Exploring open defecation in M-Ward (East)

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M2017PHHP011

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Tata Institute of Social Science
DECLARATION

I, Pratik More, hereby declare that this work is original and it is done under the guidance of Faculty supervisor Prof T. Sundararaman, School of Health System Studies and Dr. Prathibha Ganeshan, School of Habitat Studies, Tata Institute of Social Sciences Mumbai. The work has not previously formed the basis for an award of any degree/ diplomats or certificate of this institute or any other institute. I have duly acknowledged all the sources used by me in the preparation of this report.

Date - 26/02/2019

Pratik More
CERTIFICATE

This is to certify that the project report entitled “Exploring open defecation in M-Ward (East)” is the record of the original work done by Frank More under my guidance and supervision. The results presented in the project report have not previously formed the basis for the award of any degree, diploma, or certificate of this Institute or any other institute or university.

Date: 26/2/2019.

Prof- Dr. T. Sundararaman

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### Table of Content

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Content</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Title</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Declaration</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Certificate</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Acknowledgement</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>List of Abbreviation</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>Chapter 1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Chapter 2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Literature Review</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Chapter 3</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Methodology</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Chapter 4</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Secondary Data</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Chapter 5</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>History of the area and present sanitation facilities</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Chapter 6</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Presentation of findings according to household survey and interview of different stake holders</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Chapter 7</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Discussion and Conclusion</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>References</td>
<td>43</td>
</tr>
<tr>
<td>17</td>
<td>Annexures</td>
<td>46</td>
</tr>
</tbody>
</table>
List of Tables

Table 3.1: Toilet facilities available in M-ward and open defecation practice 18
Table 3.2: Number of interview conducted 18
Table 4.1: Money spent on sanitation programme before Swachh Bharat Mission 21
Table 4.2: Revenue collected through Swachh Bharat Mission Cess 21
Table 4.3: Money Spent under Seachh Bharat Urban Mission 22
Table 4.4: Money Spent under Cholera control programme by government of Maharashtra 23
Table 4.5: Money spent on Swachh Maharashtra Urban 23
Table 4.6: Money spent on print media for promotion of SBM 24
Table 4.7: Money spent on digital media for promotion of SBM 25
Table 4.8: Number of IHHL constructed in Maharashtra under SBM 26
Table 4.9: Number of community toilets constructed in Maharashtra under SBM 26
Table 4.10: Number of public toilets constructed in Maharashtra under SBM 27
Table 4.11: Number of community and public toilets constructed in Maharashtra under SBM 27
Table 4.12: Number of IHHL constructed in BMC area 27
List of abbreviation

BMC- Brihan Mumbai Municipal Corporation
CAG- Comptroller and Auditor General
CBOs- Community based organizations
CTBS- community toilet blocks
IEC- Information, education and communication
IHHL-Individual Household Latrines
JNNURM -Jawaharlal Nehru Urban Renewal Mission
MCGM- Municipal Corporation of Greater Mumbai
MHADA- Maharashtra Housing Development Authority
MMRDA-Mumbai Metropolitan Region Development Authority
MSDP- Slum Sewage Disposal Project
NBA- Nirmal Bharat Abhiyan
NGOs- Non Government Organizations
NMMC- New Mumbai Municipal Corporation
NSSO- National Sample Survey Organisation
NUSP- National Urban Sanitation Policy
OD- Open defecation
PT’s- Pay and Use toilets
SBM- Swachh Bharat Mission
TSC-Total Sanitation Campaign
WHO- World Health Organisation
WASH- Water, sanitation and hygiene
Abstract:

Poor sanitation coverage is one of the major developmental challenges that slums in the urban India has been facing since Independence. The situation is further grave for the women, children and physically handicapped people in the society. Mumbai has been declared open defecation free in 2017. This study intend to look at the open defecation free status of Brihan Mumbai Municipal Corporation (BMC) which means 100% toilet coverage and zero cases of open defecation; disease prevalence of water borne diseases and behavioural change aspects of people after Swachh Bharat Mission. Samples were selected from M-East ward of Mumbai where open defecation was practiced according to the M-ward report. The data is collected through household surveys, in-depth interview of the government officials and elected ward representatives. The narratives of participants gives information about the existing and newly created toilets, condition of the toilets, use of the toilets by the community, problem faced by the vulnerable section of community and it also help to understand the challenges faced by the state while implementing the programme. Also put information about socioeconomic status of the slum dwellers and how they are directly or indirectly practicing open defecation.

The study revealed that the infrastructure created and existing infrastructure is not adequate as well as not cater the needs of the all sections of the society. The guidelines given in the program are not practically fulfilled due lack of human resource to monitor and to create awareness in the society. Toilet condition in the few areas is worse and people are continuing practicing open defecation. In this area there is high prevalence of water borne diseases. The study identifies the problems which affect the effective implementation of the programme.
Chapter 1
Exploring Open Defecation in M-Ward (East), Mumbai

Introduction

“Sanitation is more important than independence”

Mahatma Gandhi

United Nations had defined Sanitation as a system for the collection, transport, treatment, sdisposal or reuse of human excreta and associated hygiene. Human right to sanitation entitles everyone to sanitation services that are physically accessible and affordable, safe, hygienic, secure, socially and culturally acceptable and which provide every individual the degree of privacy that they desires and thus ensures dignity. (de Albuquerque, (2012)) Under different judgments judiciary had cleared that right to access good sanitation facility is fundamental right under article 21 which says about protection of life and personal liberty. Every individual should easy access to toilets and other resources like water should be available at the toilet for the effective use of same.

Important functions which are necessary to be performed for improved sanitation are proper collection, transmission and disposal of human waste (WHO, 2004). Poor sanitation leads to disease like diarrhoea, malnutrition, intestinal nematode infections, and lymphatic filariasis. Due to diarrhoea around 1.4 million child deaths occurs every year across the world (Prüss-Üstün, 2008). In case of Mumbai around 100643 diarrhoea cases are found every year. Around 225 people died due to diarrhoea in 2016-2017 out of which 33% are below age 4 years (PrajaFoundationAnnualReport, 2016-17). Poor people (especially those who live in slums) bear the brunt of insanitary condition and their right to health and clean environment is violated by the vicious cycle of poverty and insanitary environment. Wherever the sanitary services are provided the facilities are maintained poorly forcing the people to defecate in the open. Women are forced to practice open defecation in slums because the community toilets are often not gender friendly or located commonly. It is in this context that Government of India introduced different schemes to address the question of open defecation and insanitary conditions in urban areas. The latest initiative is Swachh Bharat Mission (SBM)-Urban.

Open defecation has been common in India. Open defecation is the practice in which people go out in fields, bushes, forests, open bodies of water, or other open spaces rather than using the toilet to defecate (Coffey, 2014). There are various factors because of which people prefer open defecation. Some of them are like lack of adequate toilet facilities, believes on purity and pollution, and convenience. Cultural factors like believes of purity and pollution are most common in rural India.
However, in urban India open defecation is mostly found in the slums and poor neighbourhoods. The UN-Habitat defines slums as “contiguous settlements where the inhabitants are characterized as having inadequate housing and basic services.” Slum households are a group of individuals living under the same roof that include one or more of the conditions listed below:

- Insecure residential status
- Inadequate access to safe water
- Inadequate access to sanitation and other infrastructure
- Poor structural and quality of housing
- Inadequate access to sanitation and other infrastructure
- Poor structural quality of housing
- Overcrowding

Lack of adequate facilities and the long queue add to the woes of people in the slums. Almost all the government programmes on sanitation beginning from 1980s, focuses on construction of toilets for the poor to minimize open defecation. However, studies of rural India show that construction of toilets alone will not ensure required health outcomes. In the urban areas due to increased migration and concentration of people in the slums the urban local bodies are constrained to provide adequate sanitation facilities. In the existing community sanitation facilities the usage is very high and long queue are a regular phenomenon along with lack of water and electricity facility in some cases. However, to improve health outcome and hence good quality of life, sanitation by means of effective treatment and disposal of waste is necessary (Carr, 2001).

