

Catalyzing Locally Driven Strategies in Mumbai Slums for WASH

December 2021

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**Center for Water and Sanitation, CRDF, CEPT University
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This report has been prepared by Society for the Promotion of Area Resource Centers (SPARC) and documents the work done by SPARC and its networks of the National Slum Dwellers Federation and women’s collective, Mahila Milan in two locations mentioned above. A qualitative and quantitative study of these areas was helpful in determining access to water sanitation, awareness, identifying gaps, and preparing action plans. The team greatly benefited from discussions and meetings held with the government officials at the ward and municipal level – Engineers at the ward level, Ward Committee Chairman MEast ward, Councillors, District and State TB Officer, MLAs, Head of Maintenance Department – garbage and solid waste maintenance are ones who supported and provided their inputs to the project activities. Sincere thanks to the CEPT team for providing valuable technical assistance and advice throughout the project duration.

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Author

Designation

Organization

1. Executive Summary

1.1. Introduction

With the advent of COVID pandemic in March 2020, Government institutions in India declared full and then extended partial lockdowns, prioritized health services and urged citizens to follow three self-discipline rules – wear masks, sanitize frequently and maintain ‘social distance’. However, following rules dictated by the pandemic guidelines can be extremely challenging to some populations, the urban poor for example, who largely live in informal settlements or slums. This project “Catalysing locally driven strategies” was proposed in this context to understand current situation of essential access of slum residents, the challenges it posed in following these guidelines, and therefore the vulnerabilities which they were already facing, and what can be done to address them to build long term resilience to such epidemiological responses.

This report documents the work of SPARC and its community network organizations – National Slum Dwellers Federation and Mahila Milan during the pandemic and in the immediate aftermath of the strict lockdowns around the objectives of the above-mentioned project. The work was carried out in two wards of Mumbai – G North ward covering Dharavi alone, and M East ward covering both slums and slum relocation colonies. This report documents work done during the period 30 June 2020 – 30 November 2021.

1.2. Project Objectives

The project had 4 specific objectives: (1) Build strong local knowledge through robust data collection by residents and aided by professionals (2) Measure gaps in services, infrastructure and outreach of state processes (3) Use data and the measured gaps to develop actions addressing them and (4) Build two-way accountability between the residents and the city administration, with activities flowing chronologically from the first objective to the fourth one.

1.3. Project Activities

Building of local knowledge required; collecting basic set of data around access, adequacy, quality and technical challenges on basic services. Information such as existing levels of community organization, interventions by other actors, added to the knowledge, which was collected through a combination of data collection methodologies. Settlement/Area level surveys, Household Surveys, and data on community toilets were used as tools for this data collection. Simple mapping exercise provided additional data visualization support. Cadastral mapping of specific locations was used to determine technical challenges to

connecting to the sewer networks. Data analysis of this collected data clearly pointed out gaps in service provision, reasons for the access challenges and set the steps for developing actions for addressing them. The building of two-way accountability between residents and city administration required several sittings in meetings with residents, their locally elected political representative and technical persons from the Municipal ward office and triangulation between them to decide course of action towards addressing the challenges. A separate SOP document will describe a practical methodology to build this accountability system.

1.4. Analysis

Analysis of the data prompted prioritized action around improvement in access to sanitation. Two important areas of action became apparent and were therefore taken up: (1) Community toilet septage management – challenges with regular desludging, and connection with sewage network and; (2) access to Individual Household Toilets (IHHT). Challenges across the geographies that came up during the data collection included : high costs of septic tank cleaning of community toilets; poorly maintained community toilets not managed by communities; technical challenges to connecting septic tank outlets to nearby sewage network lines; unavailability of nearby sewage lines; impossibility of safe faecal disposal from IHHT due to unavailable, or technically challenged sewage networks causing disposal into non sewage drain networks; and administrative challenges of addressing them, as well as extending financial subsidy towards IHHT to eligible and interested families.

The issue diagnosis pointed that the challenges emerged from both technical feasibility issues as well as administrative non-coordination and therefore requires sustained investments in facilitating coordination. This forms the core of the SOP of “Developing 2-way accountability”, and also requires taking up additional actions as logical steps to specific problems, beyond the project period, which SPARC and its community network organizations are committed to.

1.5. Action /Interventions

Interventions in the area of community and individual toilets have been recommended during the study. Repairs of community toilet blocks, provision of water electricity, connection to sewer networks, safety concerns, maintenance are some of the areas of intervention. Provision of toilets at household level in slums, proper sewer connection for waste disposal are areas that need intervention at the household level.

1.6. Effectiveness

Looking at the technique and development, councillors from the neighbouring slum communities and wards within Dharavi and M-east also showed interest and suggested names of areas within the wards where this should be replicated to provide more and more households with individual toilets. In addition, they also started taking responsibility of writing letters to the ward for improvement in community toilets and connecting them to the sewer lines. The local corporators from M-east, who had already been communicating and trying for the same for their localities, suddenly saw some hope in getting work done from the ward. The work undertaken as part of this project, it has opened the possibility of working in more wards of Mumbai and also in small medium towns.

1.7. Impact and Outcome

This project helped to reconfigure restrengthen the relationship between the city government civil society and communities. The city recognizes that communities have capacities to develop their own solutions, supported by local NGOs. Many people who have spent their own financial resources in constructing individual toilets, CBOs that had to put in their own money to get the septic tank cleaned will now have support either financially or technically from the city. Additionally, settlement-wide improvement in the form of a comprehensive sewage system for every household and community toilets that are still not connected to the main sewer line, will benefit the community as a whole, the process will develop a long-standing relationship between the communities and stakeholders at the ward city level. One of the major outcomes has been regularizing of meetings internally with the team at least once in a fortnight, strengthened bond with the local corporators and city officials. The progress made so far has been because of the assessment done in different areas (WATSAN health education etc), also it is clear what the role of the community /residents are vs that of the city has also been some of the outcomes through the project. It is also produced the foundations of a new strategy by which the systems development is done by our team in which we look at the technical elements, community involvement and demand creation and look at ways by which the local politicians and the city ward administration can redistribute their roles and relationships in the production of the solution where it's possible as you put it but also to look at those issues where there is no allocation of money or the infrastructure doesn't provide it, people are yet not ready. We develop a systemic way of testing all these things. People's insights knowledge and their own ways of managing different things provided solutions and responses that we began to appreciate on one hand and consolidate on the other hand. This will be along with health a very important element of what we will continue to do as the COVID threat recedes.

1.8. Sustainability

There are strong indications from the project that the effects of the study can be sustained through community mobilization efforts. It was indicated by residents, communities and local groups that this exercise of learning is important and should be carried forward beyond their own settlements to make this a sustainable process taking it to a citywide level. Clearly there is poor logistics at the city state and local level to monitor water and sanitation activities as well as other emergencies comorbidities etc and therefore lot more effort needs to be put in to have effective monitoring systems in place. It has also been reported that while the local political leaders are very support, the same is expected at the ward and city level to make it more sustainable process.

1.9. Conclusion

On the whole, the project was effectively and efficiently implemented by the team both professional and technical. The conspicuous support from political leaders, local community groups, water sanitation department of the ward, councillors, also contributed to the project progress. This project has also given hopes and opportunities to existing community-based organizations, local groups, enthusiastic political leaders to take up issues on behalf of the communities and take it up at higher levels to be resolved.

1.10. Way forward

As a way forward, from the main learning from this project, SPARC and its network will continue to pursue active coordination to address administrative challenges with safe and convenient sanitation in the select slums and seek to pursue it in additional slums across the two wards. New learning from these engagements will be actively fed into the SOP on “Developing two- way accountability”.

This report is structured in 4 main sections:

Section **(A) Project Background** which details on the premise under which this project was undertaken, and will describe how learning along the way shaped action areas and issue prioritization.

Section **(B) Methodologies in Project Activities** will detail the different methodologies used for the project activities.

Section **(C) Findings from the Assessment** will detail the analysis of the collected data and the fourth

Section **(D) Actions** will detail the activities and actions taken based on the findings.

A final Section will conclude and lay out the next steps, beyond the project contract.

2. Project Background

2.1. Project Rationale

At the beginning of the COVID pandemic in March 2020, the general perception was that, it is a disaster like most others that have happened in the past and things will soon return to normal. However, by mid-June 2020, it was clear that there was no indication of when this pandemic will end, no clear approach to protecting oneself other than isolation, masks and hand washing. This seemingly simple strategy has not worked for almost all residents of informal dense settlements. Their wage loss, inability to get food and managing children and their online classes at home was challenging enough to trounce taking protective measures that were within their remit. This was further exacerbated by instructions from media and state communications which were difficult to follow.

The global inability to produce a “medical response” further made more difficult by clearly unpreparedness of city state national and international preparedness had both bewildered and confused the informal inhabitants of the city. And the global and national imagery of addressing this pandemic has by and large been that of addressing this challenge as if it is a ‘war’. So clearly the absence of being cared for, for their needs being met by demonstration of concern by institutions of the nation state local and national, punitive action for noncompliance was the main message the urban poor got.

Over the year various interventions in Sanitation have been carried out in Mumbai city starting with Slum clearance Drives, Bombay Urban Development Program, Prime Minister Grant Project – where slums were demolished to be upgraded and redeveloped thus granting land tenure, sites and services and safe and hygienic sanitation conditions. Projects like Mumbai Sewerage Disposal Project, Slum Sanitation Project were more with a focus on providing community toilet facilities in slums, community participation and mobilization through partnerships with NGOs, contractors and others. . Most recent was the Swachh Bharat Mission to make cities open defecation free, more focus on individual household toilets, community toilets to be provided where IHHT were not possible.

Even after having a number of projects, programs and policies in place to improve slum sanitation and provide adequate sanitation facilities to the urban poor, official reports pre 2011 show –no access to adequate sanitation, more than 50% populations still depend on community toilets, open defecations s till prevalent, dependency on seats has increased from 50/seat to 200/seat. Apart from inadequate toilets, there is also lack of water, electricity, safety of women and children, no proper sewage disposal mechanism in place, maintenance, and supervision of these toilets.

It was in recognition of both the assumed long-term impact of this pandemic as well as the need to build serious capacity and resilience within networks we already have association with, and to build a process that would consolidate their identity their ability to plan for

themselves as well as make demands on others that this project was conceived. Sanitation has been one of the key challenges that the alliance has been working on in every city where it works. The focus is to enable local communities to negotiate for accessing subsidies and develop solutions with local professionals and involve local residents throughout the process as a move towards insuring the sustainability of the implemented solutions.

2.2. Project Overview

Center for Water and Sanitation (CWAS) at CRDF, CEPT University has been supporting Government of Maharashtra (GoM) in implementing the Swachh Maharashtra goal of making all cities ODF/ODF++ since 2015. CWAS will be supporting development of strategies in catalyzing locally driven strategies to drive change by working with SPARC who will work with resident communities to primarily:

- Build strong local knowledge through robust data collection by residents and aided by professionals
- Measure gaps in services, infrastructure and outreach of state processes
- Use data and the measured gaps to develop actions addressing them
- Build two-way accountability between the residents and the city administration

The purpose of the grant was to support and strengthen existing federated groups and community groups to empower residents to participate in the change that is urgently needed. This change entails improved local knowledge, better communication with the city administration and addressing underlying gaps to strengthen capacity of informal settlements to be resilient to possible future waves of COVID-19 or any other infectious diseases.

This project intends to study the impact of the COVID 19 pandemic, an example of an extreme event, on informal communities. In most Indian cities this is where most of the urban poor reside. These communities are from two wards withing Mumbai – M-east and G-North. The project explores various aspects of these settlements, like location, accessibility, infrastructure, and amenities present, and self-governance organization. Besides representing issues related to infrastructure that authorities consider as the primary reason for their vulnerability, these aspects, also consider the provision of tenure, modes of governance that go a long way to empower and create a sense of agency among communities.

Thus, this project intends to involve communities to be a part and inform its outcome. It would map their existing self – organizational system that they have evolved to assert their right to the city. The residents of such communities, over time, have negotiated for infrastructure and amenities within these neighbourhoods to create their own living and working environments.

2.3. About SPARC and its alliance

The alliance of SPARC, Mahila Milan and NSDF seeks to develop decentralized capacity of city federations of NSDF and Mahila Milan to firstly, reduce the dependency on the NGOs to initiate and execute projects; secondly to establish a working relationship with professionals, politicians and administrators to serve the needs of the communities and neighbourhoods they serve; and thirdly to become learning laboratories so others can learn from their experiences.

The Society for the Promotion of Area Resource Centres (SPARC) is one of the largest Indian NGOs working on housing and infrastructure issues for the urban poor. SPARC was set up in 1984 by a group of development professionals who believed that they needed to create new relationships with the urban poor. SPARC began work with the poorest of the poor in Mumbai's pavement slums, where they formed a network of women's collectives called Mahila Milan (MM). MM is a decentralized network of poor women's collectives that manage credit and savings activities, enumerations, and sanitation and housing construction projects.

In 1986, SPARC and MM entered into a partnership with the National Slum Dwellers Federation (NSDF), a broad-based organization of the urban poor founded in the mid-1970s. NSDF organizes and mobilizes poor urban communities, links them to a national network, supports them to set a development agenda, and negotiates with resource-providing institutions.

SPARC, NSDF and MM – collectively referred to as the Alliance – work together to produce solutions that meet the shelter, sanitation and development needs of the poor in India's cities. SPARC provides the administrative, financial, policy, documentation and other support necessary for these processes to be successful on the ground.

