies, 26.95% received cooked food, 16.67% got information on government schemes, 10.99% received hygiene kits and 2.84% received financial aid.

Case Study: Case Study: Sonali Chaube, a homeless person residing in Sailila Zopadpatti in Parel, supports a family of 9 by doing domestic work on contract basis. She lost her job during the lockdown but had not yet received a total salary of Rs.20,000 for 2 months of work done even before lockdown as the contractor that hired her was absconding. Sonali was compelled to take a loan of Rs.10.000 from a relative to survive the lockdown. Simultaneously, it was found that the average monthly household expenses for rent and electricity increased during the lockdown. Average rent increased from Rs.2805.13 to Rs.2919 during the lockdown and further to Rs.2996.55 post-lockdown. Monthly electricity expenses increased from Rs.939.16 pre-lockdown to Rs.1180.3 during lockdown and further to Rs.1543 post-lockdown. In response, ability to spend on other expenses, including food, water and sanitation decreased from Rs.7668.13 pre-lockdown to Rs.7125.78 during the lockdown, and further to 6692.75 post-lockdown.

#### IV.c Water access

#### **Availability**

The following analysis has been carried out as per guidelines in General Comment no. 15 (2003): Right to Water, from the Office of the High Commissioner for Human Rights.

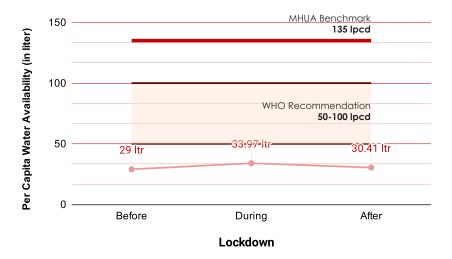


Figure 5: Water availability (Quantity in lpcd)

#### (i) Quantity

On average, respondents received 29 litres per capita per day (lpcd) pre-lockdown. Though this average only marginally improved to 33.97 lpcd during the lockdown, the average water availability has dropped again to 30.41 lpcd indicating the return to previous conditions.

The fact remains that such an average per capita water access is far from the benchmark of 135 lpcd set by the Ministry of Housing and Urban Affairs, Government of India. This

supply does not even live up to the WHO recommendation of minimum 50-100 litres per capita and has a severe bearing on the ability to maintain personal hygiene. The MCGM claims to supply 150 lpcd to all residential structures in Mumbai.

Nagar, Mandala, Mankhurd works as a street vendor to earn a monthly income of less than Rs.10,000. The lockdown took away her employment and forced her into debt. Nasimunisha sourced drinking water for her family of 3 from an informal MCGM water source at a monthly expense of Rs.700 pre-lockdown. During the lockdown, they had to cut their water consumption from 45 lpcd to 28 lpcd, as they could no longer afford the expense. Despite this compromise, they paid Rs.400/month to access drinking water and Rs. 500/month for using the paid public toilet facility.

#### (ii) Frequency

NEARLY 24.4% OF THE RESPONDENTS DO NOT RECEIVE DAILY WATER SUPPLY.

Percentage of respondents receiving water every other day decreased from 7.22% pre-lockdown to 5.5% while those receiving water every 2 days increased from 9.62% to 10.65% during lockdown. 1.03% of respondents received water only twice a week pre-lockdown. This number increased to 1.72% during the lockdown. 3.78% respondents did not have any fixed frequency of water supply pre-lockdown and this increased to 4.47% during the lockdown making capacity to practice hygiene also unfixed and irregular. These numbers indicate that although the quantity of water supplied marginally increased, the frequency of water supply to informal settlements decreased during the lockdown. This resulted in an increased uncertainty of water availability.

#### Quality

12.76% respondents reported dirt in the water they are supplied pre-lockdown and 16.26% of respondents reported colour in the water. These numbers increased to 13.49% and 17.65% respectively, indicating a further reduction in the water quality. 16.55% respondents reported a bad taste in the water during lockdown. This number increased to 19.31% during the lockdown. Therefore, we can assess that at least 19.31% respondents did not receive potable water during the COVID-19 lockdown.

#### **Accessibility**



Photo 4: Queues for water tankers in Andheri (W) during COVID-19 lockdown | Source: PHS

#### (i) Legality of source

In the absence of universal water access secured by the city's municipal corporation, respondents are forced to depend on multiple informal sources of water with varying degrees of affordability and reliability. Despite the Bombay High Court judgement reiterating the right to water as a prerequisite to right to life, the availability of legal water access continues to be largely dependent on land ownership, cutoff date of settlement origin and whether or not it is located on a pavement. Therefore, residents of a single settlement often share a common water supply arrangement and fate

of water access. Moreover, respondents must use multiple sources of water to meet their needs as each source offers varying availability and differing levels of potability. The need to seek multiple sources of water to secure a bare minimum quantity, found to be on average insufficient to cover drinking and hygiene needs, points toward the daily struggle that respondents must endure when they are deprived of their constitutional right to water.

#### (a) For drinking/cooking

Fig: Table 3 shows the changes recorded during and postlockdown in drinking water sources among respondents.

Only 16.98% of the total respondents could rely on MCGM legal water connections alone to meet their drinking water needs before the lockdown. During the lockdown, a mere 25 new water connections catering to 125 families were established by the MCGM in Bhim Nagar, Ambedkar Nagar after a long struggle of 10 years led by PHS, despite persistent follow-up with MCGM officials of the Hydraulic Engineering Department with regards to installing public stand-post connections in 62 settlements denied legal water access.

The remaining 83.02% respondents rely on multiple informal arrangements of water supply described below:

58.56% respondents depended solely on MCGM informal connections before the lockdown. During the lockdown this number rose to 60.27% as the municipal corporation was

Table 3: Water sources used for drinking / cooking. Data reflects % of 292 respondents					
Type of source	Pre- lockdown	During lockdown	Change recorded	Post- lockdown	Change recorded
MCGM legal connection	16.98%	16.98%	(+1) Bhim Nagar, (-1) Gautam Nagar	16.98%	Same as during lockdown
MCGM informal supply	58.56%	60.27%	(+15) Sitaram Mill Compound (-1) Bhim Nagar (-1) Chamunda Nagar (-6) Poisar Gymkhana (-1) Bisleri Company (-1) Kranti Nagar	58.90%	(-5) Sitaram Mill Compound (+1) Chamunda Nagar (+4) Poisar Gymkhana (-1) Bisleri Company
Wells	1.03%	1.37%	(+1) Kranti Nagar	2.74%	(+1) Ambedkar Nagar (+2) Ganpat Patil Naga (+1) Gautam Nagar (+1) Jamrushi Nagar
Tankers	6.51%	11.99%	(+14) Siddhart Nagar (+2) Poisar Gymkhana	14.38%	(+6) Ganpat Patil Naga (+2) Ekta Garden
Tanker + MCGM informal supply	0.38%	1.71%	(+4) Poisar Gymkhana	0	(-4) Poisar Gymkhana (-1) Ganpat Patil Nagar
MCGM informal supply + well	1.03%	1.37%	(+1) Chamunda Nagar	0	(-1) Chamunda Nagar (-1) Ambedkar Nagar (-1) Ganpat Patil Nagar (-1) Jamrushi Nagar
MCGM informal supply + tanker + well	1.37%	1.37%	-	0	(-4) Ganpat Patil Nagar
Asking / begging	11.30%	1.37%	(-15) Sitaram Mill Compound (-14) Siddhart Nagar (-1) Poisar Gymkhana (+1) Bisleri Company	0.68%	(-2) Baradevi footpath

compelled to establish informal makeshift water connections in Sitaram Mill Compound, a homeless community of 150 families, that previously depended on begging for water from a nearby housing society. With the COVID-19 lockdown, this source was no longer available due to strict social distancing regulations and the stigma against homeless communities who were blamed by residents for the spread of the virus.

1.03% respondents depended on wells alone for drinking water pre-lockdown. This number rose to 1.37% during the lockdown and further to 2.74% post-lockdown as respondents from Kranti Nagar (800 families), Ambedkar nagar, Ganpat Patil Nagar, Gautam Nagar and Jamrushi nagar lost access to MCGM informal connections and shifted to well water.

6.51% respondents depended on tankers alone for drinking water pre-lockdown. However, this number rose sharply to 11.99% as respondents from Siddharth Nagar (800 families) and Poisar Gymkhana (homeless community of 30 families) were compelled to shift to tankers for sourcing drinking water when the COVID-19 lockdown cut their access to MCGM informal connections and housing societies from where they previously sourced water. This number has further risen to 14.38% post-lockdown as respondents from Ganpat Patil Nagar (10,000 families) who previously also had access to wells and MCGM informal connections to augment their drinking water supply from tankers have been compelled to depend on tankers alone.

1.37% of respondents from Ganpat Patil Nagar (10,000 families) depended on 3 different sources to secure drinking water alone including MCGM informal connection, tankers and wells. This number remained the same during lockdown but respondents have become completely dependent on tanker water post-lockdown.

#### (b) For hygiene

Table 4 shows changes recorded during and post-lockdown in hygiene water sources among respondents.