When there is a scarcity of water and sanitation services, it is the women who suffer and have to find ways to manage and access what is available for them and their families. Women, girls and children are most vulnerable to the negative effects of the lack of WASH services, like ill-health, reduction in productive and positive activities such as livelihood, education and entertainment. Lack of individual toilets also makes women and girls vulnerable to sexual harassment and violence. Unlike men who could often use the toilets available at workplace women has to depend on the community toilets itself. The number of toilet seats provided to men is also less. Women toilets are also reported to be unsafe in many cases. Most “ladies” toilets are dark and not women friendly and designed with minimal thought to women particular biological and social needs. Women use toilets more frequently and for longer than men. They often carry big bags and take children to the toilet, all of which calls for differently designed toilets for them. (Phadke, 2013) Most of the toilets are closed at night time or due to the social conditions and because of fear women do not use community toilets during night time. As per the census of 2011 Mumbai’s population is 1.8 crore. With a population density of
19,652 people per square kilometre, India’s financial capital Mumbai is the second most crowded city. (Census 2011) Mumbai is divided into 24 wards and further into 88 sections. Later in nineties, some of the wards were divided into east and west or north and south. A large percentage of slum population (77.50% ) stay in M-ward. According to 2011 census, the total population in M (East) Ward is 8,06,433 and total number of houses are 16,694. (Census 2011) The infant mortality rate is the largest in M-ward, 66.47 per 1000 live births. The average life expectancy rate is 39.30 years. Providing basic facilities to the people is a challenge to administration. Government of the Maharashtra in line with the Swachh Bharat Mission started Swachh Maharashtra Mission on. On 2nd October 2017 Maharashtra government declared that urban area of Maharashtra become open defeation free.

In this study, researcher focussing focuses on ODF status of the in M-Ward East. Earlier in a study it was found that prevalence of open-defication is high in M-ward. In this study researcher explored-the availability of physical infrastructure for sanitation, behaviour change, and actual open defeaction free status after the declaration of ODF status under Swachh Bharat Mission. This is important because once a place is declared ODF then the area would not get further government support for provision of sanitation facilities. This thesis is divided into seven chapers. Chapter one is introduction gives information about importance of the sanitation practice and hygiene. Also, it tells about the condition of the slum dwellers and problem caused due to open defecati. Chapetr two is literature review it give detailed information about the past and existing programs relating to the sanitation in Urban area and in Mumbai. It also give sinformatio abou the different factors like gender, caste and economic condition affecting the open defecation practice in the slum. Chapetr three put light on the objectives, research questions and methodology used for the collecting the data. Chapter four puts light on the money spent under Swachh Bharat Missiona and Swachh Maharashtra mission and toilets created under the programme. Chapter five gives information about the history, geographical location, political factors of the area where open defecation is partly practiced. Chapter six is about the findings after the interpretation of the data. It gives information about the condition existing infrastructure in community toilets and pay and use toilets, also in the IHHL. It also gives inforamation about the water born diseases in this area and inetrview of the stake holders involved in the decision making in the implementation of the programme. Chapter seven is about the main observations from the study and future prospect for effective implementation of the programme.
Chapter 2

Literature Review

As per census 2011, Indian urban population is 377 million or 31% of the total population. The census also showed that in 4041 towns, around 8 million people do not have access to toilets and they defecate in open (7.9 million). From total urban population 13% people practice open defecation (around 10 million people), 3% or 1.8 million people use unimproved sanitation, 6% or 5 million rely on public toilets. NSSO data shows 31% urban household depend on shared community toilets. First major intervention on sanitation by the government was in 1980s in line with the United Nations celebrations on sanitation decade. Separate programmes have been implemented for both urban and rural areas to address the question of sanitation in India.

Central Rural Sanitation Program was started in 1986. Primary objective of this program was to improve quality of life of the rural people and to provide privacy and dignity to women. This program was supply driven and focused on latrine construction. As a result latrines were built despite of low demand and it remained unused. To overcome this problem, government introduced Total Sanitation Campaign (TSC) in 1999. It focused on behaviour change of the people so that they demand for toilets. The target was kept as 2017 to make India open defecation free. Under this program emphasis was given to information, education and communication (IEC). Information about negative consequences of open defecation was given. To foster competition among communities and to reward their efforts Nirmal Gram Puraskar was introduced. The award helps to improve sanitary conditions and malnutrition problem in some places. However, a holistic approach was missing in the implementation of the program. This program made improvement in latrine coverage from 22% to 31% in 2011. To overcome the problems in Total Sanitation program government introduced Nirmal Bharat Abhiyan (NBA) with a target year of open defecation free status as 2022. In this program subsidy was increased and for the first time households belonging to above poverty line was included (Carr, 2001). Comptroller and Auditor General (CAG) report on NBA showed that total money allocated for the campaign was Rs.13,494.63 crore but expenditure was 10,157.93 crore and the rest was returned to the consolidated fund of India. Among the total individual household latrines (IHHL) constructed 30% were non-functional because of poor construction quality and due to non-maintenance (India, October 20, 2015). In year 2014 NBA was reintroduced as Swachh Bharat Mission (SBM) and target year was set as 2019.

In the urban areas first intervention by government for ensuring sanitation was in 1980 in the form of Integrated Low Cost Sanitation Scheme. This scheme aimed at liberating manual scavengers by shifting from individual dry latrines to pour flush latrine. Twenty six lakh toilets were
constructed under this scheme. In 1993 Centrally Sponsored Scheme for Infrastructural Development in Mega cities was introduced to support rapidly growing mega cities. This was followed by Jawaharlal Nehru Urban Renewal Mission (JNNURM) in 2005 and Urban Infrastructure and Development Scheme for Small and Medium towns (UIDSMT). JNNURM included provision for basic service to urban poor. Rajiv Awas Yojana, 2009 have provisions to make India slum free and to make health and education accessible to all (Union Government, March 2014). Indian cities are classified based on population into 6 different categories and less populated cities in India have more open defecation problem. But, they have very less public fund compared to big cities. Perhaps visibility of issues in big cities is more as compared to that of small cities. In 2008 Government introduced National Urban Sanitation Policy (NUSP). NUSP (2008) gave importance to entire waste water cycle as well as open defecation free cities, 100% collection and treatment of waste was a goal. Major drawback was dedicated funding. Major drawback was dedicated funding. For Swachh Bharat Mission toilet is more focus but more dedicated approach is needed. (Wankhede, 2015) In 2014 Government introduced Swachh Bharat Mission with an emphasis on toilet construction (Chaplin, 2011). However open defecation prevails and the plight of the urban poor continues. This may be because of the discriminatory policies. Slum dwellers are neglected from proper sanitation. Only 47.2% urban poor have access to adequate sanitation in comparison to the 95.9% urban non-poor who have access to sanitation facility and 60% surface water sources are polluted due to sewage. Colonial legacy of segregation of the cities in terms of provision of basic services continue even today. Middle class take advantage of state sanitation service.

In order to address the issue of sanitation in urban slums the Slum Sanitation Project funded by World Bank was introduced in Mumbai. The Municipal Corporation of Mumbai implemented World Bank assisted slum sewage disposal project (MSDP) that commenced in 1995. Before 1990’s only Brihan Mumbai Municipal Corporation (BMC) constructed public toilets. Municipal staff was responsible for the upkeep of such facilities. But due to poor maintenance, lack of water and electricity the toilets were unhygienic and people was reluctant to use them. Public pay and use toilets (PT’s) using a public private approach was started by BMC in partnership with private agencies during 1984-1991. It was based on popular ‘Sulabhb’ (pay and use public toilets) model. The toilets constructed under PT were given out on management contracts to Sulabh international for 30years. These toilets constructed in highly populated areas ran well and showed that people were willingness to pay for the use good quality sanitation facilities. Constructing, running and maintaining such public toilets were open to any organization that came forward to implement program on a built operate and maintain basis. BMC provided necessary permission and land for building toilets, approved building structure, designed and regulate the structures. However, such facilities were concentrated in some
areas and others were neglected. According to BMCs ward toilet data on 2010-13 there are total of 1035 toilets in Mumbai. BMC data had community toilet blocks (CTBS) in slum areas since 1969 to 1990’s funded by BMC. These public toilets face issues due to poor maintenance, less incentive for cleaning staff etc. BMC will not finance toilets outside its jurisdiction. (The Mumbai slum sanitation program report, Sep 1, 2006)

Post 1990’s MHADA (Maharashtra Housing Development Authority) became pre-eminent agency constructing toilets in slum area of urban Maharashtra including Mumbai. With rapid growth of Mumbai these institutional configurations became inadequate and institutional transaction cost became burdensome (Making Mumbai an International Financial Centre, 2007). By 2001, there were about 10,000 community toilet blocks in the city, of which 45% had been built by MHADA, 29% by BMC, 23% by communities or charitable organizations, and 2% each by private organizations and Sulabh. A majority of these toilet blocks have aqua privies (53 %) for waste disposal, followed by septic tanks (46%) with a small proportion being connected to the city’s sewers. The bulk of the community blocks were constructed without community consultation and are, typically, a single level battery of 10 seats for use by adults with separate sections for men and women. (The Mumbai slum sanitation program report, Sep 1, 2006). No provision for water supply or electricity, and aqua privies or septic tanks for waste disposal which often overflow and discharge into the nearest drain. Users were not actively involved in the planning and hence have little sense of ownership.