2.4. Project Geography

The project was undertaken in the two project locations of Mumbai – Dharavi-G-North ward and Relocation Colonies and informal settlements in ward M-East (Indian Oil, Lallubhai compound, Vashinaka)

Table 1 Geographical Coverage for the two wards - Dharavi and M-East

S No	Indicator	Number	
		Dharavi	M-East
1	Geographical coverage		
	Number of wards the area is spread across	2 wards – G-North (Dharavi) and M-East (Rehab Buildings and Slum colonies)	
	Population	800,000 (current population) 599039 (census 2011)	26,117 (Covered under the project) 807720 (census 2011)
2	Facilities		
	Number of health facilities	Dharavi	M-East
	Municipal Dispensaries	9	7
	Municipal Health Posts	8	
	Private Hospitals	10	10
	Educational institutions		
	Municipal Schools	23	15
	Private Schools	6	10
	Anganwadi centres	100	162
	Community toilets	180	500

2.5. Dharavi

Dharavi is recognized as one of the densest slum areas of Asia and the world's one of the largest slums located in India's financial Capital-Mumbai. Around 8.5 lakh people live in approx. 55,000 dwelling units in Dharavi with a population density of 3.4 lakh per km² and covers around 535 acres of land. There are nearly 15,000 single-room factories and 5000 businesses presenting a very vibrant mosaic of different religions, castes, languages, provinces, and ethnicities, dependent on one another and the city socially, culturally and economically.

Dharavi has literally risen from the marshes. First the houses had stilts, then the land was reclaimed little by little, then built up brick by brick. In other words, it is a testament to the survival instincts of the poor – and the success of incremental development. Bit by bit, the poor developed the land, raised families and neighbourhoods, then a full-fledged township as generation after generation went to work. Global capital investment companies, local real estate developers and the State Government have all been viewing Dharavi as a privileged gateway to Mumbai’s transformation.

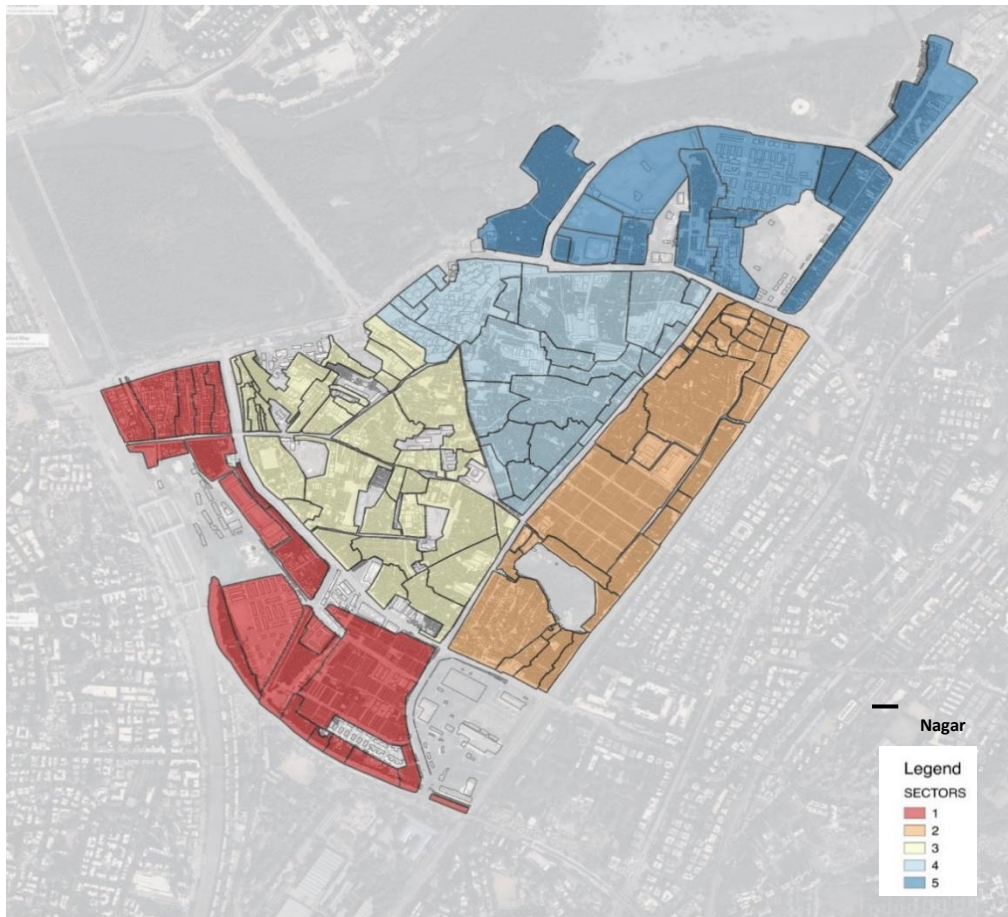


Figure 1 Sectors and Nagar of Dharavi

2.6. M-East -Mankhurd

Since the 1960s M-east ward has been home to migrant populations that immigrate to the city from different parts of India, as well as those that have been resettled from slums in the city’s center. covers slum clusters of Govandi, Vashinaka, Baiganwadi, Mankhurd, Shivaji Nagar, Cheetah Camp. The areas are overcrowded, there is a lack of ventilation, sanitation and overall living conditions are poor. M-east ward covers Chembur East, Mankhurd, Govandi, Deonar and Shivaji Nagar. Comprises of over 256 slums and 13 resettlement colonies. It is home to over 8lakh families. Three relocation colonies are being covered

through this project –Lallubhai Compound, Natwar Parekh and Vashinaka. Also some of the slum colonies are being reached out through this project.

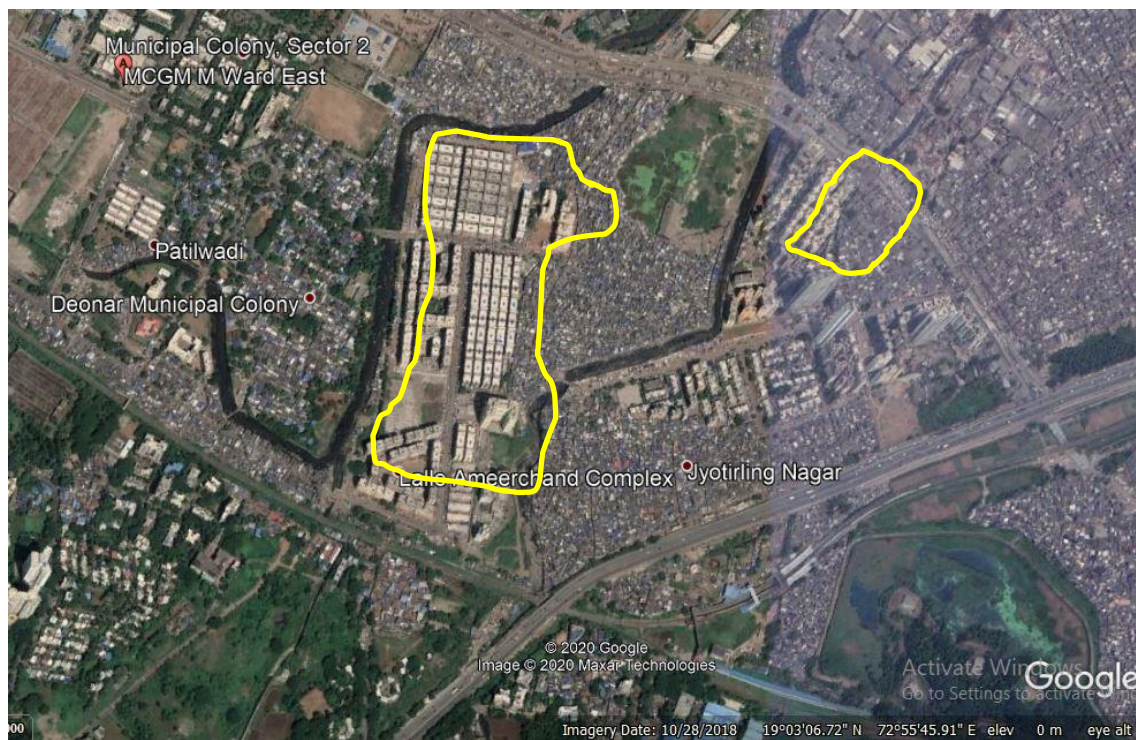


Figure 2 Project area in M-East ward



Figure 3 Slum settlements in M-East ward

3. Project Activities and methodologies used:

3.1. Project Activities

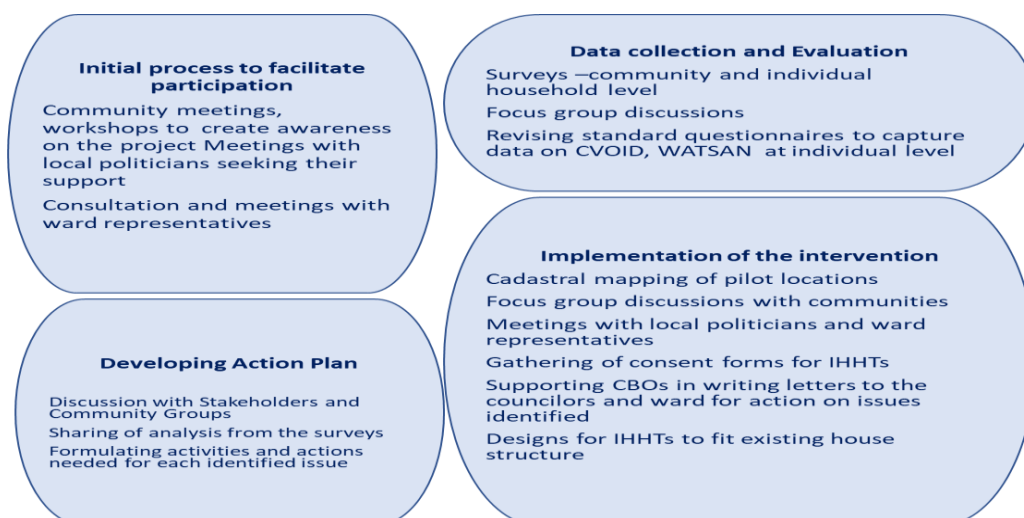
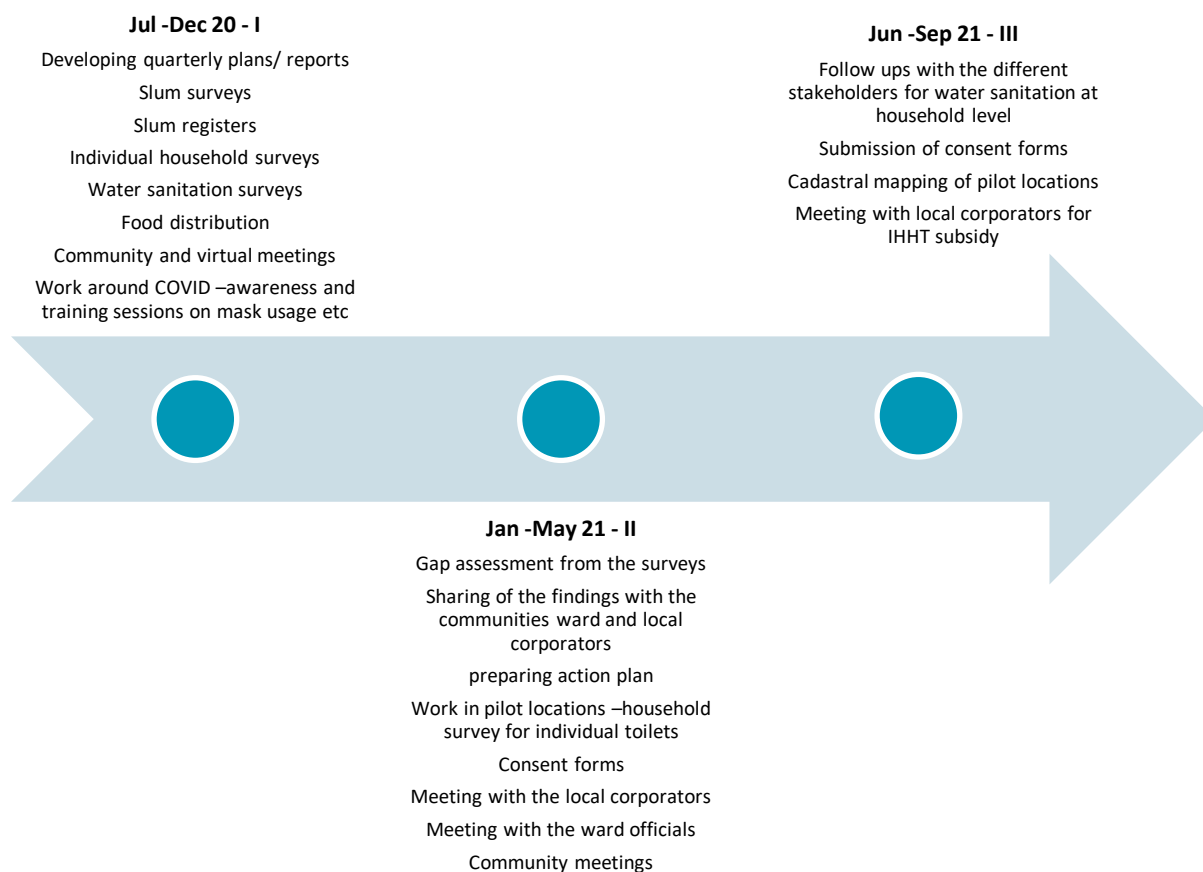