Table 4: Water sources used for bathing & hygiene.  Data reflects % of 292 respondents					
Type of source	Pre- lockdown	During lockdown	Change recorded	Post- lockdown	Change recorded
MCGM legal connection	15.09%	15.41%	(+1) Bhim Nagar	15.41%	Same as during lockdown
MCGM informal supply	53.08%	55.14%	(+15) Sitaram Mill Compound (-1) Bhim Nagar (-6) Poisar Gymkhana (-1) Dattani Park, (-1) Vile Parle (-1) Bisleri Company	55.48%	<b>(+1)</b> Ganpat Patil Nagar
Wells	7.53%	7.88%	(-1) Ambedkar Nagar (+1) Ganpati Patil Nagar	9.59%	(+1) Ambedkar Nagar (+2) Ganpat Patil Nagar (+1) Jamrushi nagar (+1) Ganesh nagar
Tankers	5.48%	10.96%	(+14) Siddhart Nagar (+1) Poisar Gymkhana (+1) Ganpat Patil Nagar	14.38%	(+6) Ganpat Patil Nagar (+2) Ekta Garden
Tanker + MCGM informal supply	0.00%	1.71%	(+5) Poisar Gymkhana	0	( <mark>-5)</mark> Poisar Gymkhana
MCGM informal supply + well	2.05%	2.05%	(-1) Ganpat Patil Nagar (+1) Ganesh nagar	0.68%	(-1) Ambedkar Nagar (-1) Ganpat Patil nagar (-1) Jamrushi nagar (-1) Ganesh nagar
Asking / begging	12.30%	2.40%	(-15) Sitaram Mill Compound (-15) Siddhart Nagar (+1) Dattani Park	4.10%	(+4) Dattani Park (+1) Siddhart nagar

Only 15.09% respondents were able to rely on only MCGM legal water connections for their hygiene needs, while 16.98% respondents accessed MCGM legal water for drinking purposes. This indicates that while certain respondents receive legal water connections, the quantity is insufficient to suffice for both drinking as well as hygiene needs.

53.08% respondents depended solely on informal MCGM connections for hygiene water pre-lockdown. This number rose to 55.14% during lockdown as respondents from the homeless community at Sitaram Mill Compound (150 families) could no longer beg for water from their previous sources and MCGM was compelled to establish a temporary informal connection. Only 1 tap was installed for the entire community of 150 families which functions for 3-4 hours daily.

7.53% respondents depended on well water for hygiene purposes before the lockdown while only 1.03% used this water for drinking. This indicates that respondents use well water for washing even though the quality of water is unsafe for consumption by drinking. During the lockdown this number rose to 7.88% and further rose to 9.59% as respondents from Ambedkar nagar (3000 families) and Ganpati Patil Nagar (10,000 families) had to shift dependency to well water alone on losing access to their informal MCGM connection. This scenario was shared by respondents from Jamrushi Nagar (800 families) and Ganesh Nagar (300 families)

5.48% respondents depended entirely on tanker water for hygiene pre-lockdown. This number rose to 10.96% as respondents from Siddharth Nagar (800 families) could no longer informally source water from other homes as they did pre-lockdown. This scenario was shared by the homeless community residing near Poisar Gymkhana (30 families), as well as Ekta Garden (8 families) who lost access to their informal MCGM water source.

12.3% respondents depended solely on water donated by neighbouring housing societies pre-lockdown. As a result of the lockdown restrictions and the stigma against homeless communities and residents of informal settlements, these sources shutdown, leaving only 2.4% respondents with access to donated water during lockdown. Nearly half of these respondents have become dependent on tankers for water supply.

This rise in dependency on tanker water is a matter of concern as private tankers are the most expensive water source (Mitlin et al 2019) and government tankers are the least reliable in terms of frequency and quantity. Tanker supply also results in long queues for water collection which create crowded and panicked conditions - suitable for the spread of COVID-19.

Case study: Durgaprasad Chauhan, a migrant worker from Uttar Pradesh is currently a resident of Siddharth Nagar, Andheri (W). He worked as a daily wager pre-lockdown but has not found employment since the lockdown began. Durgaprasad relies on tankers for water supply augmented by collecting rainwater during the monsoons. Though he paid up to Rs. 800/month for water during the lockdown, there was no fixed time for the arrival of tankers and the time spent in the tanker queue increased from 1 hour pre-lockdown to over 2 hours during lockdown. The long queues and unpredictable tanker timings led to crowding and Durgaprasad also witnessed the police use brute force on residents waiting in queue for water in order to disperse the crowds and maintain physical distancina norms

#### (ii) Physical accessibility

In the absence of 24 hours water access, respondents must collect water and store it in a combination of drums, cans, pots or tanks. Only 39.66% of respondents didn't need to travel to collect water during the lockdown, an improvement from 37.11% pre-lockdown. 54.82% have to walk under 10 minutes to



Photo 6: Queuing for water at Siddharth Nagar, Andheri pre-lockdown | Credit: Pravin Sunita Ratan | Source: PHS

get to the water source, as opposed to 50.52% pre-lockdown. 5.51% have to walk over 10 minutes to reach the water source, as opposed to 12.37% pre-lockdown. 18.9% respondents reported a change in their water source during the lockdown and 3.78% reported the new source to be further away. This indicates that despite the inability of respondents to travel to distant water sources during the lockdown, some residents were compelled to shift dependency on sources further away.

Further, 43.32% respondents needed to wait over 10 minutes in line for water after reaching the source, thereby increasing the total amount of time required to fetch water and the time during which respondents are exposed to community spread

of COVID-19. 19.49% respondents waited upto 30 minutes and 10.47% waited upto 2 hours in the queue. 17.12% reported having needed to ask or beg someone for water and 4.48% reported facing harassment from police and security guards while filling water. Each time respondents need to leave their homes to access a basic need like water, the COVID-19 protective measures of social distancing get defeated.

The time of water collection also affects convenience and safety of respondents. Before the lockdown, 17.41% respondents needed to go to collect water between 9 pm and 4:30 am. This number increased to 20.04% during the lockdown, forcing water collectors of the family, who are mostly women, into unsafe scenarios in the dark of the night.

#### (iii) Economic accessibility

Unlike popular notions, only 19.24% of the respondents did not pay for water supply as they depended on begging for water or collected water from natural sources. This number increased only marginally to 20.96% during the lockdown. Despite the loss of livelihood and income during lockdown, 79.04% of respondents had to pay for securing basic water access despite receiving insufficient and unreliable water supply.

The average monthly expense for water supply increased from Rs.667.45 pre-lockdown to Rs.704.93, with families paying upto Rs.4,000/month just for water access during the

lockdown. The average expense further increased to Rs.710.88 post-lockdown. This increase in expense can be attributed to the increased water requirements to improve the normally substandard hygiene levels during the pandemic. For a majority of the families who survive on a monthly income of under Rs.10,000, the average amount spent on water access amounts to over 7% of their income, much higher than the 3-5% recommended by the WHO.

29.45% of the respondents either pay for water on a daily basis or whenever they purchase it. This implies that their water access is dependent on immediate payment, i.e. they cannot access water on days that they cannot afford to pay for it. The number of people with this payment arrangement decreased to 25.35% during the lockdown. 47.06% of the respondents pay for water supply on a monthly basis. This number decreased to 46.23% during lockdown.

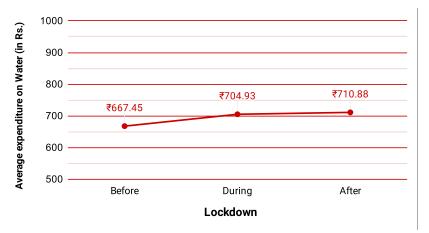
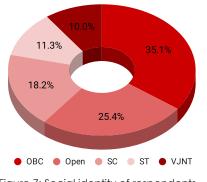


Figure 6: Average monthly expenditure on water access per household

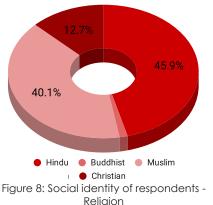
Moreover, 28.27% of respondents bore additional costs for vehicles required in transporting water to their homes prelockdown spending an average of 624.85 rupees per month. The highest amount spent on transport was Rs.1000. However, during the lockdown availability of transportation became scarce. Though the number of respondents using vehicles reduced to 18.52% the average monthly expense increased to Rs.682.73 with the highest amount paid shooting up to Rs.3600. This indicates not only the difficulty in arranging for vehicular transport for bringing water but also the desperation of communities.

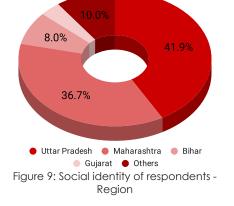
Case study: Sangita Chauhan is homeless and stays near Dattani Park, Kandivali. She sells "nimbu-mirchi" (lemons and chilli) and flags of India to make a monthly income of less than Rs. 10,000 that supports a family of 5. Along with 28 other homeless families, she was forced to collect drinking water from a public toilet as the nearby housing colony where she previously sourced water shut its doors out of fear of the spread of COVID-19. Sangita was compelled to purchase this water despite its bad odour and discolouration due to disease causing contaminants. She recorded a monthly expense of nearly 4000 rupees just for water access during lockdown. She further spent Rs.600 on auto rickshaws to fetch water as the public toilet was 10 mins away from her shelter.

#### (iv) Non-discrimination









Only 25.34% of respondents belonged to the 'open' category. The rest come from vulnerable social groups: 34.93% OBC, 18.15% Scheduled Caste, 11.3% Scheduled Tribe and 9.93% belonged to Vimukta Jati and Nomadic Tribes.

