

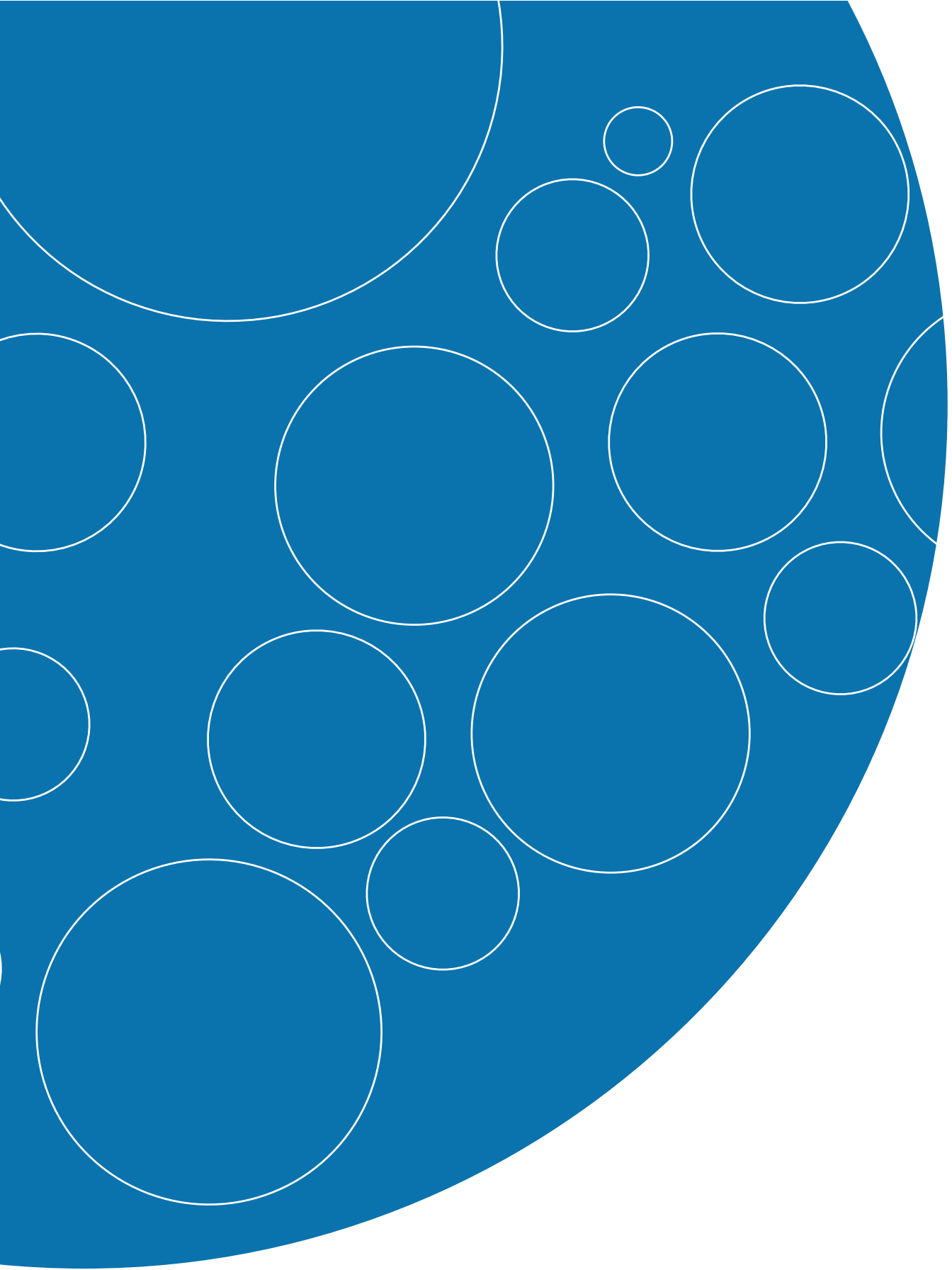


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MINISTRY OF HEALTH - ETHIOPIA