Figure 4 Process of activities

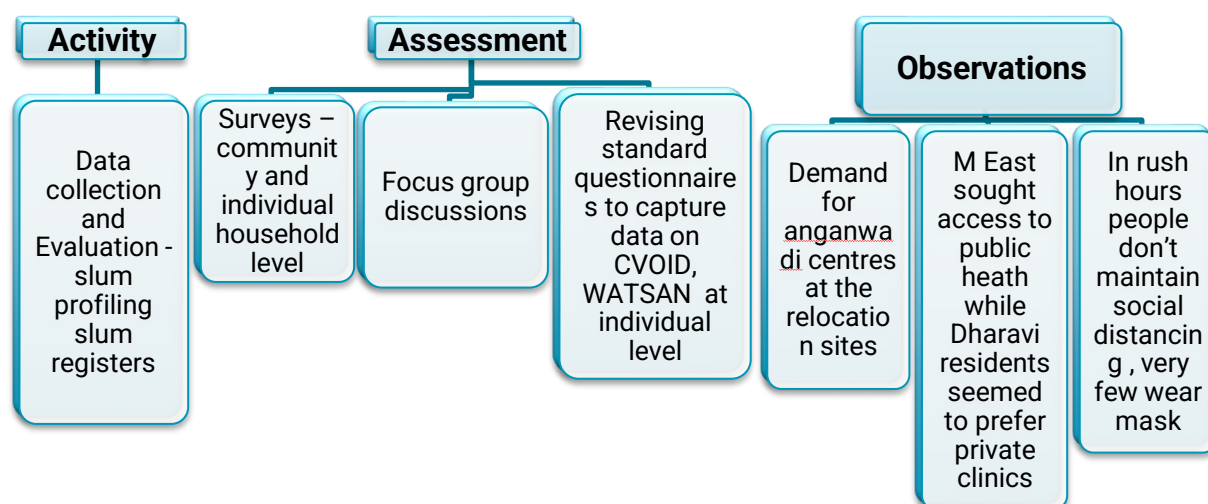
On a timescale, the progress of activities was as follows:



JUL – DEC 20 – I - DEVELOPING QUARTERLY PLANS / STRATEGIES TO BEGIN WORK AND DATA COLLECTION

In this quarter the following activities was undertaken with a view to develop a quarterly plan for the period of the grant. Putting together a communication strategy to build an existing leadership we work with about the activities and their logic and testing the questionnaires

- The back-office work of creating a data base and maps of amenities and services and building a reframing of how much required outcomes emerge from community identification of what they can do and what the state city institutions must do.
- Focus on different levels of leadership to ensure men women and youth are involved in processes that are supportive to each other.
- Community meetings, workshops to create awareness
- Meetings with local political leaders to seek their support
- Consultations with ward representatives
- Data collection through– slum profiles, slum registers, sanitation assessment, individual household surveys on water, sanitation, health, covid
- Challenges arising from the surveys
- Challenges arising from COVID and lockdown
- Exploring linkages and communication with municipality health and other institutions
- Exploring what they should be doing themselves



In Dharavi, basic information on the settlement, water, sanitation and solid waste management, health and covid data has been collected as part of slum profiling. 99 profiles of nagars/societies from Dharavi sector 4 have been filled. Similarly in M-East, data collection work began in the first week of July. 38 profiles of 14 housing cooperative societies from Indian Oil, 10 societies in Lallubhai Compound and 14 housing societies in Vashinaka that form part of the relocation colonies where slum dwellers affected by various infrastructure projects were relocated have been conducted.

At the individual household level, there are two kinds of surveys conducted – slum registers and individual household survey. The former contains information on number of members in a family and the necessary identity documents they hold. In a way it gives us the approximate number of households and population for a slum settlement. The latter contains details of services and infrastructure provided to households at a slum level. The discussions of the Dharavi Redevelopment plan have begun once again, in the midst of which the NSDF leaders had a discussion with representatives and leaders from different clusters to begin the process of slum registers. As there is no clarity on the redevelopment plan, residents are not in a position to begin with any such activity but will do so as soon as they see some things moving forward their way.

In M-East, 11 areas (3 relocation buildings and 8 slums) have completed the basic slum register process with a total of 4057 families responding.

JAN – MAY 21 – II - OBSERVATIONS / ISSUES IDENTIFIED FROM THE SURVEYS AND WORKING ON PILOT LOCATIONS

The survey tools were used to assess the present situation on WASH as well as individual household toilets, water supply, health services, anganwadis, education etc. Activities like discussion with the residents, meetings with local councillors, ward representatives, local leaders. The workplan created to achieve the objectives were shared to ensure a coordinated implementation of the activities under his/her supervision in close collaboration with the technical WATSAN team, the Project Implementation Coordinator and the field volunteers. Collaborating closely with all the groups working on the field to conduct regular assessment while implementing the activities and make note about the needs and vulnerabilities of targeted populations in regard to water, sanitation and hygiene issues. Collaborating closely with the

JULY – SEPTEMBER 21 – III - FOLLOW UP ACTIONS

As a result of the activities conducted during the project period, an action plan was developed to resolve those issues arising from the surveys and group discussions. For each intervention there were activities listed out both for the project locations as well as for the general water and sanitation interventions. Follow up on previous activities were done at this time, for instance, letters previously written by the CBOs to the ward for sewer connection, repairs, provision of water and electricity were all followed up. Following up with local councillors for availability of financial resources for individual toilets. Some of the other activities revolved around getting consent forms for individual household toilets from the two pilot areas. Surveys in other localities of Dharavi, to assess the need possibility of individual toilets was taken up in the five sectors.

3.2. Methodologies

Slum Survey

Settlement profile as we call the slum survey, consisted of a qualitative and quantitative survey, as well as a geographic reference map of the settlement boundary which marks available basic services. The data is collected through community meetings and through GIS mapping of the settlements on the ground. The settlement profile creates a general picture of the settlement and becomes the foundation of organizing around collectively identified and prioritized needs at the settlement level. Survey team along with support from Mahila Milan and community leaders collect and analysed data about their settlements.

Team used a settlement profiling form which has a questionnaire focusing on demographics, infrastructure and priorities of people in the settlement. The members of Mahila Milan made changes to this form to suit the context of informal settlements in India. Some of the points from the form are as below:

- location/accessibility/status of slums,
- Demographic characteristics
- Nature of water, sanitation, energy, and transport infrastructure
- Health and Education amenities
- Structure of Governance
- perception of inhabitant on the future of the settlement

Household Survey

A slum register is brief information about every house in the settlement. Each nagar/ slum prepares its own register of families with all information which federation call base line data. All aspects of the family are recorded – name of the head of the household, number of people living in the family by age, contact numbers, status of ownership of the structure, do you have a ration card that is made use of, if any member is going through any illness or disease like TB, BP, Diabetes etc. and will be digitalized. Its purpose is that it serves as their own ready reckoner to pick information related to a range of actions they seek. E.g., immunization, wage linked compensation, job seeking loans etc.

Individual Household survey conducted in the five sectors of Dharavi, three relocation colonies and four slum settlements in M-East. Response on WATSAN services garbage education social institutions at individual level was collected pertaining to quality, adequacy and need. Interventions in the area of COVID, support provided by various institutions, presence of other social organizations was gathered in case communities need to approach them in the future.

Community Toilet Survey

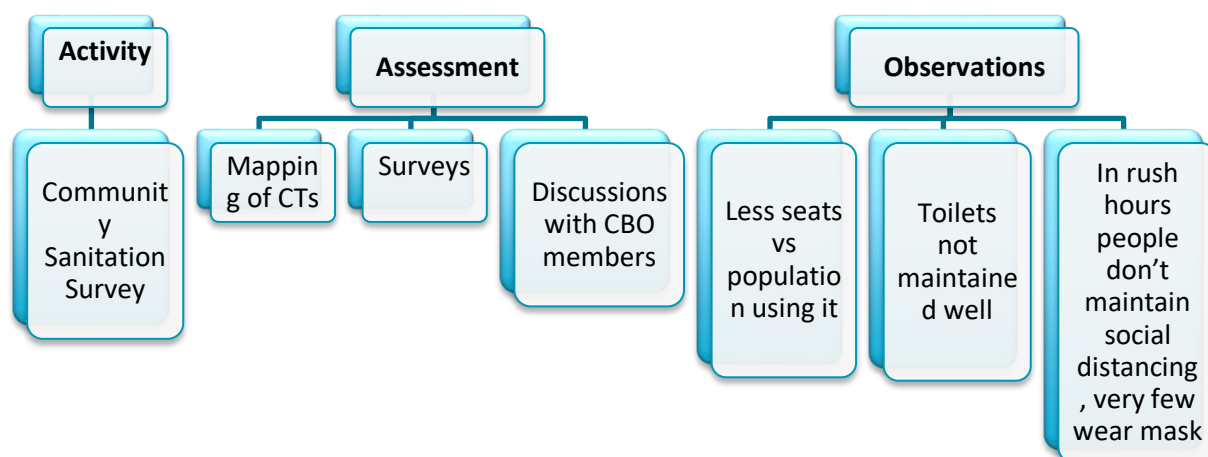
Community Toilet survey where the federations did an assessment of the community toilets to identify the challenges that may have been aggravated during the pandemic. The purpose of this activity is threefold: First to get a clear picture of amenities and services provision and their present status. Second to build ownership of ensuring the services provided are acceptable and there is a clear picture of what they as communities can do and what the city and others can do. Third, to later explore what changes are possible and how those would be explored. The potential of exploring sanitation within houses was also undertaken in two pilot locations.

Over the year various interventions in Sanitation have been carried out in Mumbai city starting with Slum clearance Drives, Bombay Urban Development Program, Prime Minister Grant Project – where slums were demolished to be upgraded and redeveloped thus granting land tenure, sites and services and safe and hygienic sanitation conditions. Projects like Mumbai Sewerage Disposal Project, Slum Sanitation Project were more with a focus on providing community toilet facilities in slums, community participation and mobilization through partnerships with NGOs, contractors and others. Most recent was the Swachh Bharat Mission to make cities open defecation free, more focus on individual household toilets, community toilets to be provided where IHHT were not possible.

Even after having a number of projects, programs and policies in place to improve slum sanitation and provide adequate sanitation facilities to the urban poor, official reports pre 2011 show –no access to adequate sanitation, more than 50% populations still depend on community toilets, open defecations still prevalent, dependency on seats has increased from 50 person/seat to 200/seat as per our surveys, though the number is small but it still talks about the sanitation situation. Apart from inadequate toilets, there is also lack of water, electricity, safety of women and children, no proper sewage disposal mechanism in place, maintenance and supervision of these toilets.

The following data for each toilet was collected:

- Name of the area/ settlement
- GPS coordinates
- Who constructed the toilet
- How many families use it
- Existing seats for both men and women
- Physical condition of the toilet block
- Who maintains the toilet block
- Waste disposal mechanism
- Water and electricity provision
- Structural Repairs Requirement



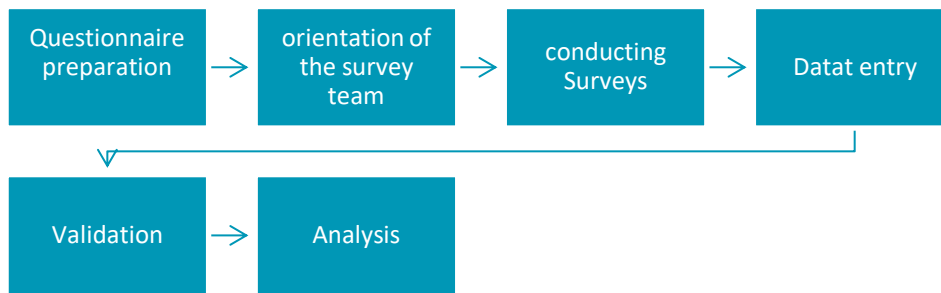
Mapping

The methodology is primarily “participatory”, and community led with support of technical persons. The project involved the residents throughout the study. A group of technical support teams along with Mahila Milan and federations along with their networks within these slums led the process of mapping and documentation. The team used digital tools such as GPS devices and smart phones with references from satellite images to mark the various infrastructure services and amenity locations.

Data Assessment

The data assessment methodology considers both qualitative as well as quantitative techniques, both performed by the team of Mahila Milan Federation and technical team. The tools used for qualitative assessment were: through observations, informal discussions with the communities and residents, individual interviews.

The quantitative assessment was administered through a detailed questionnaire covering various indicators such as access to water and sanitation, health and nutrition, COVID, satisfactory level of residents to these services, service providers, other NGOs working in the settlement, what are their needs demands etc. the questionnaire was designed by SPARC-NSDF-MM team to meet the needs of the project. From there, the collected data was punched, validated and analysed, and this final report prepared according to the collected data. The steps involved include:



Meeting and community engagement

In the case of covid the MM/federation have been attending and conducting awareness and training sessions on mask and usage and testing thus mobilizing communities through organized women groups (Mahila Milan), supporting the 'Protect your family' campaign, conducted COVID testing camp at two areas with UNICEF and Doctor for You and also supporting the ward in testing screening at various slum locations. Sessions on how to use the mask, making your own mask with support from Doctors for You and UNICEF were initiated. There was also a focus on general health particularly TB.

The training held by MM emphasized more one -

1. proper mask wearing, areas that people should avoid or take precautions especially in market areas
2. What they should do if they see the slightest signs of infection –cold or cough or fever

long with focusing on covid, we slowly moved into other sectors of health –TB, diabetes, cancer, BP, which are also more prevalent in these locations. MM tries to get in touch with different people who can interact with the women to create awareness amongst them on these health issues – what precautions they need to take, how to keep their surroundings clean, what they should eat and avoid eating etc. has been part of the discussions. While doing this, they also get support in different ways from the local corporator, MLAs and not only do they provide support in these locations but also in other areas –slums surrounding the project locations.

To arrange these activities in each area, Mahila Milan had several meetings with local councillors, other actors working on health water and sanitation, for instance Doctors for You that were approached to hold awareness camps.



Figure 6 Meeting with Mr. Vithal Lokare, Prabhag Samiti chairman, explaining the work



Figure 5 The technical and field staff meet with Mr. T. M. Jagdish, corporator of transit camp



Figure 7 Screening and testing of COVID, awareness creation on mask usage and distancing in collaboration with Doctors for You and UNICEF



Figure 8 A group of community members being provided with information

4. Findings from the Assessment

The assessment findings of the collected data are documented below in separate sections.