Muslims constitute 40.07% and Buddhists 12.67% of the respondents. This makes for a disproportionate representation of both communities as they comprise only 20.65% and 4.85% of Mumbai's total population respectively, as per 2011 census data. The other representations are as follows: Hindus 45.89%, Christians 1.37%.

The majority of respondents hailed from Uttar Pradesh (41.72%) followed closely by those from other parts of Maharashtra (36.55%) and Bihar (7.93%). 29.8% speak Marathi while 55.48% consider Hindi as their mother tongue. Other languages include 5.14% Urdu, 2.4% Gujarati, 1.37% Tamil, 1.37% Bengali, 1.37% Kannada, 0.7% Telugu, 0.7% Vadari, 0.7% Pardhi and 0.7% Bhojpuri.

These observations are evidence of the institutionalised discrimination of vulnerable communities who are excluded from access to basic amenities like water and sanitation on the basis of caste, religion and regional identity.

#### (v) Gender

69.2% of respondents reported that the responsibility of collecting water fell on the shoulders of the women in the household. This number increased to 74.14% during the lockdown. 24.48% reported that this responsibility was borne by the girl children of the family. While 75.96% of female respondents reported needing more water to maintain hygiene during menstruation, only 32.51% said that this extra water was easily available to them during the lockdown. 3.85% women reported an increase in skin infections in this time.

As mentioned earlier, 20.04% respondents had to collect water at night between 9 a.m. and 4:30 a.m. As the majority of water collectors are women, these timings resulted in unsafe

conditions for them while accessing water.

#### (vi) Information accessibility:

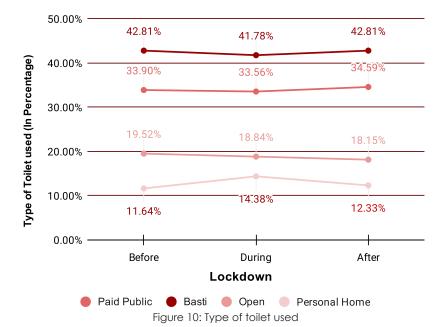
Despite the abysmal scenario of water supply, only 26.02% of respondents were able to communicate their complaints and appeals to the MCGM. Of these only 18.42% received a response from the municipal corporation for demands of sanitisation drives in settlements, distribution of food and establishing temporary water connections. Only 1 homeless community residing at Sitaram Mill Compound received informal water access from the MCGM as a result of their request. The other requests for water and sanitation access from 32 settlements registered with the MCGM as well as the District Legal Service Authority as directed by the Bombay High Court went unanswered.

Case study: Radhika Yadav from Ganpati Patil Nagar, Dahisar (W) purchases drinking water from a MCGM informal water connection by paying the private provider Rs. 300/month. She accompanies her daughter to collect water as the timings to use the tap are 10 p.m. - 12 a.m. and she does not feel safe to send her daughter alone in the dark to wait in a queue for over an hour during the lockdown. She reported seeing the police shout at people for standing too close while fetching water. The police were physically violent against some men queuing for water in order to regulate the crowd waiting for access.

#### IV.d Sanitation access

Access to sanitation facilities in Mumbai's informal settlements showed no improvements and only marginal changes during the lockdown. As in the case of water access, residents use a combination of facilities for their sanitation needs, including paid public toilets, community toilets, personal toilets and the continued practice of open defecation. Permission to build personal toilets and cost of facilities dictate choice of residents.

#### Type of toilet



18.15% respondents practiced only open defecation prelockdown. Of these, 9.43% also began using paid public toilet facilities in addition to open defecation due to movement restrictions applied on residents. 75.34% of respondents used common toilet facilities during the lockdown, making them vulnerable to the disease as public toilets have been called the major reason for spreading COVID-19 in Mumbai's informal settlements. 28.77% were solely using paid public toilets pre-lockdown. Of these 3.57% shifted to practicing open defecation. 36.64% respondents used community toilet facilities in their settlements before and during the lockdown.

Only 9.25% of the respondents had sufficient personal toilet facilities in their homes pre-lockdown. The number of respondents solely using personal toilets increased to 10.62% during the lockdown, due to restrictions on movement. 2.4% respondents used a combination of public and personal toilets pre-lockdown. This number increased to 3.77% during the lockdown. This indicates the presence of insufficient personal hygiene facilities to cater to the entire family.

#### **Accessibility**

#### (i) Physical accessibility

86.22% respondents needed to leave their home to use sanitation facilities even during the lockdown. 79.51% had to walk upto 10 minutes and 6.79% more than 10 minutes to access toilets. 1.77% respondents reported needing to walk over 20 minutes to access toilets.

The average waiting time to use the toilet after reaching the facility was 11.19 minutes pre-lockdown. This duration increased to 11.69 minutes during the lockdown.

#### (ii) Economic accessibility



Figure 11: Average monthly expenditure on toilet access per household

The average monthly expenditure on sanitation access per family pre-lockdown was Rs. 281.39. This amount decreased to Rs. 270.02 during the lockdown but has risen again to Rs. 283.93. 13.10% respondents paid equal to or more than Rs.500 per month for the family to access toilets pre-lockdown. This number reduced to 10.73% during lockdown, but has risen again to 13.24% post-lockdown. This is despite the MCGM circular to pay-and-use public toilets to stop charging residents during the lockdown owing to loss of income. However, public

toilet operators, who are charged commercial rates for water and electricity, were unable to keep up maintenance in the absence of support from the government.

30.48% respondents paid per toilet use pre-lockdown. This number reduced to 27.74% during the lockdown but has restored to 30.14% post-lockdown. This indicates the number of people who are unable to use a toilet when they cannot pay for it. 43.49% respondents paid for a monthly family pass pre-lockdown. This number remained the same during lockdown.

#### Quality of hygiene facilities

Only 29.37% of public toilet users reported that the facility was cleaned twice a day during the lockdown, lower than the 33.22% pre-lockdown. 25.17% respondents reported that their public toilet facility was cleaned once a day.

4.55% respondents reported that their toilet was cleaned only twice in a week and 6.99% said that their toilet was cleaned once every week. 6.29% reported that their toilet was cleaned once in two weeks during lockdown, when only 1.75% respondents reported this poor maintenance pre-lockdown. 5.24% reported cleaning only once in four weeks during lockdown while 4.9% reported this level of maintenance pre-lockdown.

The poor hygiene and maintenance of public toilets contributes greatly to the spread of diseases. Despite the increased need for maintaining hygiene during the COVID-19 pandemic, public toilet facilities saw no improvement, but in fact saw a further decline in maintenance.

81.25% respondents reported that the public toilet facilities offered no soap or sanitisers for use pre-lockdown. This number marginally improved to 72.82% as 8.43% respondents reported supply of soaps and sanitisers in their public toilets during lockdown. 62.54% respondents reported needing to carry their own water to use in public toilets due to lack of water supply in the toilet pre-lockdown. Far from improving during the pandemic, this number further rose to 62.89% during lockdown. Lack of sufficient water and soaps leads to compromised hygiene for communities and increased spread of the virus.

#### IV.e Solid Waste Disposal

Only 19.93% respondents received garbage collection service from their home pre-lockdown. This number marginally increased to 20.34% during lockdown. 30.58% respondents disposed of their waste in drains pre-lockdown but this number reduced to 26.55% as more respondents switched to throwing their waste in the nearest garbage disposal points during the lockdown. However, disposal of garbage required respondents to leave their homes, as against the lockdown regulations. Moreover, only 52.33% respondents reported a daily collection of garbage by the MCGM from common garbage disposal points during lockdown. 12.19% reported that garbage was collected only once in a week. Piles of garbage in public spaces creates unsanitary conditions worsened by the dense nature of the settlements.

#### IV.f Personal Hygiene

#### Awareness of safety measures

Following are the number of people with awareness of various hygiene and safety measures to protect from COVID-19

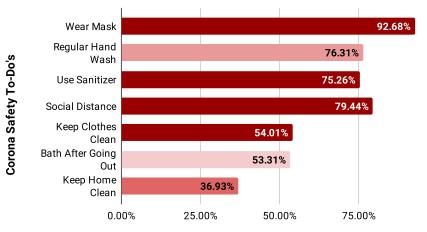


Figure 11: Average monthly expenditure on toilet access per household

#### ...awareness of physical distancing norms is higher than that of washing or sanitising hands, bathing.

Since the wearing of masks was strictly enforced, the awareness of this measure is the highest. It is worth noting that the awareness of physical distancing norms is higher than that of washing or sanitising hands, bathing, cleanliness of clothes and home. This is despite the fact that washing hands is considered the very first defence against the spread of COVID-19, and practicing physical distancing is nearly impossible in dense living conditions such as those in Mumbai's informal settlements.

#### Ability to practice hygiene

Only 67.47% of respondents could bathe on a daily basis prelockdown. This number reduced during the lockdown to 66.32%. 21.66% of respondents could bathe only 3 times a week or less during the lockdown.22.7% respondents reported not being able to wear a washed pair of clothes daily. 4.83% needed to wear the same clothes for more than two days.