የዜጎች ጤና ለሃገር ብልጽግና!  
HEALTHIER CITIZENS FOR PROSPEROUS NATION

# Public Toilet Design and Management Guideline

June, 2021  
Addis Ababa, Ethiopia





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## **i. Abbreviations**

<b>CSOs</b>	Civil Society Organizations
<b>PTs</b>	Public Toilets
<b>IUS&amp;HS</b>	Integrated Urban Sanitation and Hygiene Strategy
<b>HEHS</b>	Hygiene and Environmental Health Strategy
<b>MHH</b>	Menstrual Hygiene and Health
<b>MSEs</b>	Micro-Small-Scale Enterprises
<b>NGOs</b>	Non-Governmental Organizations
<b>PPE</b>	Personal Protective Equipment
<b>RHBs</b>	Regional Health Bureaus
<b>SEUHP</b>	Strengthening Ethiopia’s Urban Health Program
<b>USAID</b>	U.S. Agency for International Development
<b>JSI</b>	John Snow, Inc.
<b>WC</b>	Water Closet

## ii. Forward

Most public toilet facilities in large cities and small towns of Ethiopia are poorly managed. Town administrations, NGOs or any support group do not consider or mind the necessity or provisions of water, cleaning mechanism, light, management needs as whole before constructing or establishing PTs services. At the aftermath, proper services are not at place and the management body cannot administer them properly. Most public toilets facilities are poorly maintained: it is common to find broken doors, windows, vent pipes, handwashing facilities and urinals and missing handle/keys. This could expose women and adolescent girls for violation of their right to dignity and a threat to their safety. Moreover, most public toilets lack provisions for menstrual hygiene health. Due to these factors, most women are not interested to utilize public toilets and this is often observed in public toilets established in towns and cities. This is the result of inadequate follow up for sustainability, poor financial allocation, maintenance and operation of the facilities.

It is with these challenges in mind this guideline has been developed to facilitate and filling a critical gap for the town/city administrations in the process of managing public toilets and render effective service delivery thereby. It also facilitates public toilets service provisions based on sustainable sanitation solutions and sound management practices. Moreover, it is aimed to reduce problems related to access to public toilets. Improved living condition of individuals and communities has a positive impact on basic public health needs.

Therefore, the main goal of this guideline is to assist public toilets management bodies and all relevant stakeholders in the overall management (design, implementation, operation and maintenance) of public toilets all the way through their practical engagement.

I hope these guidelines will be of great practical use to policy makers, regional health bureaus, municipalities, health authorities, sewerage authorities, private sectors, development partners, donors, CSOs and implementers to make the best investments in the best interventions for the best possible health outcomes for everyone.



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### iii. Acknowledgment

Hygiene and Environmental Health Directorate of the Federal Ministry of Health would like to express its appreciation to regional health bureaus, UNICEF, World Vision Ethiopia, AMREF Health Africa, SNV and development partners who participated in the development of this guideline. The Ministry would also like to express its sincere thanks to the following individuals for their technical support for development and realization of the guideline:

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## iv. Operational Definition

**Complete WASH Package:** Availability of Water, Sanitation and Hygiene (WASH) services provided for water availability and quality, presence of sanitation facilities and availability of soap and water for handwashing and established mechanism for sustainable management, operation, maintenance and promotion of proper use.

**Handwashing:** is the act of cleaning one's hands with or without the use of water or another liquid, or with the use of soap for the purpose of removing soil, dirt, and/or microorganisms at critical times (before eating, before cooking, after using the toilet, after cleaning a baby or an adult's bottom or cleaning the pot, before and after taking care of a sick person)

**Improved Toilet:** A hygienic sanitation option for securing sustainable access to safe, hygienic, sealed and convenient service for excreta disposal, providing adequate and secured privacy, protected from rain, built either on site or connected to sewer or septic tank while at the same time ensuring a clean and healthful living environment

**Public Toilet:** Toilet facilities that are open for public use. Custodians or others intending to use the toilets are mostly required to pay fees.

**Sanitation:** refers to the principles and practices relating to the proper collection, removal or disposal of human excreta, household wastewater and refuse to prevent adverse effect upon people and their environment

**Unimproved Toilet:** sometimes known as traditional toilets, are the lowest-cost option considered at the bottom of the sanitation ladder, which is mostly open, un-cleanable, poor superstructure, unsafe, and accessible to flies, domestic fowl, and other animals.