4.1. General findings from slum and household surveys:

As is evident from the household surveys conducted in Dharavi and M-East slums as well as Rehabilitation buildings, all residents are provided with water connections that are either individual or group. They have timings for water supply fixed by the Municipal Corporation of Greater Mumbai (MCGM); the quality of water is good except during rains when for the first ten to fifteen minutes they get dirty water. In the rehabilitation buildings, the housing cooperative society decides water timings taking into consideration the convenience of the residents.

Rehabilitation buildings have individual toilets, whereas in slum colonies of M-east and Dharavi, more and more people are now constructing toilets within their homes.

Water and Toilets

Table 2 Access to Water and Toilets at Individual Household Level

Service	Dharavi	M-East
	No. of Households	
Individual household toilets	792	45
Households using community toilets	2265	48
No Response	16	
IHHT with septic tank	-	17
IHHT waste disposed off in drainage line that are open	683	7
IHHT waste disposed off in sewer line	78	-
Individual household water connection	897	74
Group water connection	1650	



Figure 9 Waste from IHHT let into open drains & construction of IHHT in M-EAST slums



Figure 10 Water connection at household level in Dharavi and M-EAST slums

4.2. Health Facilities

Health

Private clinics are easily accessible in almost all slum settlements and even in the rehabilitation buildings. For minor illnesses like cough, cold, fever they prefer visiting private clinics and for emergencies, they visit government hospitals like Shatabdi, Rajawadi etc. One can find a private clinic in every lane of the settlement. Also, now mobile medical vans can be seen in most of the areas particularly in M-east ward that are operational on a daily basis from 9 in the morning to 5 in the evening, medicines are provided free of costs, checking of fever, diabetes, blood pressure are some of the services provided. People in large numbers make the most of these opportunities. In Dharavi, as well, communities prefer visiting private doctors as they are easily accessible within their own localities and can afford it, while some prefer visiting government health posts or dispensaries. The only problem with government hospitals is they have to pay for transportation, stand in long queues; get registered which takes a lot of their time.

Table 3 Availability of Health Services at the Ward Level

	DHARAVI	M-EAST
Municipal Dispensaries	9	7
Municipal health post	8	
Private Hospitals		10

Education

Primary education in both project locations has also not been much of an issue, except during the lockdown period when they had to shut down schools and children had to continue with online studies. Major challenge with online studies was if there is more than one child in the house, the mobile has to be shared; it has to be recharged very often, when parents began resuming work, it was difficult for the children to continue with their virtual classes. Both private as well as government schools operate in Dharavi and Mankhurd. Whichever is closest and convenient for the residents, they chose the school accordingly.

Table 4 Number of Schools in the two wards

	DHARAVI	M-EAST
Municipal schools	23	
Private schools	6	10

Social and Civil Society Support

A number of social organizations and groups exists in every slum community that cater to their needs, takes up issues, negotiates on behalf of them, makes a representation to the city, builds their capacity, provides them the benefits and services of the government programs and makes them independent. These could be classified into local resident groups -women groups, youth groups etc and the others could be civil society organizations working in the area of education, health, livelihood etc. each of them has different roles to play but target the same community. Some of these groups and organizations supporting communities were identified and listed below:

Table 5 Groups Functional at the Community Level

	G-North, Dharavi	M-East
Women Groups	29	30
Youth Groups	25	15
Mandals	81	17

Table 6 NGOs supporting communities in different areas of expertise

NGO	Focus Area
G- NORTH DHARAVI	
Child Health Foundation	Children's health
Society for Nutrition Education and Health Action	Works with women and children on health, safety issues, gender
Art Room	Empowering women and children from marginalized communities through Art
Children's Education Society's	Provides education for Nursery, pre-school children, runs sewing classes, conducts health camps for children of rag pickers, scavengers, leather tanners, shoe menders etc.
Alert India	Helps improve the health and social status of people affected by leprosy

Dharavi Diary –Slum & Rural Innovation Project	A platform that involves kids, youth and women in the sphere of education and technology
Drona Foundation	Help children achieve their dreams through education, health, life skills, e-learning
M-EAST	
Pratham	Works on Education
Manav Kalyan Mahila Mandal	Works for the marginalized groups
Apnalaya	Works with the disadvantage and underprivileged groups and communities to help overcome, social, political and economic barriers.
CORO for Literacy	Works on Adult Education of slum dwellers

4.3. Assessment particular to COVID response and protection

Challenges documented:

- Many men have lost their jobs and now fear about their future. Some youths are coming together to think about alternate ways of earning income –change of work
- Asking for jobs to whoever talks to them about lockdown or covid
- BMC schools have not started online schooling yet but have provided books
- Private schools have started online classes, families unable to cope with this as they either don't have smart phones, if they have then internet issues, having more than one child makes it also difficult for them to use the phone for studies, can't recharge phone on time
- The other challenge parents face is, to make sure their child is making full use of the online class, the parent has to keep a constant watch on the child, becomes difficult especially with more than one child
- In case a family has only one mobile device and is used by the male member who also goes out to work, the child has to wait till the father comes home to get access to the phone
- On the other hand, children as they are very fond of mobile phones are enjoying this and as a result is affecting their eye sight
- School also says, if you can't pay the fees, child will not be promoted
- Some anganwadi workers have been appointed as health workers so are unable to open the anganwadi centre hence no supplementary food for children is available.

4.4. Findings from slum, household and toilet surveys:

The project laid specific focus on access to sanitation and therefore a major part of assessment was conducted on access to sanitation and the findings are documented below:

Community Toilet Blocks

This section describes the gaps and challenges identified by communities, individuals, local political leaders. The findings are presented in a tabular format with comments wherever required. Issues can be categorized as –

- Technical issues – structural & Infrastructural facilities
- CBO issues
- User Behaviour

The city provides basic infrastructure through different actors -

- Brihanmumbai Municipal Corporation (BMC) constructs community toilets in slums under various schemes for provision of basic services to the urban poor
- Maharashtra Housing Area Development Authority (MHADA) is an implementing state agency and community toilets are constructed through the members of Parliament local area development scheme

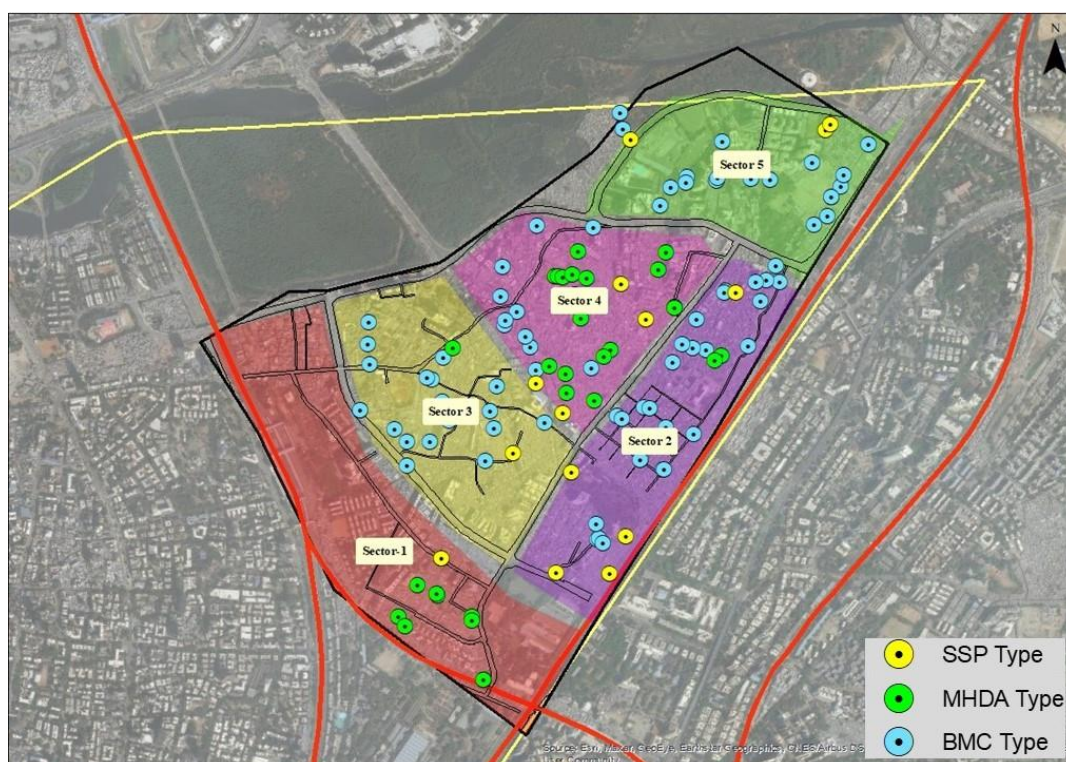


Figure 11 Provision of community toilets by different providers -Dharavi

- Municipal Corporation of Greater Mumbai (MCGM) has been providing community toilets in slums through World Bank initiated Slum Sanitation Program (SSP) executed by Mumbai Sewage Disposal Department

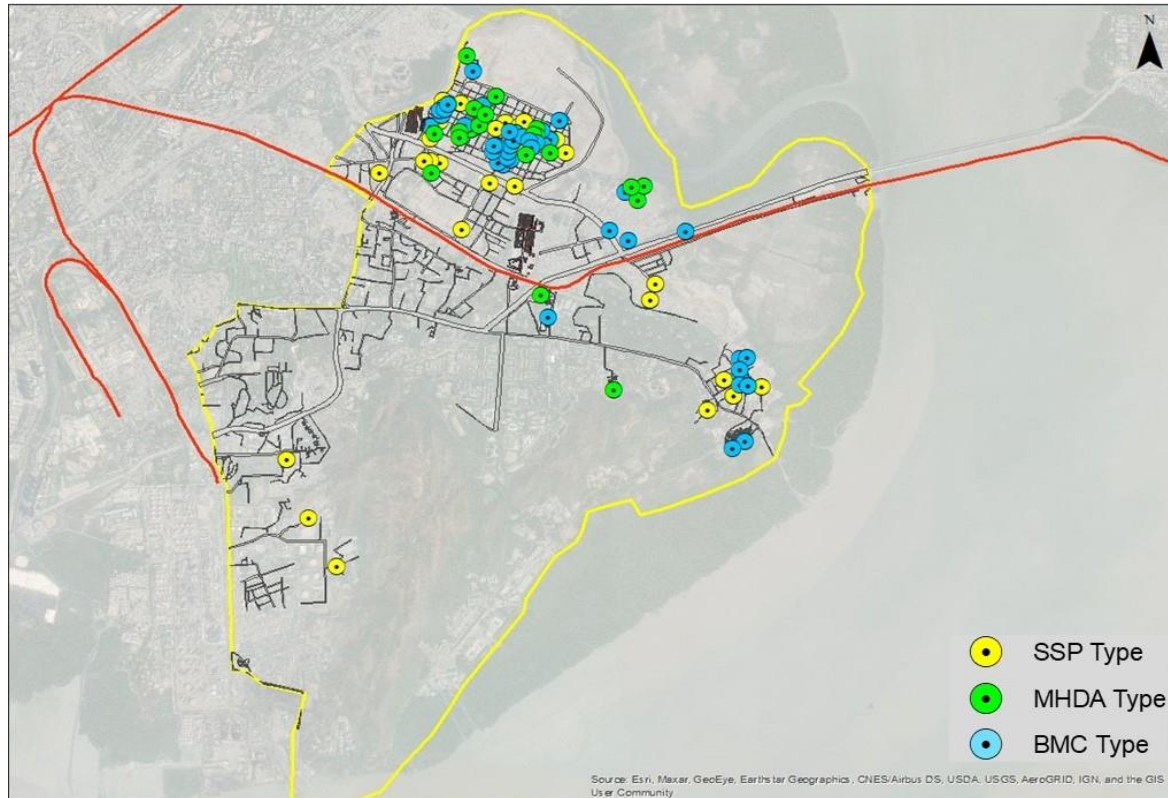


Figure 12 Provision of community toilets by different providers -M-EAST

Physical Condition of the Toilet Blocks

Physical condition of the community toilet block includes infrastructural facilities like provision of water, electricity, sewerage. Structural issues are related to design changes, less seats, toilets that need major and minor repairs- condition of doors, vent pipes, septic tanks, seats, plumbing, leakages, electrical work, condition of sewer line and septic tank all fall under this category. A community toilet that has basic infrastructure of water electricity sewer cleanliness is considered to be usable and in a good shape. Whereas, toilets that have minor or major issues of any kind or are dilapidated are considered as unusable or in bad condition.