Slum Sanitation Programme is a demand-responsive participatory approach. Non-governmental organizations (NGOs) and community-based organizations (CBOs) work together to jointly deliver community toilet blocks in a flexible framework. High technical standards of construction and high quality service levels, including 24-hour water and electricity, and other amenities including toilets for disabled persons, urinals, children toilets, and a room for the caretaker. Monthly pass charges for members and per user charges for others. (The Mumbai slum sanitation program report, Sep 1, 2006)

Very recently toilet blocks are provided under Swachh Maharashtra Abhiyan and urban Mumbai was declared open defecation free. To bring behaviour change is very important to, make program successful. According to a survey conducted in the rural areas of North India 47% of people say open defecation is pleasurable, comfortable or convenient (people say they could go for morning walk, see their field and get fresh air). Muslims in India are more likely to have toilets than Hindus and Christians. The fact that women are more likely to use of latrine doesn’t necessary mean that they have higher demand for latrine (Coffey, 2014). Advertisements play a role. At least in rural areas slogans like “Don’t let your daughter and daughter in law go outside make a toilet in your house
implies the message that ‘toilet is for women’ and men are free to practice open defecation (Kathyn Alexander, 2016) According to special report by PIB (Press Information Bureau) eradication of manual scavenging is one of the targets of Swachh Bharat Mission. But deaths in the sewers or septic tanks are still rampant in cities. Number of death due to, falling into pits is 497 for Male and 166 for female (INDIASTAT). In India there are 7,94,390 dry latrines where the excreta is clean by the human, among these toilets 73% dry toilets are located in rural area and 23% located in urban area,(census 2011) Under SBM so far 1.89 lakh insanitary latrines have been identified of which 1.56 lakh are dry toilets and 1.13 lakh have been converted to sanitary latrines. (Kumar, V., 2014) Swachh city is declared after three levels of validation. They are city declaration, district validation and finally state level validation. Mission also gives concept of open defecation watch. The concept of OD Watch is developed to ensure that the cities keep their guard up after being declared ODF. It is a tool to generate awareness amongst defaulters and vigilantly monitor the infrastructure in the city. It thus acts as driver for sustaining the ODF status of the city. Under this mission 384 cities of which 27 Municipal Corporations, 229 Municipal Councils and 128 Nagar Panchayat declared open defecation free. In 2011 around 8% of people resorting to open defecation now in 2017 the number came to 0%. (Journey of ODF Maharashtra, 2017) In 2017 around 5 lakh individual toilets are constructed, 1 lakh toilets are under construction and 12,000 community toilet seats were constructed. Mumbai is a city with myriad issues to address sanitation in the slums. How the city was made open defecation free? Does everyone in the city have toilet access? How prevalent is open defecation in the city even after the city attaining open defecation free status?

India has thus witnessed a spurt of urban sanitation programmes and schemes to make the country open defecation free. However, the ground reality is that people still defecates openly which has environmental health impacts. The reasons for open defecation may vary between rural and urban and between different slum clusters in urban area. This research will examine the sanitation status of M-ward in Mumbai to explore the implementation of Swachh Bharat Mission and the prevalence of open defecation among the people and their health issues.

Swachh Bharat mission is the one of the ambitious scheme launched by the central government. To measure success and effectiveness of the particular programme the outcome achieved through the programme is very important to give any city open defecation free status there are certain steps which are followed. In this process as per the guidelines whether the all criteria are fulfilled or not that is crosschecked this verification is done in different ward then wards declare they become open defecation free. Hence the urban local bodies pass the preliminary resolution in local daily declaring that it became become ODF. After this public announcement is done feed backs are taken and if complaints come then actions are taken and application is relooked. If there is no substantial objection
then final resolution is adopted. Then the resolution is given by state to third party verification. After verification it is given to the Ministry of Housing and Urban affairs to get ODF free certificate which is valid for six months. In the Swachh survekshan conducted by the Quality Council of India Mumabai got India’s cleanest state capital city rank. (Swachh Survekshan, 2018) The Swachh Survekshan report says that in MCGM 100% of the constructed IHHL have tapped water connection. The city is ‘Open Defecation Free’ and has a financially sustainable model to recover operation and maintenance cost of ‘Solid Waste Management’. 100% of the CTs/ PTs are monitored by Google Toilet Locator (GTL). Moreover, the city has well maintained community and public toilets all across the city. But in reality condition is different in the slum. People are practicing open defecation and condition of the toilet is not good. From the study it is found that inadequacy in toilet infrastructure, community participation and unawareness or more than that negligence of community towards hygienic practice due to struggle for completion of basic needs create hindrance in implementation of the programme.

There are different guidelines for the IEC campaigning like wall painting, door to door awareness, school competition, swachata-feri, kirtan or propagating the cleanliness mission (temples, masjid and churches), through distribution of the t-shirts, notebooks, cup, pens, appointing swachata facilitator, arranging cleanliness competition (between school, hotels, organisations, registered markets). In reality there are huge gaps in the implementation of these guidelines.

**Research Gap:**

Swachh Bharat and Swachh Maharashtra mission are the comprehensive policies to address the open defecation problem in Maharashtra. In Mumbai the main challenge to implementation of sanitation programmes is the lack of availability of the spaces to construct necessary infrastructure. The challenges also differ on the basis of geographic location. Each place has their different problems based on its geographic location. Places where open defecation is practiced have either open spaces or bushes where they can practice open defecation. In the Sathe Nagar there is big empty ground where usually male go for defecation. In Rafiq nagar and Baba nagar people go to open area in the dumping yard for the defecation. In Sahyadrinagar male go in bushes on the hill top for defecation. In Cheeta camp people use area near by the creek for defecation. This all area is somewhat similar to the villages this palaces are urban villages.

In earlier studies put light on the various factors respect to open defecation problem. The major focus of the current study is to identify the gaps in the current sanitation programme, its penetration in the society and improvement in the health of the people.
Chapter 3

Methodology:

The objective of the study is to identify the current status of the open defecation, existing and newly generated infrastructure, water borne disease status and process of declaration followed by the government to declare the study area open defecation free.

Objectives

1) To assess the existing toilet facilities in M-Ward slum area and it’s usage by the people.

2) To identify extent of open defecation in M-Ward and understand the reasons behind prevalence of people’s open defecation practice.

3) To examine the prevalence water borne diseases (sanitation related) in the M-Ward area.

4) To examine multiple methods by which government identify, verify and switch M-Ward as open defecation free area.

Research Questions

1. What kinds of toilets are available in M-Ward? And are the numbers of toilets available in M-ward is sufficient for existing population?

2. What is the status of existing toilets with respect to availability of water, electricity and maintenance? Do people use the toilets effectively?

3. Who are the people who still defecate openly in M-ward? Why do they prefer open defecation?

4. What are the changes in health outcomes after implementation of SBM?

5. What are the criteria for declaring open defecation free city? Does M-Ward fulfil these criteria? If not, what are the existing problems?