Regular use of soap to wash hands after returning home rose sharply during the lockdown from 58.42% to 91.07% of respondents. Use of soap after using the toilet rose from 91.10% to 94.86%. However, 2.40% respondents are not able to access soap for washing hands even after toilet use. Use of soap to wash hands after work also rose from 68.90% pre-lockdown to 78.01% during lockdown. This change in behaviour indicates the rising awareness among communities about the need to wash hands to protect from communicable diseases.

However, 83.73% respondents reported needing more access to water and sanitation facilities to be able to maintain the required hygiene for preventing the spread of COVID-19.

#### IV.a Community response

84.25% respondents actively participated in community responses to the pandemic including wearing masks, strict adherence to lockdown restrictions and social distancing norms, even though their crowded living conditions did not encourage this.

A respondent from Chamunda Nagar organised cleaning of the neighbourhood as well as a COVID-19 testing camp that catered to at least 250 families with support from the Corporator. Non-residents were not allowed inside the neighbourhood premises and visitors were checked for ill-health. A respondent from Ambedkar Nagar explained how the community delegated an open-space for setting up a temporary marketplace.



Photo 7: Community kitchen in Baiganwadi, Govandi | Source: PHS

A respondent from Bainganwadi, Govandi reported that the community was supported by a project of the Tata Institute of Social Sciences through which they set-up a community kitchen for 30 days and everyday delivered food to up to

3000 homes in their neighbourhood during lockdown. Another resident from Bainganwadi reported that the women in the neighbourhood had stopped socialising in the street which was the only social gathering space available to them.

A resident of Chikalwadi, Govandi participated in distribution of upto 2000 masks among the community and also secured ration for his neighbours when they were in need. A respondent from Mandala, Mankhurd reported participating in regular sanitisation of his street. Another respondent from Bhandup participated in spreading awareness about COVID-19 preventive measures in his community.

These instances of community organization are examples of self governance in the midst of crisis. Despite deprived living conditions, they show the potential of residents to collectively engage in local governance when offered support and cooperation from authorities. The conditions presented by the emergency COVID-19 lockdown show the need for institutionalising decentralised participatory governance processes in order to increase efficiency in the city's service delivery and resilience.

#### V. ANALYSIS & DISCUSSION

The announcement of COVID-19 as a global public health emergency by the WHO on 11th March 2020 was accompanied by widespread public health messages from various international health agencies regarding the importance of maintaining hygiene for disease prevention. Hand washing was repeatedly called the first line of defence against the virus. Stockholm Environment Institute issued a series of recommendations focussed on provision of sufficient water and sanitation facilities specifically in light of conditions in urban slums across Asia. These included the immediate budgeting of "available water resources from different sources against priority needs for the summer months", identifying hotspots of water insecurity, planning alternative ways of supporting hand hygiene such as the supply of free sanitisers and even deferring water utility bills until the end of the crisis. (Matheswaran 2020)

On 25th March, India was brought to a standstill in hope of containing the spread of the disease. However, efforts in improving access to hygiene were insufficient. The survey presented in this report found that residents of Mumbai's informal settlements could access only 33.97 lpcd, far below the benchmark of 135 lpcd set by the Ministry of Housing and Urban Affairs, Government of India. This meagre access which does not even fulfill WHO recommendations of 50-100 lpcd was secured at the cost of nearly 8% of the household's average monthly income, after 60.34% respondents had to leave their home to collect water, 43.32% respondents waited over 10 minutes in water queues and 10.47% waited over 1 hour. Only 9.25% of respondents had sufficient personal toilet facilities and 18.15% continued to rely on open defecation on account of having no access to any sanitation facilities. 75.34% of respondents were dependent on shared toilets despite the fact that public toilets have been termed as "super-spreaders" of COVID-19" (Suryawanshi 2020). 83.73% respondents stated that the hygiene facilities available to them are insufficient to protect from communicable diseases.

Right to water and sanitation is a human right and its delivery cannot be dependent on an individual's income, social standing or religious and cultural identity. This is further emphasised by the economic impact of the COVID-19 lockdown that has reduced the average monthly income of

households in Mumbai's informal settlements making market access to water, hygiene and sanitation unaffordable. Only 14% of respondents received any income during the months of lockdown and of these 36.5% received reduced salaries. A whopping 93.5% of respondents reported having Rs.0 savings left and 46.91% of the respondents had to take loans to survive the lockdown. At the same time average monthly expenditure for water and sanitation access increased by Rs. 37.48 (from Rs. 667.45 to Rs. 704.93) during the lockdown and continues to rise. Therefore, at a time when the maintenance of personal and public hygiene was of heightened importance due to the threat of a pandemic, the water and sanitation purchasing capacity of residents drastically reduced. The deteriorating economic condition of residents in informal settlements puts in question the claim that market-oriented privately-run water enterprises can "cater to the drinking and cooking needs of the poor and improve their health and life outcomes until they are reached by piped water." (Chauhan and Sewak 2016)

In fact, this responsibility already falls under the purview of the city's municipal authorities as reiterated by the Bombay High Court judgement in 2014 that emphasised the right to water as a prerequisite for right to life, guaranteed to every human being. Therefore, it is the responsibility of the state to facilitate universal access to water and sanitation. Yet in practice, the responsibility of securing legal water access

falls on the shoulders of citizens who, if they are even eligible, must file applications to the municipal authorities for water connections. Despite this, citizens continue to be denied their water rights on account of being "illegal" in the eyes of the municipal authorities and the current public discourse relegating "slum" dwellers to "nuisance" (Ghertner 2008). In the years 1998-2000, the Maharashtra State Government collected a sum of Rs. 7000 per household for the purpose of rehabilitation from over 25,000 families residing on Forest land in Sanjay Gandhi National Park, Mumbai. Nearly 22 years later, at least 14,194 families continue to wait for their homes despite the recognition of their right to housing and completing their due payment toward the state. Far from receiving housing, families are also denied access to legal water and sanitation facilities, degrading them to unsanitary living conditions.

The disproportionate representation of vulnerable social groups and minority communities among residents of informal settlements who are denied access to water and sanitation by the municipal authorities on the basis of "legality of residential structure" points to the social exclusion of these communities. This exclusion violates the Resolution 64/292 of the United Nations General Assembly, voted for by India in 2010, which "explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of all human rights." (United Nations General Assembly 2010)

The denial of this right also affects the right to health. Residents of informal settlements do not receive facilities and state services that residents of formal housing are entitled to such as sufficient clean water supply and personal toilets, i.e. "people living in informal settlements are not treated on a par with "proper citizens" as per Chatterjee (2004). This results in a threat to the idea of their citizenship itself as they do not fall under what Chatterjee calls the "homogenous social of citizenship" and therefore do not bear any moral claim on the state. This harms their dignity and ability to participate in the local governance crucial for a functioning democracy, which in turn affects their access to services and facilities, creating a vicious cycle of denied human rights.

Yet, communities residing in informal settlements have exhibited great resilience in the face of a health emergency exacerbated by abysmal living conditions. Examples of community organization to spread awareness, adhere to social distancing norms as far as possible in crowded living conditions, support members with food insecurity and divert efforts to improve hygiene in settlements abound. These examples go against popular notions of "unlawful slum-dwellers" and instead point toward the potential of participatory local governance to improve organisation and support the city's response to the pandemic.

#### VI.CONCLUSION

The COVID-19 pandemic presents an opportunity to understand the collective nature of health and hygiene that compels us to reassess the dominant narratives that shape legal and public discourse about resource distribution and the delivery of basic human rights. As Mumbai, the commercial capital of India now known as a COVID-hotspot, opens up after months of being under a strict lockdown, we must look toward long-term solutions to increase resilience of the city's population against communicable diseases. This resilience is crucial not just for the health of city's residents but also for the revival of its economy which is heavily dependent on the labour of vast workforces residing in its informal settlements. The right to water & sanitation is a prerequisite for the right to health and its universal access is an imperative step on the way forward to collective health and recovery.

#### VII. RECOMMENDATIONS

#### **Recommendation for Homeless communities:**

- (a) As per the 74th amendment of the Indian constitution, the 12th Schedule was added which puts onus to provide universal water and sanitation on local self-governments. In this regard MCGM must:
  - provide public stand post water connections on humanitarian grounds as soon as possible and
  - provide free access to public toilets with issued passes to all families.
- (b) Maharashtra Government should ensure food security by providing Ration Cards to access the public distribution system. This will encourage the observance of lockdown measures.
- (c) Maharashtra Government should include homeless families in Integrated Child Development Schemes (ICDS) as beneficiaries to increase access to immunisation for children and ensure nutrition for vulnerable groups like children, elderly, pregnant and breast-feeding women and adolescent girls.

- 1. **Assess ground realities:** MCGM must use the existing extensive network of Public Health Post volunteers (ASHA workers) in Mumbai to identify communities lacking access to water and sanitation facilities.
- 2. Adopt an inclusive policy for water and sanitation access:
- (a) MCGM sources sufficient water for Mumbai's residents and has been given the constitutional right to provide universal water and sanitation access to all. Using these powers and resources, it must take onus of fulfilling this responsibility by increasing coverage of water and sewage connections where possible and installing public stand-post connections where necessary.