Indicators	G-North, Dharavi						M-east slums					
	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL
Overall Physical Condition is good and do not require any minor or major repairs	12	6	7	2	1	28	15	15	8	0	0	38
Toilets that require minor repairs – tiling, fixing of broken doors, plastering, plumbing, electrical fittings, leakages	25	12	11	5	0	53	3	6	5	1	0	15
Toilets that require major repairs on an urgent basis – sewer line damaged, sewer chambers broken	18	12	6	5	0	41	1	1	4	0	0	6
Under Construction			2			2	24	1	17	0	0	42
Demolished –as families shifted			1			1	0	0	1	0	0	1
No response	2	3	1	2		8	2	0	2	0	0	4
Locked ,waiting for water and electricity connection							2	0	0	0	0	2
Repairing ongoing							0	1	0	0	0	1
Court case							0	0	1	0	0	1
TOTAL	57	33	28	14	1	133	43	22	44	2	0	110

Figure 13 Community toilets in the two wards that are in working condition and that need repairs

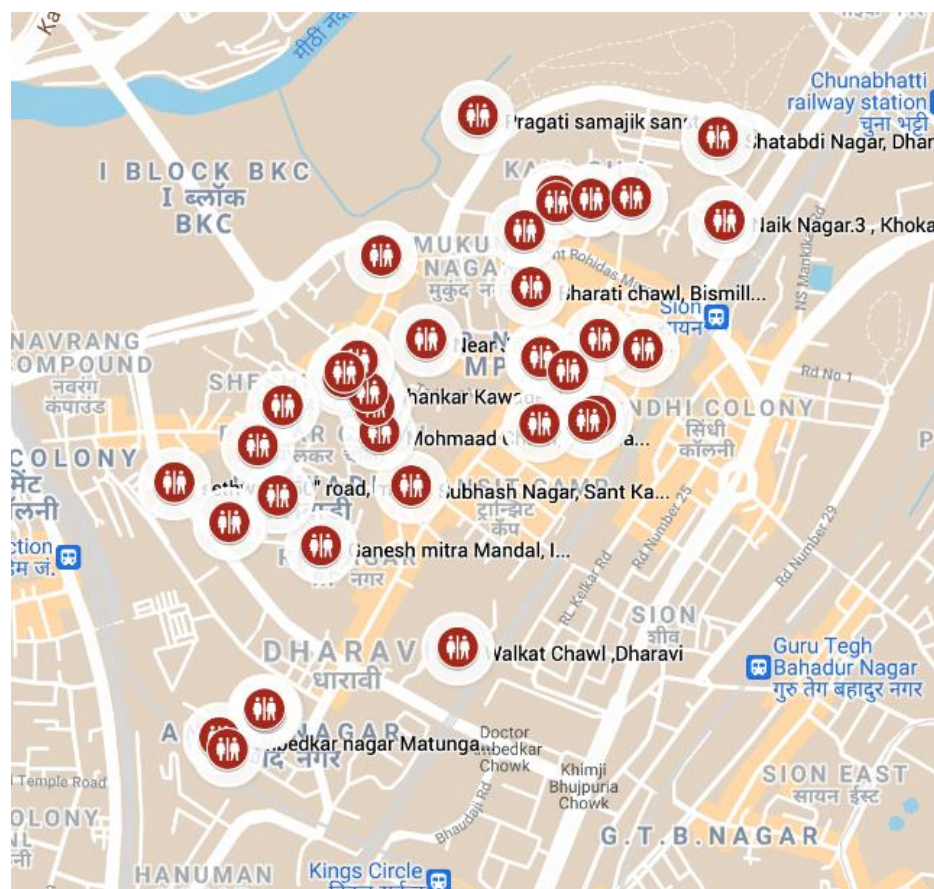


Figure 14 Community toilets in G-North with major repairs

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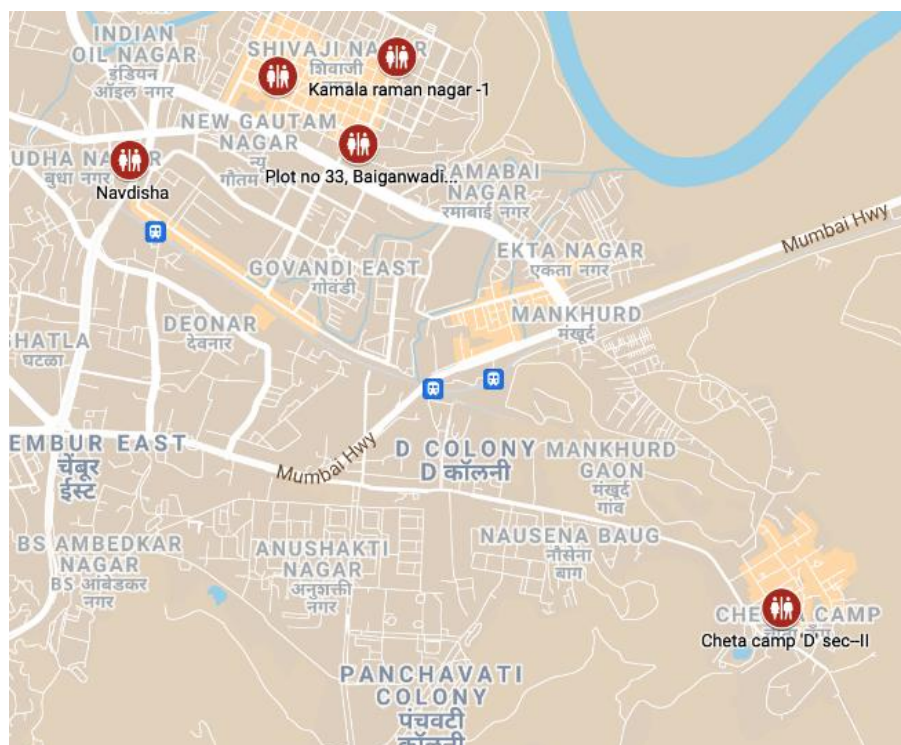


Figure 15 Community toilets in M-East with major repairs

https://www.google.com/maps/d/edit?mid=1ZE015FPUqsW7c-mc4LlTiO_hOk1UWJk2&usp=sharing



Figure 16 Bad condition of community toilets with no electricity

Criteria	G-North, Dharavi						M-East slums					
	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL
Septic tank	6	8	8	10	0	32	2	1	6	1	0	10
Sewer line connection	51	25	17	4	1	98	2	1	4	0	0	7
Septic Tank connected to sewer line	0	0	0	0	0	0	17	19	14	0	0	50
Demolished – as families have been shifted	0	0	1	0	0	1	0	0	1	0	0	1
Under Construction			2			2	24	1	17	0	0	42
TOTAL	57	33	28	14	1	133	45	22	42	1	0	110

Figure 17 Sewage disposal method of the Toilet Blocks

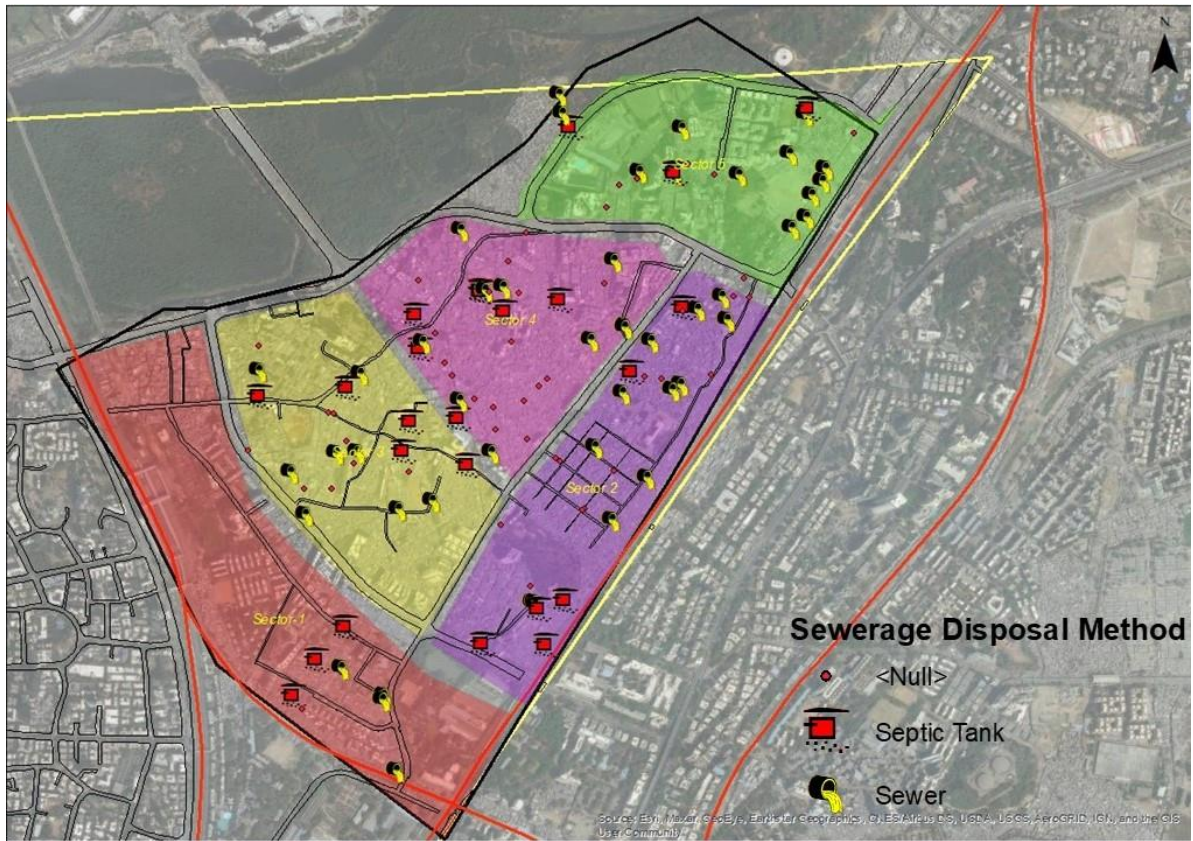


Figure 18 Sewer disposal method for community toilets in Dharavi -G-North

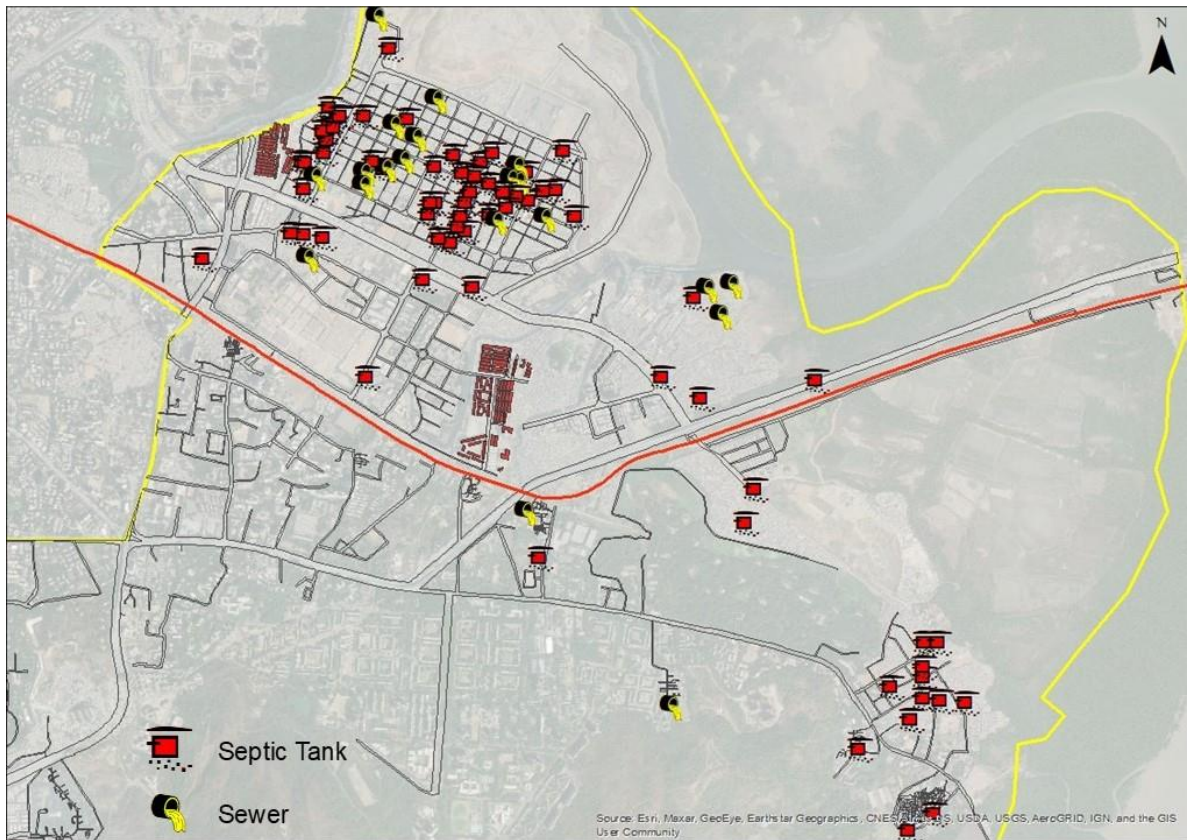


Figure 19 Sewer disposal method for community toilets in M-East slums

Water and electricity connection for the Toilet Blocks

Legal Water and electricity connections have to be provided by the city at the time of construction in absence of which these services are either rented or stolen. Even in some cases where the connections have been provided, they are charged at commercial rates with high electricity bills.

In toilets where there is no water, people carry water from their homes. At times, tankers are called for as they don't have BMC water connections. In toilets where there are no legal electricity connections, it is taken on rent from the neighbouring houses.