Data Collection

Sampling Plan:
M-ward east is classified in 6 areas. In these areas open defecation practice was more prevalent in following area:

**Table 3.1: Toilet facilities available in M-ward and open defecation practice**

<table>
<thead>
<tr>
<th>Area</th>
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<th>Open Defecation</th>
<th>Other</th>
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<td>Vashi Naka Sahyadri Nagar</td>
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<tr>
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<td>35.45</td>
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</table>

Source: M-Ward report (TISS 2015)

From the areas where OD practice is prevalent researcher conducted Semi-Structured interview of the government official working under Swachh Maharashtra Abhiyan, corporator of each area, two people practicing OD from each area. Structured interviews of household using IHHL, Public toilets, private toilets and practicing OD were conducted. The structured interviews of the household conducted based on type of toilet facilities (public toilets or private toilets) available in the slum community.
Table 3.2: Number of interview conducted

<table>
<thead>
<tr>
<th>Sample</th>
<th>Interview conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government officials related to Swachh Maharashtra Mission</td>
<td>4</td>
</tr>
<tr>
<td>2. Corporator / Nagarsewak</td>
<td>6</td>
</tr>
<tr>
<td>3. BMC Officials</td>
<td>3</td>
</tr>
<tr>
<td>4. Semi structured interview of HH</td>
<td>10</td>
</tr>
<tr>
<td>5. Structured interview of HH using IHHL</td>
<td>10</td>
</tr>
<tr>
<td>OD</td>
<td>20</td>
</tr>
<tr>
<td>Private pay and use toilets</td>
<td>20</td>
</tr>
<tr>
<td>Public Toilets</td>
<td>20</td>
</tr>
<tr>
<td>6. Total(sample size)</td>
<td>93</td>
</tr>
</tbody>
</table>

Data from 5 different parts of M-Ward East where open defecation prevalence was high according to the M-ward report was selected based on convenient sampling method. The selected area for data collection is Shivaji Nagar, Baigan wadi, Govandi, Mankhurd, Vashi Naka and Cheeta Camp.

**Study Site:**

M-ward (East) Mumbai have population around 806433 and total area is 52.26 square kilometres. 77% population in M-Ward is living in slums. Human Development Index for M-Ward is lowest in Mumbai 0.05. Literacy rate in Mumbai is 89.21% but for M-ward it is 79%. There are total 226 slums in M-Ward. M-ward (E), Mumbai is the home of people who are displaced by infrastructural development in heart of Mumbai. Estimated resettled population is about 1,50,000 to 2 lakh (Mumbai, 2015). This research will be helpful to identify sanitation status of M-ward in reality the extent of open defecation. The research also highlights the available sanitary infrastructure in the area (particularly in slum area).

**Data Analysis**

The information obtained from quantitative questionnaire provide information about existing infrastructure in area, effective use of toilets by people and improved health indicators which will signify effectiveness of the Swachh Maharashtra Program. Interview of key informants provide more
in depth knowledge about local problems. It also helps to compare and correlate the data collected by the quantitative survey.

**Ethical Consideration**

A brief introduction about the purpose of the study was given to the respondent before starting the data collection. Also those who were willing to participate in the study, a written informed consent was taken by taking a signature on the consent form before commencing the interview. Few interviews were taken after participant’s oral consent. After this each respondent was also briefed about the information which will be asked from her/him during the interview. Also they were informed about their right to decide which question to answer or which one to not. The respondents were assured that all the information shared by them would be kept confidential and only be used for the purpose of this study.
Chapter Four

Budget analysis of Swachh Bharat and Swachh Maharashtra Mission


Table 4.1: Money spent on sanitation programme before Swachh Bharat Mission
(Rs. In Crore)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Low Cost Sanitation Programme</td>
<td>55.5</td>
<td>106.01</td>
<td>69.76</td>
<td>22.59</td>
<td>21.44</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Source: Expenditure Budget, Volume2, Ministry of Finance

If we observed from the graph it is found that budgetary allocation was 106.1 crore only in the year 2010-11. It is drastically decreased by the end of the year 2014-15.

2. Revenue account of Swachh Bharat Cess

Swachh Bharat cess has become effective from 15 November 2015 at the rate of 0.5% on all taxable services. This effectively amounts to a 14.5% tax including service tax of 14% plus Swachh Bharat cess of 0.5% on taxable services. The Swachh Bharat cess is collected in the Consolidated Fund of India and is proposed to be used for financing and promoting Swachh Bharat initiatives of the government. For the revenue part of the budget Swachh Bharat cess is the important component.

Table 4.1: Revenue collected through Swachh Bharat Mission Cess
(Rs. In Crore)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Swachh Bharat</td>
<td>3925.74</td>
<td>12474.87</td>
<td>4243.4</td>
<td>240</td>
</tr>
<tr>
<td>Cess</td>
<td>Total-Service Tax</td>
<td>% of total service tax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>211414.25</td>
<td>254498.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>81228.07</td>
<td>9283</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.8568</td>
<td>4.9017</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.224</td>
<td>2.5837</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Revenue Budget, Volume2, Ministry of Finance

3. Money Spent under Swachh Bharat Urban Mission

**Table 4.3: Money Spent under Seachh Bharat Urban Mission**

(Rs. In Crore)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Schemes financed from Rashtriya Swachhata Kosh - Central component</td>
<td>100.7</td>
<td>174.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheme financed from Rashtriya Swachhata Kosh - State/ UT component</td>
<td>2034.51</td>
<td>2364.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross budget support</td>
<td></td>
<td></td>
<td>2500</td>
<td>2750</td>
</tr>
<tr>
<td>Total Swachh Bharat Mission (SBM) - Urban</td>
<td>2135.21</td>
<td>2538.8</td>
<td>2500</td>
<td>2750</td>
</tr>
<tr>
<td>Total-Centrally Sponsored Schemes</td>
<td>16620.83</td>
<td>20804.99</td>
<td>22084.05</td>
<td>24003.26</td>
</tr>
</tbody>
</table>
4. Money spent under Cholera Control programme by the government of Maharashtra by Ministry of Public Health and Family Welfare department

Table 4.4: Money Spent under Cholera control programme by government of Maharashtra

(Rs. In thousand)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(State Sector)</td>
<td>1,07,18</td>
<td>1,07,18</td>
<td>4,23,59</td>
<td>1,35,32</td>
</tr>
<tr>
<td>(Local Sector)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>10718</td>
<td>10720</td>
<td>42361</td>
<td>13534</td>
</tr>
</tbody>
</table>
5. Money spent on the Swachh Maharashtra Mission by the Ministry of Urban development

Table 4.5: Money spent on Swachh Maharashtra Urban

(Rs. In Thousand)

<table>
<thead>
<tr>
<th></th>
<th>Actual 2015-16</th>
<th>Budgetary Estimate 2016-17</th>
<th>Revised 17-18</th>
<th>BE18-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swachh Maharashtra Mission (Urban)</td>
<td>1448</td>
<td>7801</td>
<td>11172</td>
<td>12452</td>
</tr>
<tr>
<td>Total</td>
<td>77,73,07</td>
<td>1417152</td>
<td>862741</td>
<td>941411</td>
</tr>
<tr>
<td>% of Total spending</td>
<td>0.1862</td>
<td>0.55</td>
<td>1.29</td>
<td>1.322</td>
</tr>
</tbody>
</table>

Source: Expenditure Budget, Volume2, Ministry of Finance government of Maharashtra

From the graph and table it is visible that money spent in Swachh Maharashtra scheme is increasing every year also the percentage share of the Swachh Maharashtra is also increasing every year.

6. Money Spent on the advertisement
   a) Print Media

Table 4.6: Money spent on print media for promotion of SBM

(Rs. In Crore)
b) Digital Media

Table 4.7: Money spent on digital media for promotion of SBM

<table>
<thead>
<tr>
<th>Ministry of Urban Development</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74.8745</td>
</tr>
</tbody>
</table>

**Swachh Bharat Mission the Flagship scheme:**

From the budgetary allocation of the amount for the Swachh Bharat programme flagship scheme of the NDA government and it has significant weightage in overall allocation for the other programmes. Swachh Bharat Cess also have important role in the revenue collection for the Swachh Bharat Programme. Spending on the Swachh Bharat Urban component is around 10% percent of the centrally sponsored schemes. The money allocated for Swachh Maharashtra Mission also increasing every year. For the promotion of the mission money spent on the digital and print media is significant and money spent on the digital media is more.