  (b) MCGM must discard aspects of its sanitation policy that exclude residents of post-2000 settlements in order to facilitate "Sanitation for All" as directed by SBM and extend financial and technical support to communities who are willing to invest in building their own toilets. MCGM should facilitate building of not only physical infrastructure for public toilets in these settlements but also ensure governance mechanisms of maintenance like regular emptying of septic tanks, connecting drains to sewer lines, cleaning toilets and supplying soaps, sanitisers etc.
- 3. Invest in preventive healthcare: Increase state expenditure on preventive healthcare strategies that involve ensuring universal water and sanitation access to improve public hygiene. This will contain the spread of communicable diseases and therefore support the investment in public health infrastructure being made to tackle the massive influx of patients affected by COVID-19.
- 4. Make sanitation economically accessible: In order to make sanitation affordable to all, MCGM must offer subsidies to toilet operators on water and electricity bills in addition to further financial support required for paying staff and ensuring supply of hygiene products. Post the pandemic, MCGM must issue circulars that create a monthly payment facility for resident families who regularly use pay-and-use toilets on account of lack of personal toilets. Cost of monthly passes should be regulated by the MCGM to ensure affordability keeping in mind the average income of residents in informal settlements.
- 5. Invest in new 'pyaus': The MCGM claims to have identified 50 'pyaus' (or drinking water fountains) in the city and is attempting to restore 30 of them in order to preserve the city's socio-economic and architectural heritage. (Ansari 2018) In addition, MCGM must invest in installing and maintaining many more pyaus in public spaces in order to make clean drinking water available to all citizens.
- **6. Facilitating decentralised local governance:** Maharashtra government must implement its law to constitute Area Sabhas to dialogue with local communities and address grievances as soon as possible to increase participation in governance and collectively tackle issues posed by the pandemic and lockdown.
- 7. Remove bureaucratic hurdles in ensuring universal water and sanitation access: No Objection Certificates should be granted by Central Government authorities to settlements located on Central Government land to gain access to water and sanitation facilities on humanitarian grounds and as part of effective pandemic response strategy.

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2. ANNEXURE

11/24/2020 06.08.2020 Final form for Rapid Impact Assessment of Lockdown and Covid-19 pandemic on working people in Mumbai

### 06.08.2020 Final form for Rapid Impact Assessment of Lockdown and Covid-19 pandemic on working people in Mumbai

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जानकारी लेने वाले का नाम?	
Sunil	
Pravin	
Vishal	
Ruksar	
Pooja	
Shakir	
Jagdish	
Ain	
Poonam	
Soumya	
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1.1 नाम :	
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○ स्त्री	
्र पुरुष ्रतीसरा जेंडरः/ तृतीय पंथी	
ी वाबरा अंकरा वृताय प्रया	
1.6 ਰਸ਼:	
1.7 शिक्षाः	
पाठशाला नहीं गए	
ं चोथी तक	
ं आठवी तक	
्रसवी तक	
्रवास्वी तक	
े ग्रेजुएट/ डिप्लोमा	
O -310 10 1111	
ा पोस्ट ग्रेनपट	
्र पोस्ट ग्रेजुएट ्र ऑक्टरेट	

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1.8 आपके रहने की व्यवस्था	केसी है?
<b>े बे</b> घर	
() भाड़े का घर	
्र खुद का घर	
○ अन्य	
1.8.8 रहने की व्यवस्था अन्य	ही तो लिखें
	. ^
1.9 आपका घर किस प्रकार व	ज ह?
<b>क</b> च्चा	
् पक्का	
ं खुते में	
	आपके घर कभी पुलिस या बीएमसी द्वारा तोड़ -मोड़ हुई, या इसकी थमकी मिली हैं?
<b>○</b> हाँ	
्र नहीं 	
1.11 परिवार में कितने सदस्य	हैर
1.12 उन में से कितने गाँव चर	१ गए हर
1.13 क्या आपके पास रेशन व	गर्ड है:
○ हाँ	
्र नहीं	
1.13.a कौनसा रेगान कार्ड	
केसरी कार्ड	
केसरी कार्ड/ पीला कार्ड ( १	व्यवस्था
ीला कार्ठ ( अंत्योवय)	1.4 8.74
्र गुलाबी कार्ड	
1.14 जनधन बैंक खाता है? सरकार से जो 500 पैसे मिला है वह र	
ि हाँ	
्रनहीं 	
1.14.a अगर है तो मार्च २०२०	से अब तक कितने पैसे आये?
1.15 यहाँ का वोटर कार्ड है?	
<b>ि</b> हॉ	
ा नहीं	
1.16 आपकी जाती क्या है?	a a
() VJNT (विमुक्त जाती)	
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1.17 आपका धर्म क्या है?:		
<b>ि हिन्दू</b>		
्र मुस्लिम		
्र ईसाई		
ं बोद्ध		
्रिक्ष () सिक्ष		
ं अन्य		
		_
1.17.a अन्य धर्म हो तो लिख		
1.18 आपकी मातृ भाषा कौ	नसी है ?:	3
<b>ि हिं</b> बी		
ं मराठी		
्र गुजराती		
ं बंगाली		
्र तामिल		
्र उर्द		
○ 3H-2I		
0		
1.18.a अन्य भाषा हो तो लि	현:	
1.19 क्या आपका जन्म मुम्ब	रई में हुआ ?	3
○ ₹		
ार्ही		
1.20 क्या आप अपने-आप	को स्थलांतरित मजदूर समझते है या मुंबई के रहिपासी ?	,
स्थलांतरित मजदूर		
ं मुंबई के रहिवासी		
1.21 आप, या आपके पूर्वज	कोनसे राज्य से मुंबई में आयें?	,
ा महाराष्ट्र		
ा गुजरात		
ं उत्तर प्रदेश		
<b>ि विहा</b> र		
ामध्य प्रदेश		
🔘 पश्चिम बंगाल		
ासाम		
ामिल नाडु		
्र केरत		
ं अन्य		

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1.21.a महाराष्ट्र के जिला	का नामः
अहमदनगर	
अकोला	
अमरावती	
<b>औरंगाबाद</b>	
্ৰীত	
ं भंगरा	
ु बुलढाणा	
चंद्रपूर	
ं बुळ	
ा गडिचरोती	
्रागेंदिया -	
ि हिगोली	
जळगाव	
जालना	
्रकोल्हापूर -	
्रा <u>त</u> ्र	
ं मुंबई उपनगर	
ं मुंबई शहर	
ागपूर	
ांदेड	
े नंदुरबार	
ारिक	
उस्मानाबाद	
्र परभण <u>ी</u>	
ं पुणे	
ायगड	
रत्नागिरी	
सांगली	
सातारा	
ि सिंधुदुर्ग	
सोलापूर	
ाणे व्याप	
ा वर्धा	
ाशीम	
यवतमाळ	
ातघर	
1.21.b अन्य राज्य हो तो	
1.22 आप कितने सालों से	

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1.23 आपने, या आपके पूर्वजों ने	अपना गाओं / शहर क्यों छोडा?
घर नहीं था	
ज़मीन नहीं थी	
खाना नहिं था	
पानी नहीं था	
रोज़गार नहीं था	
स्कूल नहीं था	
जातिवाद से परेशान	
<b>ा</b> आकाल	
ा अन्य	
1.23.a गाओं को छोड़ने के अन्य	कारण:
1.24 मुंबई को क्यों चुना?	·
ो रोजगार	
पर के लियें 	
पढाई के लिये हॉस्पिटल	
रिश्तेदार मुम्बो में थे	
्रारश्तदार मुखा म य मुखई सबसे पास का बड़ा शहर	771
अन्य	1.91
1.24.a मुंबई को चुनने के अन्य व	तरण ?
1.25 आप अकेले आये या अपने	परिवार को साथ लेकर?
ं अकेले आये	
परिवार को साथ	
1.26 आपके पास रहिवास के क्य	ा पुरावे / सबूत है?
आधार कार्ड	
🔲 राशन कार्ड	
aiटर आई.डी.	
्राइविंग लाइसेंस	
स्कूल का दाखिला	
ि निष्कासन नोटिस	
२००० स्लम सर्वे रसीद	
पासपोर्ट	
🔲 फोटो पास	
अन्य	
लाइट का बिल	
☐ नहीं है	
1.26.a अन्य रहिवास के सबूत	

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1.27 आप तालाबंदी के दौरान अ अगर विशेष जानकारी मिले तोह अत में अ गांव में घर नहीं है	भ । बिलरवेषन में तिश्वे
जाने के पैसे नहीं थे	
्रांसपोर्ट नहीं था	
ाांव में खाना नहीं मिलता	
जमीन या खेत नहीं है	
जा के आये	
अन्य	
1.27.a अन्य हो, तो तिखें:	*
विभाग २ : नौकरी और रोजगार	
2.1 आप क्या काम करते है? हाउस वाइफ हो तोह तिखे	*
2.2 रोजगार का प्रकार:	*
परमनंट नौकरी	
ा कॉन्ट्रैक्ट नौकरी	
्र ि रोजंदारी	
्रा स्वयंरोजगार	
्राउस वाइफ	
2.3 क्या आपके पास अभी रोज़ग	ार है?
⊝ साँ	
ि नहीं	
2.3.a अगर हाँ, तो क्या काम कर	पहें हैं?
2.3.d अगर नहीं, तो आप कब से	ैं बेरोज़गार है?
तालाबंदी से	
तालाबंदी के पहले से	
ा हाउस वाह्फ	
2.3.b क्या वो आपकी पिछली नौ	करी हैं या आपको एक नई नौकरी मिल गई है?
ि पिछली नौकरी	(a 1) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
ाई नौकरी	
2.3.c नए रोज़गार का प्रकार?	*
परमनंट नौकरी	
्रकॉन्ट्रैक्ट नौकरी	
ो रोजंदारी	
् स्वयरोजगार	
2.4 आपको सामाजिक सुरक्षा मि	तती है?
प्रोविडेट फण्ड , ईएसआयसी (आरोग्य सुवि	वधा, बेलकेयर बोर्ड से रॉक्स्टर कर उनकी स्कीमों का लाभ, मातृत्व या पितृत्व के ती छुट्टी)
○ हाँ	
ा नहीं	