Indicators	G-North, Dharavi						M-East Slums					
	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL
Have Water and Electricity Connections	35	11	4	10	0	60	9	9	0	0	0	18
Have Water but No Electricity	2	2	14	1	0	19	2	2	20	1	0	25
No Water but have Electricity	11	5	1	0	0	17	4	10	0	0	0	14
No Water, No Electricity	8	15	6	3	1	33	3	0	1	0	0	4
NA as under construction			2			2	24	1	17	0	0	42
Demolished – as families have been shifted			1			1	0	0	1	0	0	1
NA –toilet is not functional since 15 years	1					1	3	0	3	0	0	6
TOTAL	57	33	28	14	1	133	45	22	42	1	0	110

Figure 20 Indicators for toilets with or without water electricity



Figure 21 No water facility in the community toilet, tankers are called for, drums are filled with water to be used for toilet

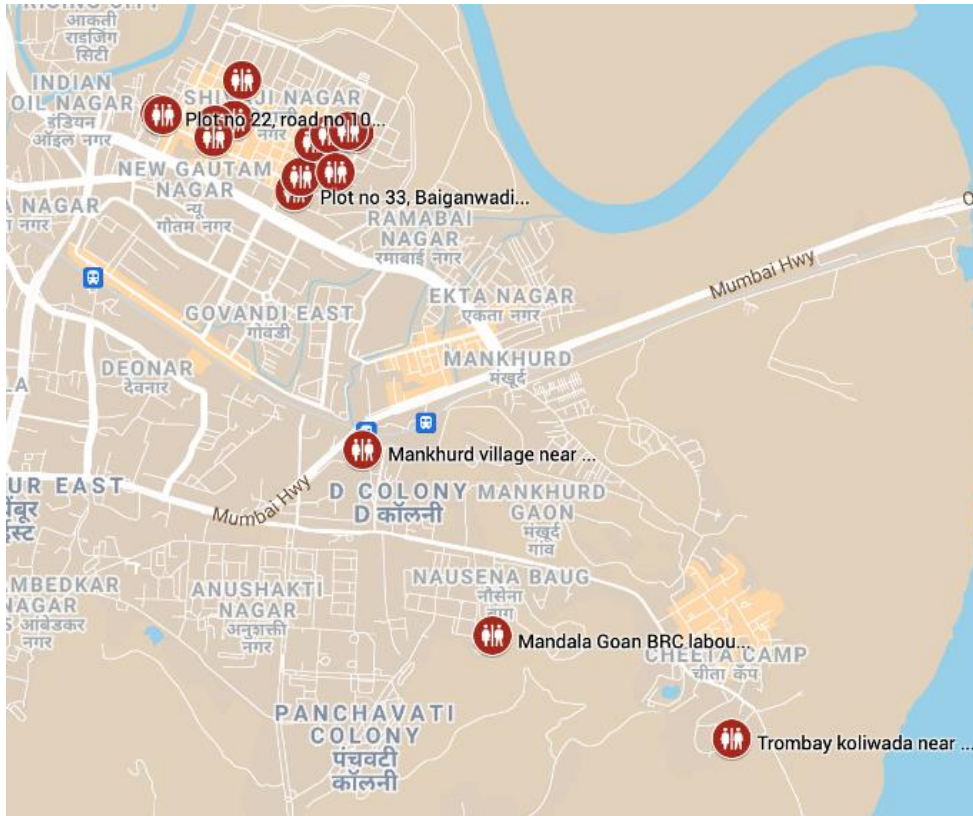


Figure 22 Community toilets in m-east slums with no water electricity

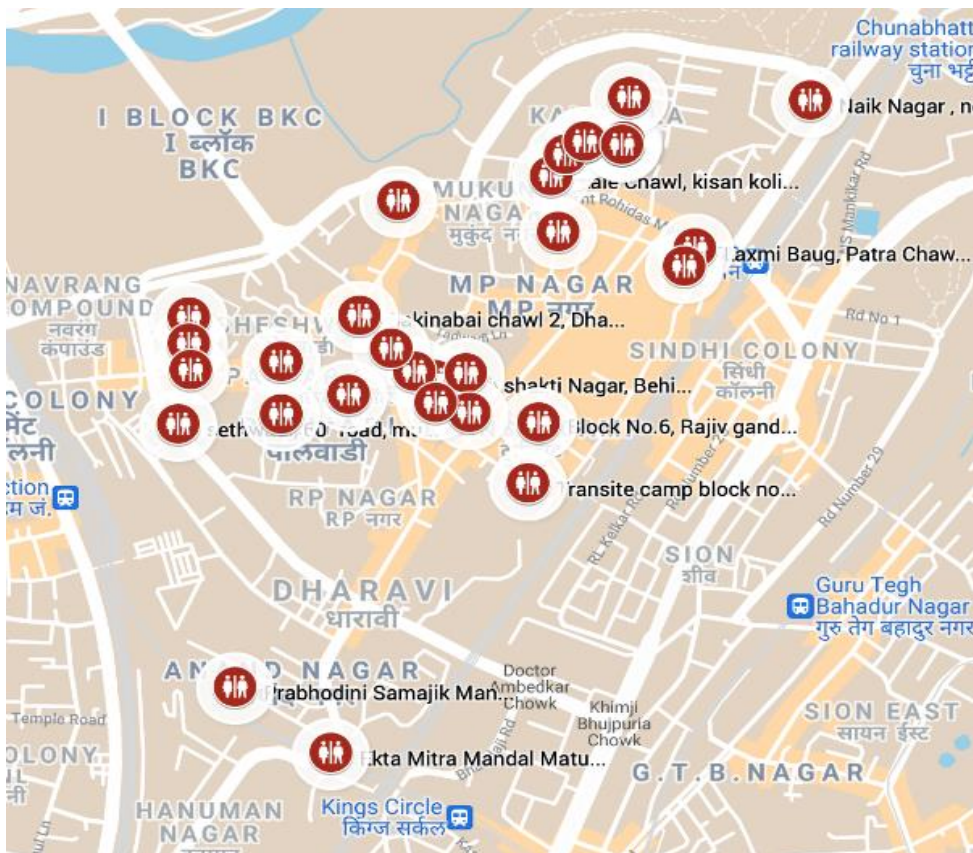


Figure 23 Community toilets in Dharavi slums with no water electricity

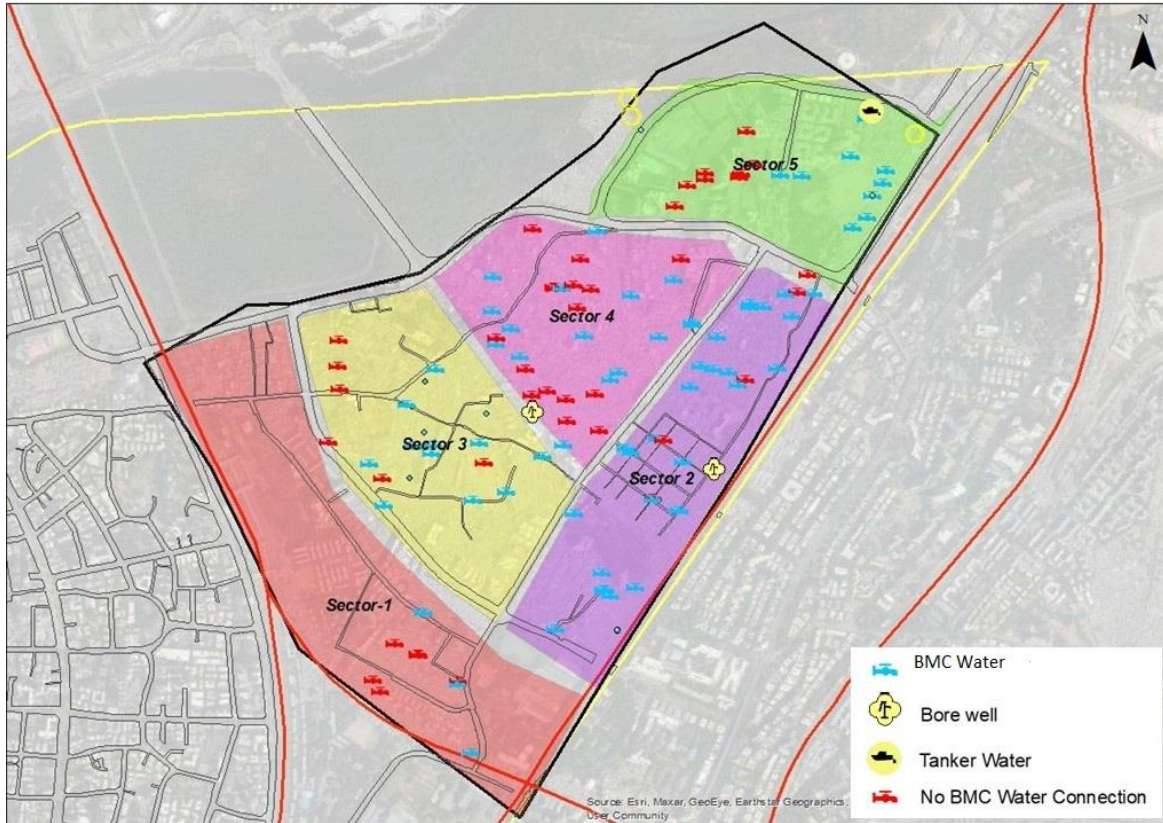


Figure 24 Water facilities in G-North Dharavi

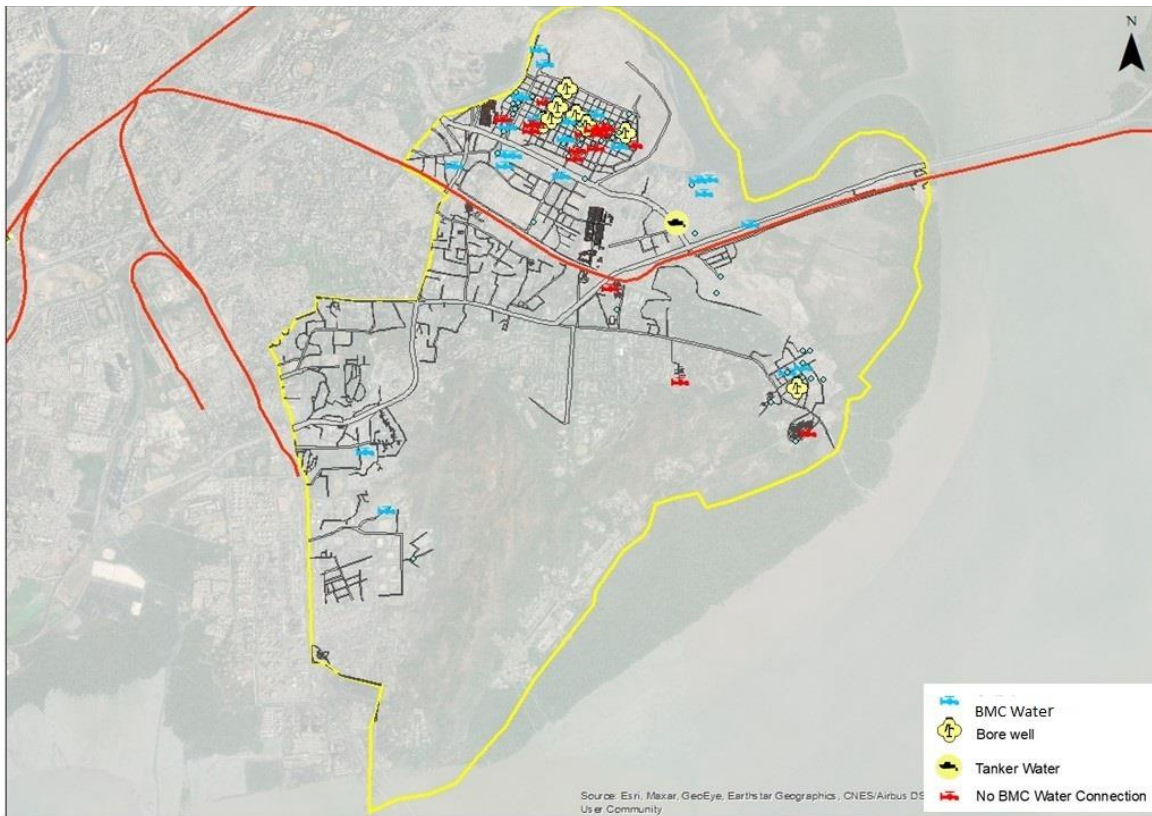


Figure 25 Water facilities in M-East toilets

Crowding – users/seat

The standard BMC accepted WHO norms states one toilet per 50 people, but with increase in population this number has gone up to 200 users/seat. This is also one of the reasons for the bad condition of the toilets but there is also the other side of it where more and more families are now opting for individual toilets. This reduces the burden on the community toilets. From the table below it is clear that the toilets surveyed under this project are not overburdened but might not be the case with other existing toilets.

Indicators	G-North, Dharavi						M-East					
	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL	BMC	Mhada	MSDP-SSP	SWM	Private	TOTAL
Less than 50 users /seat	39	13	15	10	1	78	24	19	16	1	0	60
50 users / seat	2	4		3		9	16	1	21	0	0	38
Between 55-100 users / seat	12	8	10	2	0	32	0	2	5	0	0	7
Between 110-150 users /seat	2	5	0	0	0	7	0	0	0	0	0	0
Between 160-250 users /seat	0	3	0	0	0	3	0	0	0	0	0	0
Above 250 users/ seat	1	0	0	0	0	1	0	0	0	0	0	0
TOTAL	56	33	25	15	1	130	40	22	42	1	0	105

Figure 26 Indicators for seats



Figure 27 More users than seats

Aspirations for individual toilets

According to the different surveys conducted at community and household level, people's major concern is having a toilet of their own. While all the other basic services of health posts, education, anganwadis are being met by the city and local politicians in slums and in rehabilitation buildings, they seem to be quite satisfied with this and now are looking forward to the provision of individual toilets.

Lack of toilet seats, need for individual toilets, and non-connection to sewer system in case of community toilet blocks as well as individual toilets, less toilet seats as compared to the current population that uses it have come out as some of the main issues in both project locations. These sanitation issues were identified as the major area with gaps and potential for innovation. The most significant gaps identified in both locations have been similar in nature, therefore interventions will be same, and any changes while implementing the solutions /interventions will be reported later.