**Physical Infrastructures made:**

Table 4.8: Number of IHHL constructed in Maharashtra under SBM

<table>
<thead>
<tr>
<th>Individual Household Latrines (IHHL), Nos</th>
<th>Application Approved</th>
<th>Under Construction</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>719,921</td>
<td>3392</td>
<td>682,786</td>
</tr>
<tr>
<td>India</td>
<td>571,1062</td>
<td>741,906</td>
<td>54,647,27</td>
</tr>
<tr>
<td>%</td>
<td>12.60572902</td>
<td>0.457200777</td>
<td>12.49</td>
</tr>
</tbody>
</table>
Table 4.9: Number of community toilets constructed in Maharashtra under SBM

<table>
<thead>
<tr>
<th>Community Toilets (No of Seats)</th>
<th>Under Construction</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>392</td>
<td>65832</td>
</tr>
<tr>
<td>India</td>
<td>25770</td>
<td>264931</td>
</tr>
<tr>
<td>%</td>
<td>1.52</td>
<td>24.84</td>
</tr>
</tbody>
</table>

Table 4.10: Number of public toilets constructed in Maharashtra under SBM

<table>
<thead>
<tr>
<th>Public Toilets (No of Seats)</th>
<th>Under Construction</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>868</td>
<td>40414</td>
</tr>
<tr>
<td>India</td>
<td>13604</td>
<td>199319</td>
</tr>
<tr>
<td>%</td>
<td>6.38</td>
<td>20.27</td>
</tr>
</tbody>
</table>

Table 4.11: Number of community and public toilets constructed in Maharashtra under SBM

<table>
<thead>
<tr>
<th>Community and Public Toilets (No of Seats)</th>
<th>Under Construction</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>1260</td>
<td>40414</td>
</tr>
<tr>
<td>India</td>
<td>39374</td>
<td>464250</td>
</tr>
<tr>
<td>%</td>
<td>3.2</td>
<td>8.7</td>
</tr>
</tbody>
</table>
Table 4.12: Number of IHHL constructed in BMC area

<table>
<thead>
<tr>
<th>BMC</th>
<th>9641</th>
<th>2187</th>
<th>2156</th>
<th>160</th>
</tr>
</thead>
</table>

Source: Ministry of Housing and Urban affairs, Government of India

Construction of Toilets - Out of the target of 66,42,221 Individual Household Toilets (IHHLs), 43,22,776 units have been constructed. Similarly, out of the target of 5,07,750 Community/Public Toilet (CT/PT) seats, 2,70,360 have been constructed. (MoHAU)
Chapter Five

History of slum settlements in M-Ward and there sanitation related problems:

This chapter gives information of the history of the particular slum, how it was established, current scenario of the open defecation practices and other sanitation related problem faced by the community. (This information is based on the survey conducted in the area.)

Sahyadrinagar- This area earlier was considered as the non-residential area because of the hazardous petrochemical and power industry in the Chembur. After the drought of 1972 in Marathwada region of the Maharashtra flow of the migrant started coming to Mumbai. Most of them were belonging to the scheduled caste as in the plain area because of the caste and power dynamics they started residing in the hilly area. The name of the Sahyadrinagar was given based on the montian range Wester Ghats which is known as Shyadri Ranges in Maharashtra. The settlement has narrow roads, lack of the resources like water, electricity and health facilities. Community made the structures like Buddh vihar to ineract and orgainse. (Bhide,2016)

Sahyadri nagar is divided into two parts namely part A and part B. Sahyadri Nagar part A have only two community toilets. One is ladies toilet and one is combined toilet. In Sahyadri Nagar Part B have one ladies toilet on the hill area which was constructed after a security issue that popped up and two combined toilets. Reason for construction of the ladies toilet in the Sahyadri Nagar is there security issue. During night some local drunk people harassed women and people of the area decided to have a toilet assigned only for women. This toilet is 6 seats are divided into 10 women living in the same gully. In this community toilet for women one toilet seat is used by the women from the two families living in the neighbourhood. These toilets were maintained and cleaned by the users, because of this condition of the toilet is good. But few people defecated outside the toilet. They kept one toilet door open for use of any other women. Women were saying that this open toilet is dirtier than other toilets.

In this area people use water from BMC pipeline through water tap. Quality of the water is fine. But people of this area reported to have different type of skin infections. In the same part diseases like typhoid, cholera is in highly prevalent. In the nearby area there is no health facility. Nearest health centre is Shatabdi Hospital. Some respondents said that they do not wash their hand after defecation. Few people believe that they are affected by diseases because of God’s curse. In sahyadri Nagar Part A people need to buy water 2Rs/can. One person died last year while carrying water from the paid water source after falling down from hill. In Sahyadri nagar all toilets are cleaned by the local cleaner. They will charge around 30-40/ month from surrounding household. He also makes arrangement of the electric bulb in toilets. Women toilets are made dirty by throwing sanitary napkins on the door or windows. The cleaner clean this dirt. In the male toilets latches of the toilets are broken.
People (men) defecate openly on the hill side. Reason for open defecation problem is toilets are far, crowded, unclean and dirty. Some local boys broke the toilet seat hence they are not in use.

All the toilets were constructed before SBM except on toilet which was reconstructed after falling down older toilet in 2014-15. In this area neither IHHL nor pay and use toilet.

Slum dwellers in the Sahydri Nagar are going to rehabilitate to the new building. They will get 270 sq ft flat in the new tower. In return builder will get 50 acre of Sahyadri Nagar part. Builder constructed one fiber shed toilet but in summer toilet are very hot and no space for the ventilation. Drainage out line is broken. This toilet has septic tank but it is not under use due to unclean condition. Most of people in the Sahyadri Nagar have ration card. Good morning pathak never came to this area.

**Indira Nagar 2 / Sathe Nagar**

After 1980’s when settlement began to become more organise the social differences became more pronounced and it became major vote bank in election. In the area like Ghatla only people from the Maratha community were consciously given space to settle. At the corner of this bastis Dhangars and Wagharis found space to settle. The name of politicians and social reformer was given to the different settlements to protect them and to reflect their social identity.

Indira Nagar is situated in Vashi Naka area. In the basti everyone uses community toilets. There are two community toilets for men and two for women. Total 80 toilets seats are available in one place. People from the other side of the basti have to come to this place after walking around 100-150m distance. Mostly women, old people and children are having more inconvenience because of this. Usually, during night time women will avoid going for a toilet. One pay and use the toilet is in front of Indira Nagar Basti sometime male will use this pay and use the toilet but women never use it. Drainages are open in the area. BMC water is available here. People living in the area near to the toilets have serious problems due to smell from the toilets, toilets doors are open; the sanitary napkin is kept in the windows, water seepage problem in the renewed toilets. In this area there are two gents and two ladies toilets. The problem in the ladies toilet is that they are unclean and sanitary napkins are left in the toilet. Water is available in the cement tank outside the toilet. Response from the respondent in the area varied. Few respondents said that toilets are cleaned every day and few said twice a week. Here in one male community toilet two commode type toilet seats were there. Out of the 30 toilets, 10 were broken. Few toilets seats were very dirty. No light in one of the community ladies toilet. Few toilets were constructed through the corporation’s fund and few were constructed from MLA’s fund.
Cheeta Camp

It is widely accepted by the community members that Cheeta Camp gets its name from the word ‘Cheeta’, which in vernacular terms means ‘dead body’, the context of which are the cemeteries and burning grounds that have long existed alongside the swampy mangroves. In 1976, about 72,000 residents of Janata Colony in Mankhurd were evicted from lands (in a coordinated police operation, and from lands which they had been assured they would not be evicted further) to a swampy area about two km east, which in earlier assessments, had been deemed unsuitable for relocation of residential quarters. This was done for the expansion of housing facilities for the staff of Department of Atomic Energy (DAE).

The population of Cheeta camp is about 70,2456 (arrived at by assuming an average family size of 5 in about 14,049 households. Source: M Ward project - TISS). A majority of the population consists of people who have migrated from different parts of India, mainly from Tamil Nadu, Uttar Pradesh, Bihar, West Bengal, Madhya Pradesh and Andhra Pradesh. Most of the men are self-employed (various kinds of trades) and the working women comprise of household help or vegetable/snack vendors. Small scale industries such as zari work, bag making, mat weaving, carpentry, tailoring etc. thrive here. A majority of the population belongs to the age group 15-34. About 62% of the population is Muslim. The settlement is culturally highly cohesive, and the community members identify it as socially as well as economically homogeneous. In fact, Cheeta camp rose to recognition as one of the few areas that remained unaffected by the communal riots of 1992-93.