2.4.a अगर होँ, तो कौनसी सामाजिक सुरक्षा मिलती है?  प्रोतिकेंट फण्ड  ईएसआयसी (आरोग्य सुविधा)  बेतफेयर बोर्ट के रोजस्टर कर उनकी स्क्रीमों का ताभ  मातृत्व या पितृत्व के ती सुट्टी	
ईएसआयसी (आरोग्य सुविधा) वेलकेयर बोर्ड से रेजिस्टर कर उनकी स्कीमों का ताभ मातृत्व या पितृत्व के ती सुट्टी	
येलकेयर बोर्ड से रॉजिस्टर कर उनकी स्क्रीमों का लाभ मातृत्व या पितृत्व के ली सुट्टी	
येलकेयर बोर्ड से रॉजिस्टर कर उनकी स्क्रीमों का लाभ मातृत्व या पितृत्व के ली सुट्टी	
मातृत्व या पितृत्व के ती सुट्टी	
2.5 क्या आपको मार्च २०२० से अब तक का पगार मिला है?	
○ हाँ	
ं नहीं	
2.5.a अगर हाँ, तो हर महीने कितना?	
25.b क्या आपको पूरा पगार मिला या घटा कर मिला?	
्र पूरा प्रमार	
ा घटा कर पगार	
2.6 क्या आपकी तालाबंदी से पहले की पगार मितनी बाकी है?	
○ र्गं	
ार्स	
2.6.a आर हाँ तो कितनी?	
2.6.b अगर हाँ, तो कितने महीने कीं?	
2.6.c अगर हाँ तो क्यों?	***************************************
2.7 आपके मालिक से आपको तालाबंदी के दौरान पगार के अलावा कोई आर्थिक या अन्य सहयोग मिला है?	
् हाँ	
ं नहीं	
2.7.a अगर हाँ, तो क्या सहयोग?	
राशन	
पका हुआ खाना	
पैसे	
सरकारी स्क्रीम की जानकारी	
सरकारी स्क्रीम की जानकारी ताइजीन किट	
ताइजीन किट	
ताङ्जीन किट गांव जाने के लिए मदद	
ताइजीन किट गांव जाने के लिए मदद अन्य	
्राह्मजीन किट ्राव जाने के लिए मदद अन्य 2.7.6 अगर अन्य, तो क्या सहयोग?	

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<ol> <li>तालाबंदी के दौरान परिवार चलाने के लि।</li> <li></li></ol>	ए क्या आपने कहींसे उधारी ली है?		*
ि नहीं			
2.9.a अगर हाँ, तो किससे उधारी ती?			*
रियतेदार			
दोस्त			
साहकार			
दुकानदार			
मालिक			
अन्य			
2.9.c अगर अन्य किससे उधारी ली तो लिखें:			*
ALEXANDER PROPERTY OF THE PROP			
2.9.b. ब्याज कितना लेते हैं? (%)			*
2.3.0 44141 (0/04) (1/0 6 : (40)			
225266	0.1.2.0.0		4
2.10 क्या आपको कोई चीज गिरवी रखनी प	ड़ा या बचना पड़ा?		Î
्र हाँ ्र नहीं			
U 161			
2.10.a अगर हाँ, तो क्या गिरवी रखनी पड़ा?			*
गोल्ड या ज़ेवर			
गांव में क्षेत या ज़मीन			
घर के कागज़			
गाडी/ वाहन			
अन्य			
2.11 महीने का गुज़ारा करने का खर्च	घरभाडा	विजली	अन्य
( तालाबंदी के पहले) :			
( तालाबंदी के दौरान) :			••••••
( mm rq. r qr. r yr			
( तालाबंदी के बाद):	·····		
( तालाबदा क बाद).			
2.12 आपकी आजकी बचत कितनी है?			*
विभाग ३: पानी की आपूर्ति	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.1 पानी के स्त्रोत: खाना पकाने	<b>बीएमसी का</b> नल	बीएम <b>सी</b> का नल और कोई	बीएमसी का नल और कोई
और पीने केलिए आप कहाँ से पानी लेते है?	बीएमसी का अवैध नल टैंकर टैंकर	बीएम <del>सी</del> का अवैध नल टेंकर	े बीएमसी का अवैध नल े टैंकर
पाना लत है?		All the same of th	0 33- 0
	बोरवेल कुंआ और कोई	बोरवेल 📗 कुंआ	बोरवेल ुकुंआ

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3.2 पानी के स्त्रोत: साफसफाई और नहाने –धोने के लिए आप कहाँ से पानी लेते है?	बीएमसी का नत   बीएमसी का अवैध नत   टैंकर   बोरवेत   कुंआ   और कोई	बीएमसी का नत   और कोई   बीएमसी का अवैध नत   टैंकर   बोरवेत   कुंआ	बीएमसी का नत और कोई बीएमसी का अतैध नत ैरकर बीरवेत कुंआ
3.1.a और कोई पानी के स्त्तीत खाना पकाने और (ताताबंदी के पहले, दौरान और बाद अंतग वाक्य में तिखें)	पीने केतिए:		
3.2.a और कोई पानी के स्त्रोत साफसफाई और : (तालाबंदी के पहले, दौरान और बाद अलग वाक्य में लिखे)	नहाने केतिए:		
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.3 कितने दिनों में पानी मिलता है	्र हपते में दो बार दो दिन छोड़के ि कक्ष्ड समय नहीं है ्र हपते में एक बार एक दिन छोड़के ्र रोज़	्रहपते में द्वो बार ्रहपते में एक बार िष्ठक्षप्ठ समय नहीं है ्र एक दिन छोड़के द्वो दिन छोड़के ्र रोज़	्रो दिन छोड़के एक दिन छोड़के  फिक्स्ड समय नहीं है  हपते में एक बार रोज़  हपते में दो बार
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.4 आप पानी के लिए पैसा कब देते हो?	् सरीदते समय प्रतीने हण्ते रोज नहीं देना पड़ता अन्य	् सरीदते समय प्रतीने हण्ते रोज अन्य नहीं देना पड़ता	् खरीदते समय प्रातीने अन्य हफ्ते नहीं देना पड़ता रोज
3.4.a आप पानी के लिए पैसा कब देते हो? अगर (तालाबदी के पहले, दौरान और बाद अलग वाक्य में लिखें)	अन्य, तो क्या?		
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.5आपको महीने भर में कितना पानी मिलता है? (इंटरव्यू लेने वाले साथी ने: कितना पानी रोज भरते है ? कितना लीटर का ग्यालन ? कितने ग्यालन? ऐसे सवाल पूछकर एक महीने का कितना, इसका हिसाब निकालना है)			
3.6 आप पानी के लिए हर महीना कितना पैसा खर्च करते हो?			
3.7 आप कौनसे समय पानी भरने जाते है?( eg.10AM - 11AM)			
3.8 पानी भरने की जगह आपके घर से कितनी दूर है? (चलने का समय, कितने मिनिट)			

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3.9 क्या आपको पानी भरते समय कोई वाहन का इस्तेमाल करना पड़ता है? (हाँ / नहीं / सर पे रख कर)			
3.9.a अगर हाँ – तो कौनसा? (सायकत, रिक्शा, बाइक, टेम्पो या अन्य)			
3.9.b वाहन को कितना पैसा देते हो? (महीने का खर्चा)			
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.10 ज्यादातर पानी भरने की जिम्मेदारी आपके घर में किसकी है?	पुरुष स्त्री म्हातारी सडुका सडुकी म्हातारा	पुरुष स्ती तडुका तडुकी म्हातारी म्हातारा	पुरुष स्ती तदुका तदुकी म्हातारा म्हातारी
पानी का दर्जा:	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.11 क्या पानी से बास या बदबू आती है?	ानहीं ि हाँ	्र नहीं ्र हाँ	ासी ि हॉ
3.12 क्या पानी में कोई गन्दगी या कचरा होता है?	ि नहीं ि हाँ	ाती होँ	ातीं हाँ
3.13 क्या आपके पानी में कोई रंग होता है?	नहीं हाँ	नहीं ु हाँ	नहीं ि हाँ
3.14 क्या पानी का टेस्ट अच्छा है?	ं नहीं ं हाँ	ि नहीं ि हाँ	ि नहीं ि हाँ
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
3.15 पानी भरने के लिए कितना समय लाइन में रुकना पड़ता है?	् <१० मिनिट ् <२० मिनिट <१० मिनिट ् <१ घंटा <२ घंटा	् <१० मिनिट ् <१० मिनिट <१० मिनिट <१ घंटा <१ घंटा	< १० मिनिट < २० मिनिट < १० मिनिट < १ घंटा < १ घंटा
3.15.a २ घंटे से ज्यादा हो तो, कितना समय यह	तिखें		
3.16 क्या तालाबंदी के दौरान आपके पानी भरने ् हाँ ् नहीं	की जगह बदल गयी है?		*