Figure 28 Individual toilets constructed by households

5. Actions

Table 7 Interventions for Challenges Identified

Topic	Findings / Challenges	Intervention Needed
Community Toilet Blocks	Community participation and empowerment missing	Meetings with residents to address gaps identified, to create sense of ownership, making representation to the city through letters and joint meetings
	Lack of maintenance of community toilet blocks especially in MHADA and private toilets	List of toilets constructed by MHADA and private agencies to be shared with Municipal Corporation and seek their support in forming systems for operation & maintenance for these toilets. Second,
	Lack of water and electricity results in poor hygiene and cleanliness	Letters to the ward from SPARC and CBO with list of toilets for provision of water and electricity

	Safety concerns especially during night	One seat in the community toilet block to be kept open throughout which can be used at night in case of emergency. Enough light should be available within and around the toilet premises
	Desludging costs of community toilets septic tank has to be borne by the CBOs	Approach the municipality and ward to check facilities available at ward level for desludging of these toilets. Letters from CBOs to the Sewerage department.
	Sewer line connections are in bad condition and non-functional	Requests/ applications to fix these will be sent out by CBOs , site visits to be done by ward engineers
	Non-connection of community toilets to sewer network	Meetings with local corporator to discuss the situation Letters to the concerned department
	Major repairs of community toilet blocks	List of such toilets with letters from CBOs and SPARC to the solid waste management department
Individual Household Toilets	Unscientific sewage disposal of IHHT	Efforts to connect IHHT to existing sewer line where they are within 30 ft. Providing the list of families with IHHT in close proximity of sewer line to be connected
	Waste from IHHT disposed off in storm water drain which connects to open nallah	Work out ways by which these can be connected to the existing sewer
	No permission granted to construct IHHT even when families are in need	Effort to mobilize the local government for provision of household level toilets
	Emptying and de-sludging of individual household latrines with septic tank	Check what systems are in place to empty septic tanks of IHHL As already informed by the ward, units closer to the sewer line can be connected to the city's underground drainage network. Checklist of such units and slums by Mahila Milan would be helpful.

The aim of the present Action Plan on the provision of the provision of water supply and sanitation in slum communities is to establish a list of measures/activities directed at ensuring the provision of equitable access to water and sanitation, as well as to establish the evaluation criteria, responsible authorities, partners for the implementation of the proposed actions.

Table 8 Measures / Activities for Provision of Access to Water and Sanitation

No.	Measures / Actions / Interventions	Expected Outcome	Coordinating / Responsible Authority
1	Meetings with residents to address gaps identified, to create sense of ownership, making representation to the city through letters and joint meetings	As more and more community groups are involved in the maintenance and upkeep of community basic infrastructure, they become more responsible and take proactive steps to resolve issues, build relationship with different stakeholders	Existing community and resident groups Local political leaders NGOs as coordinators
2	List of toilets constructed by MHADA and private agencies to be shared with Municipal Corporation and seek their support in forming systems for operation & maintenance for these toilets. Second, formation of or handing over these toilets to community groups	Community Based Organizations are in place for the O&M of toilets, care takers appointed in toilets constructed by MHADA	Ward and Municipal Corporation
3	Letters to the ward from SPARC and CBO with list of toilets for provision of water and electricity	Legal water & electricity available	Ward, CBOs, Electricity department
4	One seat in the community toilet block to be kept open throughout which can be used at night in case of emergency. Enough light should be available within and around the toilet premises	Residents, especially women feel safe to use toilets at night Toilet can be used in emergency any time of the day	CBO

5	<p>Approach the municipality and ward to check facilities available at ward level for desludging of these toilets.</p> <p>Letters from CBOs to the Sewerage department.</p>	<p>Municipality takes on the charge of regular cleaning of septic tanks</p> <p>Timely requests are submitted by CBO for desludging</p>	<p>Municipal corporation, CBOs, care takers</p>
6	<p>Requests/ applications to fix sewer lines in bad condition will be sent out by CBOs , site visits to be done by ward engineers</p>	<p>Sewer networks are now functional</p> <p>Systems have been put in place to report back to the ward / municipality in case in future the issue arises</p>	<p>Ward, municipality, CBO</p>
7	<p>Meetings with local corporator to present a list of community toilets not connected to the sewer line</p> <p>Letters to the concerned department</p>	<p>Community toilets connected to the sewer line</p>	<p>CBOs, local Corporator, NGO, ward, municipality</p>
8	<p>List of such toilets with major repairs to be done along with letters from CBOs and SPARC to the solid waste management department</p>	<p>Community toilets are repaired and in good working condition</p> <p>Open defecation reduced</p> <p>Health issues reduced</p>	<p>CBOs, local Corporator, NGO, ward, municipality</p>
9	<p>Efforts to connect IHHT to existing sewer line where they are within 30 ft.</p> <p>Providing the list of families with IHHT in close proximity of sewer line to be connected</p>	<p>Proper sewerage disposal of IHHT. Less risk to households</p>	<p>Ward, Municipal Corporation, local resident groups</p>
10	<p>Work out ways by which IHHTs that dispose of waste in the drains can be connected to the existing sewer</p>	<p>Proper waste disposal of IHHT</p>	<p>Ward, Municipal Corporation, individuals, local resident groups</p>
11	<p>Effort to mobilize the local government for provision of household level toilets</p>	<p>Residents provided with individual toilets</p> <p>Changes in existing policy for sanitation</p>	<p>Ward, Municipal Corporation, individuals, local resident groups, NGOs</p>

5.1. Pilot Actions

Two pilot locations one each from G-North and M-East ward were taken up to explore possibilities of individual household toilets, looks at existing sewer systems and waste disposal systems study the technical challenges of these locations in terms of WATSAN. Transit Camp in Dharavi and Maharashtra Nagar in Mankhurd were chosen where these could be tested.

Pilot I – Maharashtra Nagar, Mankhurd

Maharashtra Nagar is divided into 3 major parts as per the years of evolution, of which Maharashtra nagar 1 & 2 are the oldest settled areas with chawls formed by the residents and Maharashtra nagar 3 consists of newer settlements.

- Maharashtra nagar- 1 & 2 (Chawl Cluster) (Pilot location)

Maharashtra nagar-3 (Samta nagar, Ambedkar Nagar, Shanti Nagar, Indira Nagar, Bhim Nagar)

Chawl Cluster, Maharashtra nagar

Table 9 Settlement profile

Basic Profile	Basic Amenities	Problems
Households- 4000 Population- 20,000 Status: Declared Typology: G+1 structures	Water connection: 2021, 4-5 houses per connection. Water timing: 3 AM- 7AM Electricity: Legal connections. Toilet: Public toilets- 7 (159 seats) Individual toilet: 15% of the houses (450-500) with septic tanks constructed underground. Garbage collection: gully to gully collection. Dumping area near public toilet.	Water timings- too early. Water taps. Shared by 4-5 families using pipes. No working drainage line. Violence

Table 10 Challenges in Pilot I

Challenges	<ul style="list-style-type: none"> Household Septic tanks are not cleaned in the proper manner Residents have constructed IHHT without prior permission, hence fear approaching the ward to get the septic tanks cleaned Internal disputes with local councilor a hindrance in getting their consent letters
Technical Challenges	<ul style="list-style-type: none"> Sewer lines have been laid down but are not connected to the main line Existing sewer lines are choked which makes it difficult for IHHT to be connected to sewer size of existing sewer is small and it may not take the load of sewage from Individual toilet connection.

Table 11 Survey details of Pilot I

Activities Conducted – Maharashtra Nagar 1	
Total No. of Chawls	100+
No. of Chawls surveyed	12
No. of units	500
Consent forms received for IHHTs	172
Cadastral Mapping	ongoing
No. of units with IHHTs for sewer connection	38



Pilot II - Transit Camp, Rajiv Gandhi Nagar, Dharavi

Transit Camp is a small part of Sector 2 of Dharavi, and has 1000 households of which nearly 50% have IHHT, the team has identified 221 households that are in need of individual household toilets and consent letters are being taken from them. The goal here is also to reach out to the remaining families that are in need of IHHT. In transit camp, our observation while working with communities on IHHT is that many are now opting and have constructed household toilets due to the fear of the coronavirus, saying it's difficult to maintain social distance using community toilets.

Drawings of households with toilets and ones without toilets prepared. This exercise was taken up to show how the residents can accommodate toilets within their homes, where the outlet is for the individual toilets and what water arrangements do they have.

Table 12 Survey details of Pilot II

Activities Conducted	
Total No.of Blocks	12
No.of rows/ block	20 (A-T)
No. of units /block	200-210
Consent forms received for IHHTs	233
No. of units with IHHTs for sewer connection	24
Cadastral Mapping done for blocks	1-8
Marking of HHs that need IHHTs done on the map for blocks	7&8
Mapping of HHs that need IHHTs in other blocks	ongoing

Table 13 Challenges in Pilot II

Challenges	<ul style="list-style-type: none"> • Households had applied for SBM subsidy but did not get any response • Residents were a little reluctant to sign consent form • Community meetings have become difficult due to rise in COVID cases • Consent of local people and elected representatives is necessary as the common passages are very small and covered with utility services like water line, electric cable, house drains.
Technical Challenges	<ul style="list-style-type: none"> • Existing sewer on the main road is of smaller size, therefore it has to be upsized to take extra flow from individual toilets • Difference in existing Main Sewer line will make it difficult to maintain proper slope • Else there will be reverse flow