Most of the people in the Cheeta camp use pay and use toilet khadi area). Toilets are cleaned between mornings 1-5 am. Few people can't afford to use the pay and use toilets particularly women uses toilet only once a day. Few people use toilets at their work place. In khadi area few drunk people, children and during emergency few male goes in open for defecation. Government officials came in this area and filled the form in 2015 to construct IHHL. Most people paid a form fee for filling up of the form as requested by the government officials. Good morning Pathak never comes here. All the IHHL have direct toilet outline in normal gutters hence when gutter is chocked dirt will come out of nalla inside house. BMC contract person took the responsibility to clean gutters but at the end of the gully no worker comes to clean the gutter. People have water borne diseases like diarrhoea, normal fever, and skin infections. Few people want to construct IHHL but due to unavailability of the space at home they are unable to construct toilet. These houses are located in the mangrove forest area. Government (forest officials) broke houses in this area.
Jai Ambe Nagar
It is situated near to the Chembur Nakka. It was a basti for almost 30-40 years back and 40 slum dwellers were living in this area. In 2011-12 MHADA constructed the building and gave the house to the slum dweller. House size is almost 250-300 sq ft. Each household has a toilet inside a house. The building is seven floors. People living in the building before coming to stay in the building were using community toilets now they are using IHHL. But the problem is water availability in the area is very less. Municipality water will come only for an hour and bore water is available only for the 2 hours. Hence most of the people including old people use the pay and use a toilet in the nearby area, even though they have IHHL.

Rafiq Nagar
This area is very close to the dumping ground. It is divided into two areas Rafiq nagar and Baba nagar, In Baba nagar only two toilets are found. Among them one is non-functional because no contractor is ready to run the toilet due to uncleanliness issue.

In every gully of the Baba Nagar at the end there is one temporary toilet like shed in the creek. People use this temporary toilet and drain will directly go in the creek and during full tide dirt below the kachha toilet is washed away. In some places pakka toilet is constructed by people by contributing money. So only those people who can use the toilet in the gully contribute money for the toilet. Doors of these toilets are locked. Mostly women are using the pay and use toilet. Men who are not using the temporary toilet go in the dumping area for defecation. Women are worried to go out for defecation in the night due to the presence of unwanted social elements like drug and alcohol addicts. In last six month one minor girl was raped when she was going to the toilet. One 50 years old lady told even her daughters are above 15 she accompany them every time while using pay and use toilet.

In the Rafiq nagar few people buy water who can’t afford to take pipeline from the main BMC water source. They buy big water can for 50Rs. In this area few people have IHHL. When they reconstruct there house they build household latrine. Most of them have septic tank.

In the other pay and use toilet number of seats for male is more than for women. Community toilet condition is very bad. Women throw sanitary napkins behind the toilet. People had thrown the stones in the toilet seats and still people are defecating on the same toilet pot. Cleaner who cleans the toilet broke the toilet seat few people were complaining.

Solid waste from the toilet will directly goes in nalla. But the nalla is chocked. When people complained about it to BMC officials they said in the nalla widening there houses will be demolish hence they are not ready to clean it. Due to chocking of nalla solid waste and dirty water is going
inside their houses. On the main road new toilet is under construction and condition of the toilet is good.

**Sathe Nagar**

Only two pay and use toilets are located in the area. One toilet is under construction. This new toilet is constructed after falling down of old toilet which was in the poor condition. New toilet which is being constructed have gents toilet seat on first floor and women seats on ground floor. As one toilet is under construction people are using other toilet available in the area. Condition of this toilet is not good and toilet seats are risky. People have fear in their mind that they will fall down in the septic tank. Hence few male are going for open defecation. Other reasons for the open defecation are toilets are unclean and water given in the toilet is very bad. Few have infection after use of this unclean water. One of the respondents believed he had infection after using the community latrines and preferred open for defecation. Some children in the area have also reported skin diseases and water born disease like cholera. There were reports where people are denied IHHL facilities in the area under SBM because BMC insisted on the presence of sewer line connections. To have an IHHL with septic tanks BMC officials also asked for an undertaking that if the septic tank troubles the neighbours then it is removed. However even after the undertaking was taken the respondent is yet to receive the benefit.

**Some Photographs of the area:**
Survey in the Sahyadri Nagar Area
Survey in the Rafiq Nagar and Baba Nagar
Chapter Six

Findings from the house hold surveys and personal interview of the officials:

Chapter gives detailed information about the main findings from the collected data. In the findings data obtained from household survey is separated based on the type of toilet used. Findings from interviews of elected representative give information about the different common problems faced for the implementation of the programme.

HH using private paid toilet

Among the interviewed HH more than 50% of the HH are having education till seventh standard. Almost 80% of the people live in their own houses, 95% of the people have ration card, 75% of the people have income in between 10000-15000 Rs. Almost 70% of the people don’t pay money for the maintenance of the toilet. Forty 5% of the HH responded that the toilet which they are using is unclean. Most of the toilets are cleaned once a week. These toilets are cleaned by the workers hired by the contractor who runs the toilet. Water is available in toilets is sixty five percent. Fifty five percent of the toilets don’t have place to wash the hands after use of the toilets. Eighty five percent of the toilets have light inside the toilet. Doors of the toilet are in the working condition. Twenty percent of the toilets don’t have proper latches. Fifty five percent of the households use water from the nearby water tap to the toilets and forty five percent of the people bring water from home for the use in toilet. Twenty two percent of the women using the toilets keep the used sanitary napkins in the windows or throw in the toilet pot. In most of the area normal cough, cold, fever is common but apart from that people are suffering from typhoid, diarrhoea and other skin diseases.
HH using Community Toilets

Forty two percent of the household are studied till seventh standard. Seventy five percent households have income ranging from 0-5000 while as three forth of the private toilet user has income range between 5000 to 10000 rupees. Seventy five percent of HH have their own houses and rest of the people leave in rented houses. Seventy one percent of the HH have ration card. Maintenance charged for the cleaning the toilet is in between 40-20 rupees. Only thirty five percent of the toilets are clean. Almost all toilets are cleaned once a week. Forty percent of the toilets are cleaned by the people using toilet, Thirty five percent of the toilets are cleaned by the workers hired by the community and rest of the toilets are cleaned by the volunteers. Seventy percent of the toilets have water available in the
toilets. Fifty percent of the toilets have water available near toilet to wash hands after use of the toilet. Eighty five percent of the toilets have light and seventy three percent of the toilets have doors. Sixty percent of the toilets have latches for the doors. Seventy percent use water from the toilet other people bring water from the home. Fifty percent of the excreta is disposed into nalhas and Twenty percent of the discrete is discharged in the septic tank or drainage. Seventy percent of the women throw the sanitary pad in the dustbin near to the toilets. People are suffering from diseases like diarrhea, typhoid, skin diseases and common cold and fiver.
**HH using IHHL**

Sixty percent of the HH having education from 8 to 12 standards and other forty percent of the people have education till eighth standard. Most of the HH have income in between 5000 to 10000 rupees. All of the surveyed HH having IHHL have their own house. All of them have ration card. Thirty percent of the HH constructed toilet in last one year and Fifty percent of the toilets is constructed three to six years back. Before construction of the IHHL 50% of them was using community toilet and 30% of them were practicing open defecation. Fifty six percent of the excreta are discharged into the septic tank and 40% of the excreta are discharged in the nallhas. Overall disease prevalence is lower as compared to the use of the other toilet type of toilet.

**People practicing OD**

Thirty three percent of the interviewed HH practices open defecation because the community toilets are overcrowded. Nineteen percent of people don’t use community toilets as the toilets are dirty. Other people don’t use toilet because toilets are far from home, cost of the toilet is high and eve teasing. Fifty three percent of the HH have some kind of water born disease. Most of the patient has cold, fiver and skin disease other are suffering from diarrhea, jaundice and typhoid.
Interview of HH practicing open defecation

For the open defecation practice major reason is overcrowding. During the morning people are in hurry to go for work and people use places where bushes or open ground is available for open defecation. In some of the area there are only female toilets and male toilets are far away from home so men practice open defecation. Unclean toilets are the other reason for the open defecation. In some area like in the Sathe Nagar toilets are unsafe for use, people are using toilet as there is no other toilet in the area.
Common findings after HH survey and interview of the other officials:

Interview of the corporators:

This interview gives the information about the initiatives taken by the corporators in their respective area and challenges faced by them during implementation of the program.

Sahydrinagar-

According to corporator the area is hilly and therefore under swachh Bharat mission she was unable to implement the programme properly. Initiative taken by the BMC are inadequate. People are making illegal settlement on the hill, according to the corporator BMC should take the strict action on the illegal migrants.