3.16.a अगर हाँ, तो क्यों?			
3.16.b आपके नए स्त्रीत क्या है?			
3.16.c क्या यह पहले स्लोत से और दूर है? ि हाँ			
ं नहीं			
3.17 क्या आपको पानी कहीं से / किसीसे हर	: रोज <mark>म</mark> ाँगना पडता है?		
⊖ हाँ			
्र नहीं 			
3.17.a अगर हाँ, तो किससे?			
	ापको कभी पुलिस / किसी वाचमान आदी से मार या	डांट सहनी पड़ी है?	
○ हाँ			
<del>ा</del> हीं			
3.18.a अगर हाँ, तो विस्तार में बताये कि क्य	। हुआ:		
२ 10 तालावंटी के टौरान थाएने एएनी के टर्स्ट			
	माल के तरीके में क्या कोई बदलाव किये?		
○ हाँ	माल के तराक में क्या कोई बदलाव किये?		
	मात के तराक में क्या काई बदलाव किय?		
् हों ○ नहीं	ामाल क तराक म क्या काइ बदलाव 1कप? अब ज्यादा महत्त्व कौनसे इस्तेमाल को देते है?		
ं हाँ ं नहीं 3.19.a अगर हाँ, तो क्या बदलाव क्रिये? जैसे,	ladescendes Commission (1995)		
ि हाँ ि नहीं 3.19.a अगर हाँ, तो क्या बदलाव क्रिये? जैसे,	ladescendes Commission (1995)		
हाँ वर्षी नहीं 3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे,	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?		
हाँ वर्षी नहीं 3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे,	ladescendes Commission (1995)	तालाबंदी के दौरान	तालाबंदी के बाद
हाँ नहीं 3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे, 3.19.b आपने यह बदलाव क्यों क्रिये?	अब ज्यादा महत्त्व कौनसे इस्तेमाल को देते है?  तालाबंदी के पहले		
<ul> <li>हाँ</li> <li>नहीं</li> <li>3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे,</li> <li>3.19.b आपने यह बदलाव क्यों क्रिये?</li> <li>४: शौचालय की सुविधा की पहुँच :</li> <li>4.1 आप कौनसे तरीके का</li> </ul>	अब ज्यादा महत्त्व कौनसे इस्तेमाल को देते है?  तालाबंदी के पहले  पैसे भरकर पब्लिक शौचालय	पर में निजी शौचालय ख़ित में जाना	ै पैसे भरकर पब्लिक शौचातय
<ul> <li>हाँ</li> <li>नहीं</li> <li>3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे.</li> <li>3.19.b आपने यह बदलाव क्यों किये?</li> <li>४: शौचातय की सुविधा की पहुँच :</li> </ul>	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पब्लिक सौचालय  बस्ती के सौचालय		
<ul> <li>हाँ</li> <li>नहीं</li> <li>3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे.</li> <li>3.19.b आपने यह बदलाव क्यों किये?</li> <li>४: शौचातय की सुविधा की पहुँच :</li> </ul>	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक शौचातय  बस्ती के शौचातय  पर में निजी शौचातय  श्वेन में जाना	पर में निजी शौचातय ख़ित में जाना पेसे भरकर पश्लिक शौचातय बस्ती के शौचातय	े पैसे भरकर पब्लिक शौचालय बस्ती के शौचालय खुले में जाना पर में निजी शौचालय
<ul> <li>हाँ</li> <li>नहीं</li> <li>3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे.</li> <li>3.19.b आपने यह बदलाव क्यों किये?</li> <li>४: शौचातय की सुविधा की पहुँच :</li> </ul>	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पब्लिक सौचालय  बस्ती के सौचालय	पर में निजी शौचातय सुते में जाना पैसे भरकर प्रश्तिक शौचातय	ै पैसे भरकर पब्लिक शौद्यालय बस्ती के शौद्यालय सुने में जाना
हाँ नहीं नहीं 3.19.a अगर हाँ, तो क्या बदलाव किये? जैसे, 3.19.b आपने यह बदलाव क्यों किये?  ४: शौचालय की सुविधा की पहुँच :  4.1 आप कौनसे तरीके का शौचालय इस्तेमाल करते हैं?	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक शौचातय  बस्ती के शौचातय  पर में निजी शौचातय  तालाबंदी के पहले	पर में निजी शौचातय ख़ुते में जाना पैसे भरकर पब्लिक शौचातय बस्ती के शौचातय तालाबंदी के दौरान	े पैसे भरकर पब्लिक शौचातय वस्ती के शौचातय सुने में जाना पर में निजी शौचातय तालाबंदी के बाद
हाँ     नहीं     नही     नहीं     नही     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक शौचालय बस्ती के शौचालय पर में निजी शौचालय स्ति के पहले  तालाबंदी के पहले	पर में निजी शौचातय ख़ुते में जाना पेसे भरकर पश्चिक शौचातय बस्ती के शौचातय तालाबंदी के दौरान	े पैसे भरकर पब्लिक शौचालय  बस्ती के शौचालय सुने में जाना  पर में निजी शौचालय  तालाबंदी के बाद  हर इस्तेमाल पर हर दिन का
हाँ     नहीं     नही     नहीं     नही     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक शौचातय  बस्ती के शौचातय  पर में निजी शौचातय  तालाबंदी के पहले	पर में निजी शौचातय ख़ुते में जाना पैसे भरकर पब्लिक शौचातय बस्ती के शौचातय तालाबंदी के दौरान	े पैसे भरकर पब्लिक शौचातय वस्ती के शौचातय सुने में जाना पर में निजी शौचातय तालाबंदी के बाद
हाँ     नहीं     नही     नहीं     नही     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक गौचातय बस्ती के गौचातय पर में निजी गौचातय खुने में जाना तालाबंदी के पहले  हर इस्तेमाल पर हर दिन का नहीं देना पड़ता महीने का फॅमिनी पास	पर में निजी शौचातय ख़ुते में जाना े पैसे भरकर पश्तिक शौचातय े बस्ती के शौचातय तालाबंदी के दौरान  महीने का फॅमिली पास हर इस्तेमाल पर नहीं देना पड़ता	पैसे भरकर पब्लिक शौचालय बसी के शौचालय सुने में जाना पर में निजी शौचालय तालाबंदी के बाद हर इस्तेमाल पर हर दिन का महीने का फॅमिली पास
हाँ     नहीं     नही     नहीं     नही     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं     नहीं	तालाबंदी के पहले  पेसे भरकर पश्चिक शौचालय  बस्ती के शौचालय  पर में निजी शौचालय  स्ति के पहले  उत्तर इस्तेमाल पर इर दिन का  नहीं देना पड़ता	पर में निजी शौचातय खुते में जाना पेसे भरकर पश्चिक शौचातय बस्ती के शौचातय तालाबंदी के दौरान महीने का फॅमिती पास हर इस्तेमात पर नहीं देना पड़ता	्र पेसे भरकर पब्लिक शौचालय  बसी के शौचालय सुते में जाना  पर में निजी शौचालय  तालाबंदी के बाद  हर इस्तेमाल पर हर दिन का  महीने का फॅमिली पास
हाँ नहीं नहीं 3.19.8 अगर हाँ, तो क्या बदलाव किये? जैसे, 3.19.8 आपने यह बदलाव क्यों किये? 8: शौचालय की सुविधा की पहुँच : 4.1 आप कौनसे तरीके का शौचालय इस्तेमाल करते हैं? 4.2 आप शौचालय का पैसा कब अदा करते हैं?	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक गौचातय बस्ती के गौचातय पर में निजी गौचातय खुने में जाना तालाबंदी के पहले  हर इस्तेमाल पर हर दिन का नहीं देना पड़ता महीने का फॅमिनी पास	पर में निजी शौचातय ख़ुते में जाना े पैसे भरकर पश्तिक शौचातय े बस्ती के शौचातय तालाबंदी के दौरान  महीने का फॅमिली पास हर इस्तेमाल पर नहीं देना पड़ता	पैसे भरकर पब्लिक शौचालय बसी के शौचालय सुने में जाना पर में निजी शौचालय तालाबंदी के बाद हर इस्तेमाल पर हर दिन का महीने का फॅमिली पास
् हों ○ नहीं	अब ज्यादा महत्त्व कौनसे इस्तेमात को देते है?  तालाबंदी के पहले  पेसे भरकर पश्चिक गौचातय बस्ती के गौचातय पर में निजी गौचातय खुने में जाना तालाबंदी के पहले  हर इस्तेमाल पर हर दिन का नहीं देना पड़ता महीने का फॅमिनी पास	पर में निजी शौचातय ख़ुते में जाना े पैसे भरकर पश्तिक शौचातय े बस्ती के शौचातय तालाबंदी के दौरान  महीने का फॅमिली पास हर इस्तेमाल पर नहीं देना पड़ता	पैसे भरकर पब्लिक शौचालय बसी के शौचालय सुने में जाना पर में निजी शौचालय तालाबंदी के बाद हर इस्तेमाल पर हर दिन का महीने का फॅमिली पास