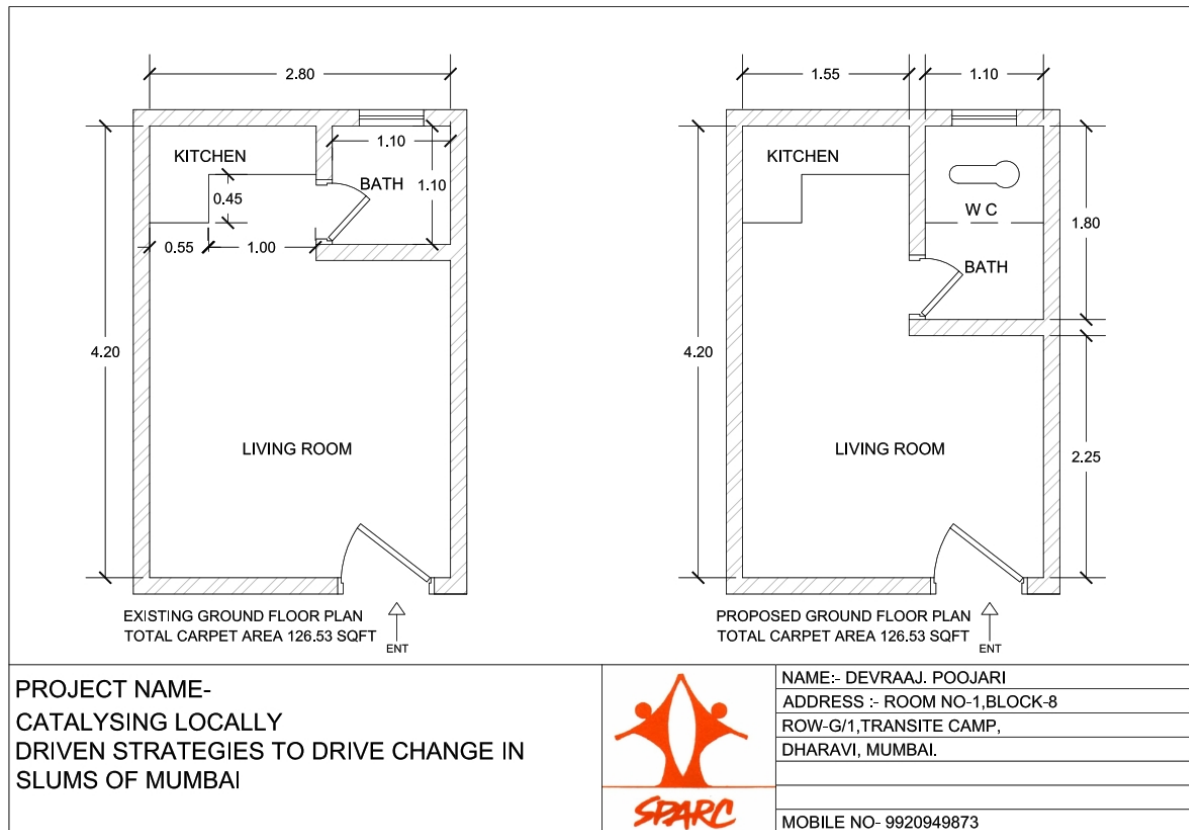


Figure 29 Drawings of individual toilets at transit camp, Dharavi



Figure 30 Community meetings at pilot locations for individual household toilets



Figure 31 Cadastral mapping at transit camp, Dharavi

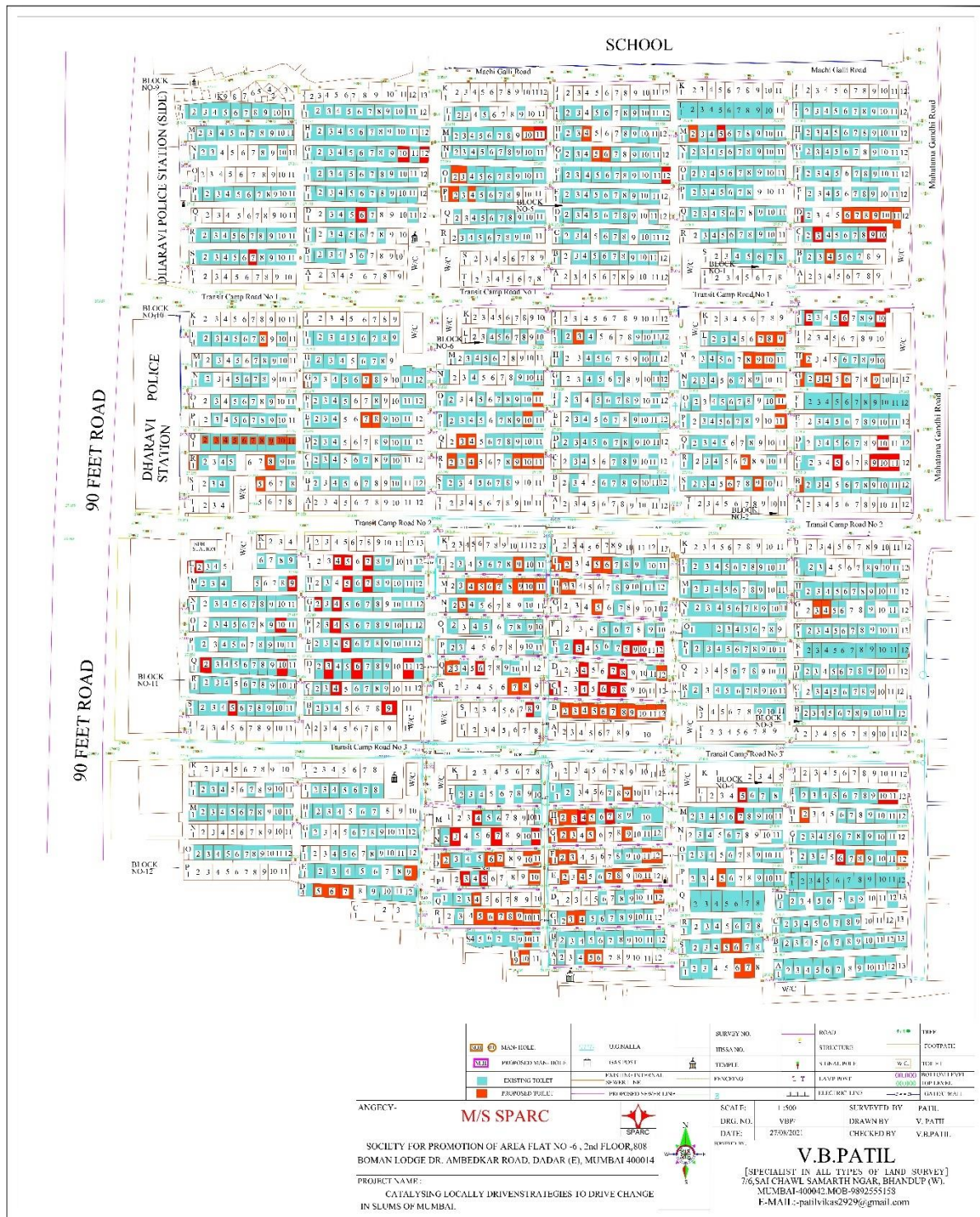


Figure 32 Cadastral mapping complete at transit camp, Dharavi

6. Discussions, Conclusions and Way Forward

6.1. Developing a two-way accountability system-discussion

The NSDF and Mahila Milan educational and organizational strategy is one in which communities of informal settlements who seek to explore and try out new ideas are supported by technical and organizational processes and financial back up to explore options. The logic is very simple. If a community is very eager to try a way to solve a problem, they are assisted to experiment. If the solution they develop is one which is good for community, good for the environment and good for the city, then the alliance encourages many more people to try it out and build the capacity of communities to demand partnership with city to scale up the solution. The existing structure of the Alliance is thus strengthened as well as existing community groups like Community Based Organizations (CBOs), youth groups are also strengthened and motivated to increase their participation.

Creating access to resources are means which have strengthened the urban identity of the poor. Past failures of individual attempts to use the city systems have led to the poor operating outside the subsidized public services provided for by the government. When collectives achieve this breakthrough, its impact is very energizing. Interaction with city level institutions. This gradual increase in interaction with formal institutions has led not only to greater visibility of different groups, but their own lobbying makes them a force difficult to ignore, thereby opening avenues for demand for more long-term changes.

Putting the above strategy in place, the different stakeholders that involve local corporators, community groups /representatives, Mahila Milan & Federation, concerned ward offices converse with one another as and when the need arises. But apart from this, while the technical, field and MM team meet each other on a weekly basis to update themselves on the progress, SPARC team meets with them once in a fortnight. Similarly, the team does regular follow ups with the ward office authorities for the letters submitted, to share any new information they gather or report on the development of the work. Due to the restrictions on timings and entry to the ward office, only limited people get a chance to meet with the ward officer or the engineering department. On the other hand, meetings and informal discussions with local councillors has now become a part of their work, where they meet them twice a month. There is interest shown from the local councillor also on the progress of the work.

6.2. Strengthening the Federation Structure

Since Mahila Milan has been working in both the wards in different capacities, the existing federation structure was further strengthened to work with these communities more specifically to work and support residents in individual toilets. It gave them an opportunity to begin negotiations with the ward and local councillors in water and sanitation. They have been meeting with the local councillors, writing letters to the ward, following up with the ward to get the work done faster. No new committees have been set up as there are existing committees in the slums and pilot locations that are being encouraged to take up their own issues liaise with the local corporator and with the ward with support from Mahila Milan leaders. One good example has been where residents themselves came forward in M-east areas to take up surveys and communicating with residents for the consent forms for individual toilets.

The chart below illustrates what two-way accountability systems have been set up for how the Mahila Milan and Federation will work and liaise with communities and local authorities for the interventions mentioned above:

Table 14 Role of Stakeholders for the Interventions

Interventions	Two-way accountability systems
For interventions around community toilet blocks	Technical assistance to communities by SPARC and ward technical team
	Financial backup by the city
	Access to local politicians through community networks
	Access to government officials through SPARC
	Sharing information through various methods -physical, digital, individuals, events etc.
	Consultations in the form of surveys, meetings
	Ensuring participation of communities and residents local councillors in design implementation activities, participate actively in monitoring and evaluation
	Existing local groups to be involved and strengthened
For interventions around individual toilets	Technical assistance to communities by SPARC and ward technical team
	Financial backup by the city
	Financial backup by the individuals

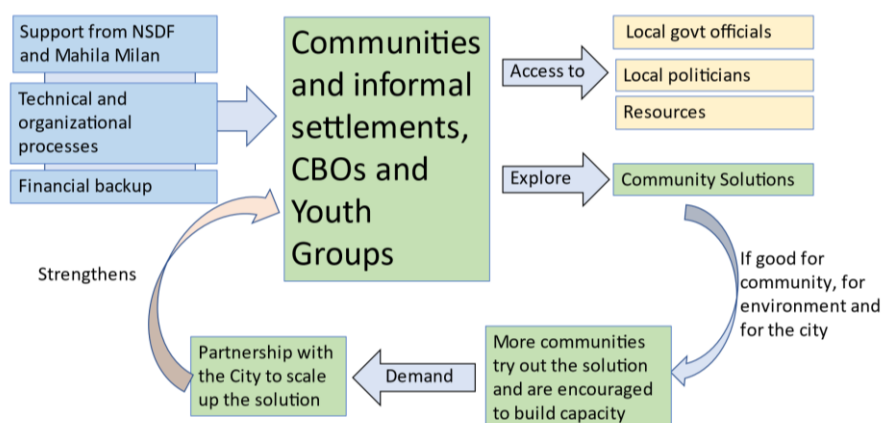


Figure 33 Flowchart for the interventions

6.3. The question of Sustainability

Effective and functional community systems are crucial for this, from both organizational and operational perspectives. Strengthening of community systems should be based on a capacity-building approach and backed up with adequate and appropriate financial and technical support from the city. Small community organizations and groups actors should find these levels helpful for: planning their work; mobilizing financial and other resources; collaborating with other community actors; and documentation and advocacy concerning barriers and challenges experienced at local, national, regional, and global levels.

Community members and organizations are uniquely positioned to effectively monitor and document the experiences of key affected people and communities, the quality and reach of services and the policies that are being implemented at community level. To fulfill this critical role, community-based organizations and networks need to improve their capacity to collect and analyse data, including strategic choices about what data to collect, and how to target and use it effectively. Strong community-led documentation and monitoring will contribute to be more efficient, responsive, and accountable structures at community and higher levels, providing feedback to government and civil society organizations and supporting greater cooperation and accountability. Monitoring and documentation will also contribute to engaging and empowering community members, who often feel they have little or no role in planning and design of programs in which they are expected to play a role.

The Alliance of SPARC-NSDF-MM continue working with the community and residents even after the project has been completed or a particular activity has been accomplished. Mahila Milan and Federation have and will always be the system between the communities and the local government officials. Over a period, their involvement might be less, but will always be called on to support in different interventions.

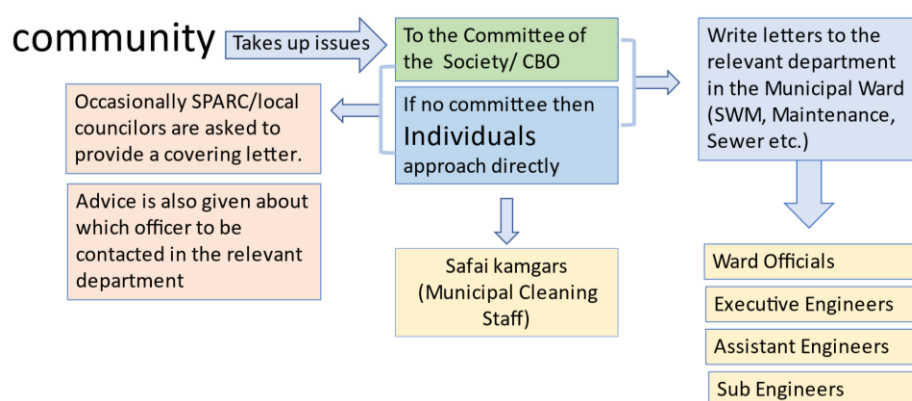


Figure 34 Flowchart for handling community level issues

The above diagram shows how community issues are taken up by the residents, who they approach at what level. At the end what we are trying to achieve- better coordination communication between the city and communities. This leads to better use of limited resources and more efficient services, helps officials estimate potential untapped community resources that can be mobilized and build on societal strengths, strengthens policy making at local level, and builds community ownership.

6.4. Conclusion

The objective with which the proposal was drafted and project undertaken was the need of special operating procedures do deal with current pandemic responses in such ill planned and densely populated areas. Thus, the collaboration between the different teams – Mahila Milan / technical /residents and corporators will set up a model where the three are trying to address sanitation gaps as well as any other service provision gaps in the area of health, water etc. At the moment, this team is in contact with each other on a regular basis virtually as well as physically they meet once a week. This can continue post project also, as we think there needs to be more of such examples for it to become the norm. This is described in the way forward and continuance section.

6.5. Way Forward, continuance steps

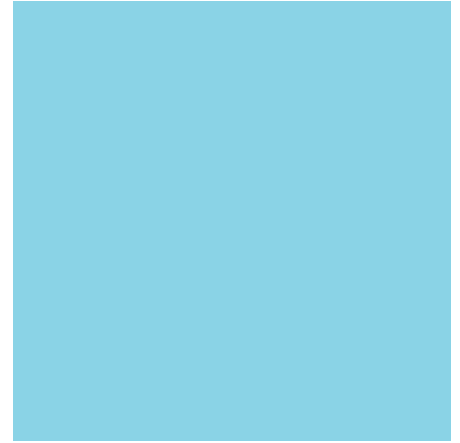
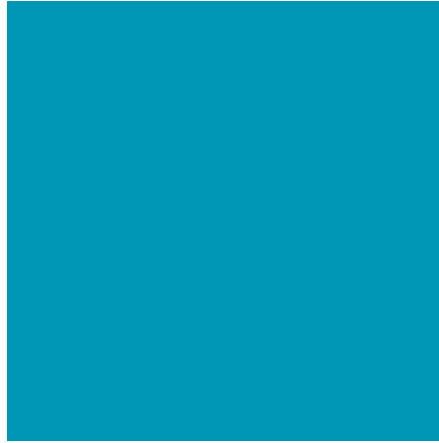
Two major interventions one in community toilets and the other with individual household toilets have been reported that can be taken up by the community and local government. Certain activities as way forward can be taken up as listed below:

- Provision of technical assistance
- Financial backup
- Awareness activities on solid waste management practices as this could be one of the reasons for choked drains and sewer lines.

- A detailed plan for the two pilot locations one each in Dharavi and Mankhurd- extend sewer networks, septic management for community toilets and individual toilets.
- List of households that have given their consent for individual toilets and have shown interest
- List of housing units from pilot as well as other identified locations that are within 30 mtr from the existing sewer line so the septic tank can be connected

Some activities will continue beyond the project period as listed below with the way forward

Ongoing task	Way forward
Plain table survey/ Cadastral mapping in Maharashtra Nagar	Supervision and monitoring the work by the Mahila Milan and Federation field staff
Replicating the same in at least 2-3 more settlements in Dharavi and M-East, Mankhurd	Replicate the steps and process adopted in the two pilot locations to scale up to the city level
Pushing forward the work of connecting existing community toilets to sewer lines both in M-east and G-North in toilets that have not been connected yet	Follow up with the ward and CBO local councillors Sending reminder letters to the ward
Efforts to obtain financial support from the city towards provision of IHHT subsidies. This can be sought through available subsidies from the Swachh Bharat Mission (SBM) and if not, then the ward can make requests for fresh grants.	Case studies of households that constructed IHHT using their own financial resources to be shared by the ward and municipal corporation Check on the provision of available subsidies under SBM or any other fund
Efforts to bring in policy changes to sanitation on two grounds, one where alternatives to community toilet blocks can be explored thus encouraging construction and provision of individual household toilets and the other connecting individual household toilets to sewer lines wherever possible as septic tanks are not an option of IHHTs in slums as the drawback is they cannot be cleaned or emptied.	Negotiating with the city with field testimonies of individuals on importance and need of individual household toilets wherever possible Field visits can be done with the technical team of solid waste management department of the ward to do a feasibility survey of laying sewer lines in such locations



CENTER FOR WATER AND SANITATION

The Center for Water and Sanitation (CWAS) is a part of CEPT Research and Development Foundation (CRDF) at CEPT University. CWAS undertakes action-research, implementation support, capacity building and advocacy in the field of urban water and sanitation. Acting as a thought catalyst and facilitator, CWAS works closely with all levels of governments - national, state and local to support them in delivering water and sanitation services in an efficient, effective and equitable manner.