**Waste Water:** Water that is wasted from leaking pipes and spill over from water drawing areas such as water pumps or communal distribution sites usually forming ponds around the site attracting animals, encouraging mosquito breeding or infiltrating to contaminate the water source and from shower, laundry and other services.

**Inclusive WASH:** is provision of suitable WASH facilities considering the issues of sex, disability, age (children and elderly), MHH, and special conditions like pregnancy and insure the participation of marginalized groups without discrimination during decision-making process.

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## Part One - Introduction

### 1.1. Background

Public toilets in modern speaking are restrooms, which are provided service for the floating population/general public in places such as markets, train stations, bus stations, expressway, tourist places, near office complexes, or other public areas where there are considerable number of people passing by with a charge for each use. Public toilets need to be accessible to one and all and well connected to important areas and pedestrian junctions. Public toilets need to be open to anybody in public places or in residential areas.

Inadequate sanitation systems exist in many parts of the world. Many people worldwide practice open defecation and many more do not have services that prevent faecal waste from contaminating the environment (WHO-UNICEF, 2017). One of the key aspects to adopt Community Led Total Sanitation and Hygiene (CLTSH) and Sanitation Marketing, and developing Integrated Urban Sanitation and Hygiene strategy (IUSHS) and National Hygiene and Environmental Health Strategy (NHEHS) as government strategies, is to eliminate open defecation and improve sanitation and hygiene to meet Sustainable Development Goals (SDGs) through availing improved sanitation facilities to keep privacy, dignity and health of the rural and urban population.

Historically, municipalities were the main providers of public toilets, but these facilities suffered from poor maintenance and cleanliness for a variety of reasons and were largely avoided by the public.

Similarly, the coming PTs management in our cities and small towns will follow the smart sanitation principle, and envisage providing smart, clean and accessible public toilets to the nearby residents and floating populations designed for cost recovery, revenue generating business opportunities. Cost recovery and user satisfaction are among the core objectives of any public toilet service provision that would be the domain of city/town administration, unless and otherwise unfavorable conditions are occurred.

Under these circumstances, the development of this Public Toilet Management Guideline for managing PTs may be an essential component of sanitation adopted for low-income areas especially when considering the human rights approach to toilet services.

### 1.2. Existing situation

Public toilets are commonly provided and managed by municipalities or designated government structures, and often no service fee was charged to users.

Toilet attendants were employed by the managing institutions. This traditional model of public toilet management is limited in its ability to generate income for maintenance. According to mapping results (SEUHP/JSI/USAID, 2014) indicated that the hygienic statuses of the majority public toilets (PTs) were not good. For instance, the hygienic statuses of 124 PTs (37%) were categorized as fair. Moreover, 123 PTs (37%) were categorized as poor. Only 51(15%) were found in excellent hygienic conditions. The availability of handwashing facilities near or in the toilets is a proxy indicator for hygiene. From all PTs included in the study, only 107 (32%) public toilets had hand-washing facilities near or in the toilet.

Among these, significant numbers of existing public toilets in urban areas are non-functional and the major reasons for non-functionality are poor management arrangements, limited accessibility for desludging, limited budget and personnel to manage the toilet, and poor engineering design of the toilet. The traditional public toilet management arrangement implemented by the major PL providers (municipalities) has numerous limitations.

To mitigate these limitations, some city/town administrations have transferred the management of public toilets to organized micro and small enterprises (MSEs) which use a pay to use business model to cover the cost of maintenance and generate profit. Public toilets shall be constructed

based on the need assessment of the proposed area. The following activities must be undertaken as part of need identification. For public toilets, locations such as tourists' destination, public gathering railway stations, bus, markets religious institutions, etc. need to be identified, demand side assessment needs to be conducted in the locations identified above for understanding the following:

- Number of potential users,
- Duration and timing of toilet usage,
- Gender ratio
- Willingness to pay
- Type of toilet preferred,
- Number of persons using the toilets in a day,
- Facility utilized (urinal, WC, bathing facility etc.)
- User fees paid
- Ideal site for the location of the public toilet needs to be mapped based on the above assessment keeping in mind the convenience of the users.
- Ideal distance norms for location of public toilets are within a walkable distance.