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4.4 अगर आपके घर में शौचालय नहीं है तो आपको कितनी दूर जाना पड़ता है? ( कितना समय चलना पड़ता है - मिनिट में लिखें?)			
4.5 आपको शौचालय के इस्तेमाल के लिए कितनी देर लाइन में खड़ा होना पड़ता है? (मिनिट में लिखें)			
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
4.6 आपका सार्वजनिक शौचालय कितनी बार साफ़ किया जाता है?	्रिष्पते में दो बार महीने में दो बार दिन में एक बार महीने में एक बार दिन में दो बार अन्य हपते में एक बार	्र एते में एक बार ्र हपते में दो बार महीने में दो बार महीने में एक बार दिन में एक बार अन्य दिन में दो बार	अन्य महीने में दो बार िंदन में दो बार रिन में एक बार महीने में एक बार
अन्य हो तो लिखें:		1 2	
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
4.7 क्या आपको कभी खुले में शौच जाना पड़ता है?	्र हाँ ् नहीं	्र हाँ ्र नहीं	्र हों ्र नहीं
4.8 क्या आपके शौचालय में हात साफ़ करने साबुन या सेनिटायझर उपलब्ध होता है ?	े हाँ े नहीं	्र हाँ ्र नहीं	्र हाँ ्र नहीं
4.9 क्या आपको शौचालय जाते समय अपने घर से पानी ले जाना पड़ता है?	े हाँ े नहीं	ं हाँ ा नहीं	्र हाँ ्र नहीं
	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
4.10 आपके घर का कचरा कहाँ फेंका जाता है?	ा आपके पर से कचरा उठाने कोई आता है आप करीबी कचरा पेटी में फेंकते है गटर में	आपके पर से कचरा उठाने कोई आता है आप करीबी कचरा पेटी में फेंकते है गटर में	आपके पर से कचरा उठाने कोई आता है आप करीबी कचरा पेटी में फेंकते है गटर में
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
4.11 बीएमसी से वह कचरापेटी	े रोजाना े हर हपते े अन्य	ोजाना हर हपते अन्य	े रोजाना अन्य हर हपते

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4.11.a कचरापेटी की सफाई अगर अन्य दौरान	में हुई है तो कब?		
4.12 अगर आपके घर से कचरा नहीं उठाया जात	ता है तो इसका कारण क्या है?		*
विभाग ५ : निजी स्वछता			
5.1 कोरोना से बचने के लिए हमें क्या-क्या करने वह जो-बो बोले. साथी वह सब सेतेश्ट करे — मास्क पेतेन्ना — शारीरिक दूरी रखना — बार बार हाथ धोना — कपठे साफ़ रखना — बाहर से पर आने के बाद नहाना — सेनिटाइजर का प्रयोग — पर को स्वछ रखना			*
5.2 जब आप पानी भरने, शौचालय, दुकान या अ	न्य जगह जाते हैं तो लोगों से शारीरिक दुरी कैसे बन	ाये रखते है? विस्तार में बताये :	
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
5.3 आप हफ्ते में कितनी बार पूरा बदन धोकर नहाते है?			
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
5.4 आप धोये हुए साफ़ कपडे कितने दिनों तक पहनते है?	् एक दिन ् दो दिन ् दो दिन से अधिक	े दो दिन े एक दिन े दो दिन से अधिक	े दो दिन े एक दिन े दो दिन से अधिक
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
5.5 क्या आपके घर में किसी को त्वचा / चमड़ी की कोई बीमारी है?	्र हाँ ्र नहीं	्र हाँ ्र मही	े हाँ नहीं
-	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
5.6 जब आप बाहर से घर लौटते हो तो क्या आप हाथ और पैर साबुन या सेनिटायझर से धीते हो?	कभी कभी नहीं अधिकतर हाँ	कभी कभी नहीं अधिकतर होँ	्र अधिकतर ्र कभी कभी ्र नहीं ्र हों
5.7 क्या आप शौचालय या मुतारी के हर इस्तेमाल के बाद साबुन से हाथ धोते है?	कभी कभी नहीं अधिकतर हाँ	कभी कभी नहीं अधिकतर हाँ	अधिकतर कभी कभी नहीं हाँ

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5.8 क्या आप खाना पकाने और खाने से पहले अपने हाथ धोते है?	कभी कभी नहीं अधिकतर हाँ	कभी कभी नहीं अधिकतर हाँ	्र अधिकतर ् कभी कभी ् नहीं ् हाँ
5.9 काम से घर निकलते समय क्या आप हाथ और पैर साबुन या सेनिटायझर से धोते हो	कभी कभी नहीं अधिकतर हाँ	ं कभी कभी ं नहीं अधिकतर ं हाँ	अधिकतर कभी कभी नहीं हाँ
5.10 अगर आप अभी काम को जा रहे हो तो क्या	सावधानी बरतते हो?		*
5.11 कोरोना से बचने और शारीरिक दूरी रखने वे हाँ नहीं 5.11.a अगर हाँ, तो इन सुविधाओं को कैसे बेहत	o तिए क्या आपको अब से अधिक पानी और शौचा प्राचित्र र बनाया जा सकता है?	तय की उपलब्धता की ज़रूरत है?	*
वेभाग ६ : महिलाओं के लिए			
	तालाबंदी के पहले	तालाबंदी के दौरान	तालाबंदी के बाद
6.1 माहवारी के समय, क्या आपको साफ़ रहने के लिए अधिक पानी की ज़रुरत पड़ती है?	ं हों ं नहीं	ं नहीं ं हॉ	्र नहीं ्र हाँ
6.1.a अगर हाँ, तो क्या यह अधिक पानी आसानी से उपलब्ध होता है?	ि हाँ ि नहीं	ा नहीं ि हाँ	्र नहीं ्र हाँ
6.2 क्या आपको निजी जगह पर जलन , खुजली या ऐसी कोई चमड़ी की बीमारी झेलनी पड़ी है?	ि हाँ ि नहीं	ा नहीं ि हाँ	्र नहीं ्र हाँ
5.2.a अगर हाँ, तो कैसी बीमारी ?			
वेभाग ७: तालाबंदी के दौरान की अन्य त्रासदी (तः			
7.1 तालाबंदी में कोरोना से बचने के लिए आप, अ	ापके परिवार और पड़ोसियों ने क्या खास कोशिशें	की?	
7.2 क्या आपने कभी बीएमसी ऑफिस या नगरसे हाँ नहीं			*
7.2.a अगर हाँ, तो उन्होंने क्या कहा या किया? वि	स्तार मं बताये :		

7.4 तालाब	
	iदी के दौरान आपको सामाजिक संस्थाओं की तरफ से कोई सहयोग मिला?
	दि। के दौरान आपका सामाजिक संस्थाओं का तरफ से कोई सहयाग मिला?
्र नहीं 	
	र हाँ, किस प्रकार का सहयोग
	चुन सकते हैं
राश-	Ŧ
पका	हुआ खाना
पैसे	
हैजि	न किट
सरव	गरी स्वीम की जानकारी
गांव	जाने के लिए मदद
अन्य	
SHE	
7.4.b 317	र हाँ, कौनसी संस्थाएं
वेभाग ८: र	जानकारी लेने वाले साथी ने भरने की जानकारी : (पूरी बस्ती के लिए एक बार यह भरना है)
B.1 बस्ती :	DI 1314 (
3.2 बीएम	सी का वार्ड कौनसा है?
O Aw	ard
O Bw	
○ cw	
O Dw	and .
○ Ew	ard
O F/N	ward
○ F/S	ward
0	ward
O G/N	
○ G/N	
O G/s	ward
O G/s	
G/S	ward
G/S H/E H/W	ward ward
G/S H/E H/W	ward ward  / ward ward
G/S H/E H/W K/E K/W	ward ward  V ward ward  V ward
G/S H//E H/W K/E K/W	ward ward  V ward ward  V ward  V ward
G/S H/E H/W K/E K/W LW M/E	ward ward  V ward  ward  V ward  ard  E ward
G/S H/E H/W K/E K/W LW M/E	ward ward  V ward  ward  V ward  V ward
G/S H/E H/M K/E K/M	ward  Ward  Ward  Ward  Ward  Ward  Grand  Ward  Ward  Ward  Ward  Ward
G/S H/E H/W K/E K/W L/W M/W	ward  Ward  Ward  Ward  Ward  Ward  Grand  Ward  Ward  Ward  Ward  Ward
G/S H/E H/M K/E K/M LW M/E M/N N N	ward
G/S H/E H/W K/E K/W L W M/E M/V N W P/N P/S	ward
G/S H/E H/M K/E K/M L W/ M/V N W P/N P/S R/C	ward  / ward  ward  / ward  / ward  / ward  ward  / ward  ward  ward  ward  ward  ward  ward  ward  ward  ward
G/S H/E H/M K/E K/M L W/ M/M N W P/N P/S R/C R/C	ward

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8.3 नगरसेवक कौन है	*
8.4 बस्ती को कानूनी ब	*
() हाँ	
ं नहीं	
8.5 जमीन का मालिक	ਲੀਜ ਫੈ?
8.6 बस्ती में बिजली क	गै परिस्थिति क्या है? (कानूनी या गैर कानूनी कनेक्शन है या नहीं. कितना महीने का खर्चा होता है.)
8.7 जानकारी लेने वाले	वे के ऑब्सेर्वशन्सः विस्तार में लिखे