Sathe Nagar-

Toilet seats are insufficient. BMC is not taking any initiative for the solving the OD practice in the area. The condition of the toilet in the area is not so good. In the open ground where people practice open defecation there he want to build the toilet. He ask permission for the making the toilet to BMC. The new double decker toilet is under construction.

According to the Corporator Santa Gadage Baba scheme was successful because they are giving price to the cleanliness initiatives. He wanted new scheme by name of Prabodhan Kar Thakare. For the maintenance of the septic tank BMC is not able to reach houses which are located in the congested area.

Indira Nagar 2

In the area only community toilets are available. A new sewer line is proposed and the work will get over in the next four months. Hence, household who have place to construct toilet will get the proposed amount under the swachh Bharat and swachh Maharashtra mission to construct the toilet. The number of beneficiary will be very small as available space is less to construct IHHL.

Cheeta Camp

For the corporator Swachh Bharat is only cleaning of the road. He said twice a year a committee appointed by the central government will come to clean the area after that condition will remain as it is.

According to the 2010-11 plan of BMC datak vasti (adopted rehabilitation) an organisation will be appointed for the cleanliness of the area. The people appointed by the organisation will clean the area and solve the drainage problem in the allotted area.
In the cheeta camp this organisation and corporator and corporator and community have Whatsapp group for any problems regarding choking of the gutters or other problems people will take photo and send to corporator and then corporator forward the same photo to the organisation so problem is solved easily. In the cheeta camp there is not proper sewage line all human excreta is disposed in the gutters hence during rainy season it leads to different diseases. Corporator was talking about the making of the separate sewer line which disposes the excreta in the proper disposal site.

For the awareness of the people BMC is not taking any initiative hence it affects success of the swachh Bharat. In the Khadi area few houses are demolished by the forest department and BMC as this houses were located in the mangrove forest area. Now the drainage line in the demolished area is broken and sewage flows in the nearby area. Corporator expects that apart from the fund given by the BMC there should be a interaction between community and administration.

**Mission director of the Swachh Maharashtra Mission Urban:**

Swachh Maharashtra programme is the flagship programme of the NDA government. Under mission different local bodies are coordinating with the mission directorate for archiving the cleanliness status. As in city like Mumbai where due to lack of availability of the spaces it is difficult to achieve the open defecation free city target. Unavailability of the land is major issue. For the effective implementation of the programme IEC played important role. For the success of the programme participatory approach is necessary. In some areas MCGM installed good facilities in toilet to increase the use of the toilets but, people are stealing the material from the toilets. In New Mumbai Municipal Corporation (NMMC) the toilets condition is good as the toilets in airport and people are keeping the toilets clean they are using all resources properly. For the construction and maintenance of the toilets three authorities are responsible MCGM, MMRDA and Swachh Maharashtra Mission Urban. In the urban slum due to lack of the availability of the toilets there is limitation on construction of IHHL, but whoever apply for construction of IHHL to them government provide subsidy. For the area where drainage systems are not in use they provide the septic tank. According to the guidelines this septic tanks should be cleaned on regular time interval. To clean these septic tanks small suction machines are available that can go through the narrow areas. For the success of the programme political will is very important. Local water mafia and there political mentors are responsible for the unavailability of the water for the different purposes. This scarcity of the water is one of the reason people can’t use toilet facility as more water is needed for the keeping toilet clean.
Chapter 7

DISCUSSION

From the study it is found that following factors are responsible for the not achieving the open defecation free status:

1. **Availability of the adequate number of the toilets:** Like all earlier programmes Swachh Bharat and Swachh Maharashtra mission also focuses on the creation of the toilet facility. But from the study it is found that toilets are not available in adequate number in the few areas. As per the guideline given in the Swachh Bharat programme toilet should be available in every 500 meter of area but number of toilet seats are not sufficient as number of toilet user is very high.

2. **Gender:** In the most of the area toilets available for men and women are separate. In area like Sahyadrinagar more priority is given to the female toilets over male. Due to the eve teasing and because of security issues women are unable to use toilet facility during night time. The design of the toilets are not female friendly, as dustbins are not available in the toilets of some area women throw sanitary napkins either in the window or in the toilets. Men are using toilets available at place where they work but the house maker women are unable to use such facilities.

3. **Illegal settlements:** Toilet facilities are not provided in this area and increased number of the migrant population take shelter in the cheaply available illegal places. In Sahyadrinagar at the top of hill, Cheeta camp and in Rafiq nagar area near to the Khadi there are illegal slums as toilets are not available in nearby area people practice open defecation.

4. **Cost of the pay and use toilets:** Most of the people living in the slum have lower income. Open defecation practice for children and males. In Cheeta camp children are going for open defecation in Khadi area.

5. **Availability of water at toilets:** Due to lack of the availability of the water toilets are unclean and open defecation is preferred over use of unclean toilets. In sathe nagar area people are going for the open defecation on open ground. For the slum dwellers water availability for the daily chores is very low and cost of water is very high for them because the tanker mafia and political support for such practices. Hence, to save the water people are practicing open defecation.

6. **Human behavior:** In the some of the area in slum have village like setting and few people are having habit of going for open defecation in open spaces. Few of them are worried to use the toilet facility which is unsafe because of the uncleanliness and unsafe toilets due to unrepai red toilets.
7. **Worse condition of the toilets:** Mostly toilets are built by the private contractors and community don’t have any role in deciding type of toilet to be build and in the maintenance of the toilet hence people don’t have responsible behavior toward toilets. In the Sahaydrinagar and Rafiq nagar some local gundas broke the toilet seats. In the male toilet of Indiranagar 10 out of 40 toilet seats are broken. Private contractor who are running the toilet in Sathe nagar are not maintaining and repairing the toilets properly hence people are worried to use damaged toilets. By increasing the community participation toilets can be kept in good condition and by regular auditing toilet condition should be cross checked.

8. **Awareness among community of cleanliness and hygiene:** After effective advertisement campaign through print and digital media people are still not aware of the hygienic practices. They are unaware of the water borne diseases and stunted growth caused due to the unhygienic practices. Practical demonstration on the water borne diseases and ill effects of open defecation on health in the school and community will help to understand the seriousness of the problem.

9. **Role of government officials:** BMC official and the staff working on the ground are not aware about the guidelines under SBM and there is need well trained workforce particularly working for the awareness and proper execution of the programme.

**Conclusion and recommendation:**

The criteria for declaring the city open defecation free is not having any single case of the open defecation. M-ward is the area where 70% of the people are living in the slum. From the M-ward report in 2015, it was found that in some areas like Jai Ambenagar 98% of the population was defecating openly. From the present study it was found that Jai Ambernagar became open defecation free but the other areas like Sathenagar, Sahyadrinagar, Rafiq Nagar and Cheeta camp have significant number of the people practicing open defecation. In some area like Cheeta camp and Rafiqnagar there is construction work of new public toilets and pay and use toilets is in progress but creating a toilet does not assure the use of toilet by the community. For maintenance and keeping the toilet safe community participation is important. Involving the community in the construction of toilets, designing and maintenance of toilet will create a sense of ownership on the community toilets.

People living in this slum are suffering from various types of water borne diseases. For keeping up the competitiveness among the cities and make the city authority to work for cleanliness of the city it is important to give recognition like open defecation free city, but there should not be any false declaration to acquire open defecation free status. Ideal condition of open defecation city might be a difficult target to achieve but efforts should be made to achieve that goal.
For the sustainable growth of the city we need to assure that there should be an equal distribution of the resources despite of the class, caste, gender and other differences in the citizens. If the people are provided with good quality of the services and by sensitizing and creating the belongingness to the public property we can achieve the open defecation free status not state imposed but it will be citizen declared and participatory.
References:


Annexure

Consent Form

Introduction and Informed Consent Form

Dear Sir/ Madam

This research is being conducted by Pratik More by the student of TISS, Mumbai.

Purpose of the Study: Aim of the current study was to observe open defecation practice and implementation of Swachh Maharashtra mission in M-ward East.

Nature of Participation: We would like to request your consent to participate in the study. If you agree to participate, you will be asked to fill a small questionnaire to measure the health status and your socio-economic status as well as physical parameters in the house.

Risks and Discomforts: Some of the questions may make you feel uncomfortable. To protect you from this sense of discomfort, you do not have to answer any question you do not want to. The study will ensure complete confidentiality of your information.