In the past few years, the Addis Ababa Water and Sewerage Authority (AAWSA) has constructed 100 public toilets with limited additional amenities, such as a traditional coffee ceremony and mini shops that are

managed by MSEs. Perception of these facilities indicated the functionality and the profitability of the facilities do not meet expectations of users. This is because of management arrangements, limited involvement of different stakeholders, a large number of MSE members, limited flexibility to customize additional income-generating activities, and the design of the toilet.

### **1.3. Rationale**

Public toilets matter to everybody, regardless of their age, class, ethnic origin, gender, mental ability or physical ability. Public toilet should be sufficient, accessible, secure, clean, culturally appropriate, and inclusive (gender specific and also accessible by the persons with disability). Ministry of Health adopts Community Led Total Sanitation and Hygiene (CLTSH) and Sanitation Marketing as a tool to increase access to toilets and also to end practices of open defecation and keep health and dignity of the population; into the bargain, it is to create enabling environment for private sector's involvement. Public toilets should adequately address the different needs of special population groups including women, and disabled persons.

Public toilets matter for a variety of reasons. Without these facilities, many areas of streets will be fouling and

disgusting. As a result, nearby resident will be affected by it. Towns/cities administrations and residents forced to clean up open defecates every morning. Lack of public toilets results in residents feeling anxious about going out and walking on the street. Older people, for example, do not readily leave their homes without the reassurance that they will have access to public toilets, which can lead to ill health. Lack of public toilets is a significant contributory factor in the isolation of older people, the disabled; and the situation will worsen as toilets provision continues to decline.

In Ethiopia, public toilets are primarily intended to serve mobile populations and are usually constructed in locations such as marketplaces, lorry parks and bus terminals, where there is high foot traffic. Public toilets are the only facilities available to many poor slum dwellers and those with inadequate access to sanitation facilities.

On the other hand, public toilet fails due to operation and management after couple of years due to inadequacies in the planning and financing. The responsibility and ownership of public toilets lack regularity and clear guidance, which leads to failure of public toilets. Thus, the current design and management guideline addresses these gaps.

## 2. Purpose

This guideline aims to provide comprehensive roadmap for decision makers and other stakeholders on various aspects including design, operation, maintenance and facility management.

### Objective

The main objective of the guideline is to facilitate planning, design, implementation, management, monitoring, operation and maintenance of public toilets in a manner and through hands-on engagement of stakeholders.

### Specific Objectives

- A. To give proper support in the plan, design, construction and management of public toilet by the government and development partners.
- B. To motivate private sectors to take up public toilet as a profitable business.
- C. To formulate methods of capacity building related to public toilet management for MSEs and other private sectors to play an active role in the business.
- D. To render a management guide for Public toilets that can be operated and maintained by government, private sectors, and municipalities/town administrations, and MSE private and enterprises
- E. To ensure the quality, comfort, safety and proper waste management of public toilets in general at public places.

## 3. Scope

The public toilet design and management guideline focused on how public toilet facilities are designed, operated and maintained. Regular operation and maintenance of the amenities like cleaning, lighting, water supply, solid and liquid waste disposal, security of users and protection of the facility from theft, sustainable service management, staffing, awareness creation and user education and performance monitoring are also taken in to consideration.

### 3.1. To whom the guideline prepared

The main audience of this guideline is national and local authorities including policy makers, regional health bureaus, municipalities, health authorities, water supply and sewerage authorities, private sectors, development partners, and donors who are responsible for the public toilet design, construction, operation, maintenance, services, management, development, and implementation and monitoring of standards and regulations.