Benefits: Although you will not receive an immediate benefit from this study, you and others from the humanitarian field may benefit from this in the future, if this research succeeds in finding ways to improve the secondary stress among humanitarian workers.

Duration of the procedures: The questionnaire may take 15-20 minutes to fill up.

Compensation: There will be no monetary compensation for your participation in the study.

Confidentiality: To make sure that no one learns about any information shared by you in this study, your name will not appear on any document or other materials associated with the project. Each questionnaire would be given a unique code. The filled forms will be kept in a safe place under lock and key and only accessible authorized persons designated by us in Mumbai. The identity of the interviewee will always remain confidential. Your name will be removed from all records.

Right to refuse or withdraw: Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time.

Participants' consent: I have read and understood this entire consent form and any questions I have, have been answered to my satisfaction. I agree to participate in the study and to respond to the questions. I understand the purpose, nature, and length of my involvement in the study. I understand that I may choose not to participate at the beginning of the project or at any time during the project without penalty.
Questionnaire

Interview of women HH using IHHL

1. Name
2. Age 18-40
   41-60
   60+
3. Education  Illiterate
   Primary
   Secondary
   Higher Secondary
   Graduation
   Post-graduation
4. Income  0-5000
           5000-10000
           10001-15000
           15000+
5. Ownership of the House
   Own House
   Rented House
   Relative’s House
   Others
6. Do you have Ration Card?  Yes       No
   If yes, which colour? ______________
7. Questionnaire related to construction of IHHL

   1. How long ago was this latrine constructed?
      Year
      Month
   2. Before construction of toilet which facility you were using?
      Community toilet
      Private paid toilet
      OD
   3. Does latrine is constructed under any scheme?
      Yes
      No
   4. If yes, which scheme?
   5. Why you feel necessity to construct toilet?
      Due to awareness programmes by government
      For safety
      Due to government monetary

Signature
<table>
<thead>
<tr>
<th>Questions</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Did you receive any money from the government for the construction of this latrine?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>6. If yes, How much?</td>
<td></td>
</tr>
<tr>
<td>7. Did the government give you material for construction of toilet or government constructed toilet by their own?</td>
<td></td>
</tr>
<tr>
<td>8. Did you have to pay any bribes to get government assistance for the construction of your latrine?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>9. If yes, how much?</td>
<td></td>
</tr>
<tr>
<td>8. Where does an excreta discharge from the toilet?</td>
<td></td>
</tr>
<tr>
<td>a) Drain,</td>
<td></td>
</tr>
<tr>
<td>b) Nallahs,</td>
<td></td>
</tr>
<tr>
<td>c) Open pit;</td>
<td></td>
</tr>
<tr>
<td>d) Ponds or river or streams or any water body</td>
<td></td>
</tr>
<tr>
<td>e) Closed Septic tank with a Soak Pit</td>
<td></td>
</tr>
<tr>
<td>f) Enclosed Twin Pit;</td>
<td></td>
</tr>
<tr>
<td>g) Enclosed Single Pit;</td>
<td></td>
</tr>
<tr>
<td>h) Closed drain which empties into Sewer system/ nallah/pond/river after treatment</td>
<td></td>
</tr>
<tr>
<td>i) Biogas System for digestion</td>
<td></td>
</tr>
<tr>
<td>j) Other Safe options</td>
<td></td>
</tr>
<tr>
<td>9. Health condition in the area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Questions</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Has any family member had any illness during last one month due to water borne diseases?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2</td>
<td>If yes, specify</td>
<td>Diarrhoea Yes/No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jaundice Yes/No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Typhoid Yes/No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cough, cold, Fever Yes/No</td>
</tr>
</tbody>
</table>
### Interview of women HH using Community or private paid toilet

1. Name
2. Age 18-40
   - 41-60
   - 60+
3. Education
   - Illiterate
   - Primary
   - Secondary
   - Higher Secondary
   - Graduation
   - Post-graduation
4. Income
   - 0-5000
   - 5000-10000
   - 10001-15000
   - 15000+
5. Ownership of the House
   - Own House
   - Rented House
   - Relative’s House
   - Others
6. Do you have Ration Card?  Yes   No
   If yes, which colour? ________________
7. Cost incurred in community toilet or private toilet?

<table>
<thead>
<tr>
<th>Money charged for using the community toilet or private toilet</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost incurred (In rupees)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>1 to 99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 to 199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 to 299</td>
<td></td>
<td></td>
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<td>300 to 399</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400 to 499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 and above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean cost incurred by the household for using community toilet

| Median |               |

<table>
<thead>
<tr>
<th>Money charged monthly for maintenance the community toilet</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount charged for the maintenance of community toilet (In rupees)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

**Condition of Community toilets or paid toilets**

<table>
<thead>
<tr>
<th>Characteristics of community toilet</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanliness status</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency of cleaning</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More than once a week</td>
</tr>
<tr>
<td></td>
<td>Once a week</td>
</tr>
<tr>
<td></td>
<td>Two or three times a week</td>
</tr>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Authority responsible for cleaning</td>
<td>Workers from BMC</td>
</tr>
<tr>
<td></td>
<td>Worker hired by the people of the community</td>
</tr>
<tr>
<td></td>
<td>Volunteers from the community</td>
</tr>
<tr>
<td></td>
<td>Don’t Know</td>
</tr>
</tbody>
</table>

| Availability of 24-hour water             | Yes |
|                                          | No  |

| Source of water used                     | From Home |
|                                          | From tap near the community toilet |

| Availability of space for washing hands after defecation | Yes |
|                                                          | No  |

| Functional lights in the toilet?            | Yes |
|                                          | No  |

| Are there doors in the toilet?             | Yes |
|                                          | No  |

| Are the latches in the doors intact?       | Yes |
|                                          | No  |

8. Where does an excreta discharge from the toilet?
   a) Drain,
   b) Nallahs,
   c) Open pit,
   d) Ponds or river or streams or any water body
   e) Closed Septic tank with a Soak Pit
f) Enclosed Twin Pit
    g) Enclosed Single Pit;
    h) Closed drain which empties into Sewer system/ nallah/pond/river after treatment
    i) Biogas System for digestion
    j) Other Safe options

9. How do you dispose of sanitary napkins or cloths?
   a. Throw it out with the rest of the garbage
   b. Burn it with plastic
   c. Other____________________

10. Health condition in the area

<table>
<thead>
<tr>
<th>SR. NO.</th>
<th>QUESTIONS</th>
<th>Yes........................</th>
<th>No........................</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Has any family member had any illness during last one month due to water borne diseases?</td>
<td>Yes........................</td>
<td>No........................</td>
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<tr>
<td>2</td>
<td>If yes, specify</td>
<td>Diarrhoea</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jaundice</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Typhoid.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cough, cold, Fever</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin disease.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any other, specify.</td>
<td>No</td>
</tr>
</tbody>
</table>
4. Community toilets are very dirty
5. Difficult to climb the stairs of community toilet
6. The CT is not safe to use

<table>
<thead>
<tr>
<th>Possible reasons</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems faced</td>
<td>Eve teasing by local boys</td>
</tr>
<tr>
<td></td>
<td>Unsafe as it is very dark</td>
</tr>
<tr>
<td></td>
<td>The security guard is drunk</td>
</tr>
<tr>
<td>Presence of security person</td>
<td>Yes</td>
</tr>
<tr>
<td>Presence of security person during night</td>
<td>No</td>
</tr>
</tbody>
</table>

7. How do you dispose of sanitary napkins or cloths?
   a. Throw it out with the rest of the garbage
   b. Burn it with plastic
   c. Other ______________________

8. Health condition in the area

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<td></td>
<td></td>
</tr>
<tr>
<td>Any other, specify.</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Semi-Structured Interview of women HH Practicing open defecation**

1. What is your name
2. Age
3. Education
4. Employment
5. Income
6. Number of family members
7. Does the other family member also practice OD or any other public facility?
8. Since when are you living in the area?
9. From where you migrated from?
10. What are the reasons for practicing open defecation? And not using public facilities?
11. How do you feel about open defecation?
12. Do you know any ill effects of open defecation? What are the ill effects?
13. Do you or your family member have any water borne disease?
14. Does your neighbor also practice OD?
15. Which place you prefer for OD? Any preferable time you practice OD?