## Part Two: Public Toilet Design and Considerations

### 4. Minimum Standard

Public toilet should provide safe, accessible, convenient, hygienic, and inclusive to the public at a level of privacy, adequate to perform necessary personal sanitary functions. A public toilet should provide facilities to urinate, defecate, hand wash, shower, groom and tend to other bodily needs in a secure, private and clean environment. All these facilities should always be functional during working hours of operation. Public toilet should design to provide a minimum standard of services to the targeted residents. The minimum standard includes the following points:

- Public Toilets must not be constructed in areas prone to flooding, landslide and insecurity that can danger the life of the users.
- Public toilet should have a minimum of four seats for male and female residents. The space around the public toilet need to provide enough space for dislodging services (vehicle and workers).
- Public toilet room must have rigid doors, which is lockable from inside and outside and fixed on the solid frame that can allow minimum privacy and security for users, particularly women and children.
- Public toilet should not be located far away from the residents of average users and it must be at least 30 meters away from the ground water sources to avoid infiltration and cross contamination of ground water sources and at least 10 meters away from residential houses.
- When natural lighting is not available, installed solar exterior lighting should be provided at all times during hours of operation and should be bright enough to illuminate entrance, exits, walkways, paths, parking spaces and other areas where the public may require access to public toilet. Light needs to be installed near the public toilet and inside each room. Lighting should be directed to discourage vandalism and areas of concealment. If light is not available avail torch light for users.
- The toilet block must have separate entrance for men and women, which lead them to their respective blocks in the facility. The design component is essential to ensure privacy and safety for women. The design must also include waiting areas for women where they can queue up in case the washing

closet or bathing area is occupied. Make sure that the two- sex toilet is clearly marked with in pictorial form and words of illustration users and workers from the community to ensure they are used by the indicated gender.

- Public toilet facilities should provide for the needs of people of different cultural needs, religion, genders, all age group, parents and children, people with disabilities and their caregivers.
- The toilet should provide for the needs of people with disability and other special needs. For easy access, separate room with wide door and low sloppy ramp is needed for people with disability and who are using wheelchair, and direction indication for people with impaired vision.
- Toilet should be located on the continuous accessible path of travel and appearance should be sympathetic to the surrounding to all users: male, female, children and elderly, healthy and sick with clear entrance
- Consider the wind direction. Public Toilet should be downward to the wind direction.
- Provide appropriate handwashing facilities nearby the public toilet that can be accessible to all. Handwashing facilities must be separated for male and female users and it should be foot or sensor operated to prevent cross contamination. Handwashing

basin should be of appropriate size to allow for handwashing activities and for avoiding splashing of water on to surrounding vanity, person and floor.

- Menstrual hygiene health (MHH) facilities with clean space with soap and water need to available to change menstrual materials in private space or shower room. It should also allow for the disposal of women’s menstrual hygiene material with a separate bin with cover/lid or any other suitable option accepted by users to reduce flies density and cross contamination. Additionally, the design should include waste management option.
- The public toilet needs to have bathing and could have laundry service.
- It should have male urinal with all-time accessible water. Both male and female user has access to appropriate urinals. The use of appropriately designed urinals reduces the number of toilets stands needs by users.
- Regarding number seats, additional one seat needs to be considered for females.
- In public toilets, number of urinals and seat can be determined based on number of users.



## 5. Site selection

Selection of the public toilet location has determined by water availability, geological conditions (soil type and water table), space availability, social norms/ cultural habits, faecal sludge emptying system, the residential sites, and wind direction. It must be at the lower level according to the slope of the land. It also considers the wind direction and place it downwind direction and convenient distances from the public. The public toilet will probably need emptying on regular basis (3-6 months for most frequent used toilet) so easy access by truck will make things much simple. Public toilet should be in a safe area to avoid from encouraging any unlawful activities thereby everyone can use in a safe and secure way. It also good to take in to account local risks for example avoid ditches and bushes near footpath in areas where snakes and ensure women and girls are fully protected.

## 6. Water supply

A public toilet should always keep hygienic condition to prevent the spread of microorganisms like bacteria, virus, fungus, infection and disease. Availability of enough water in a public toilet is essential for its efficient operation and maintenance. It is also essential to ensure that users practice good personal hygiene. Water supply system of the public toilet premises requires constant supply of water in order to discharge wastewater,

liquid waste materials, or sewage to the drainage system. It will be also used for handwashing, menstrual hygiene and health, shower, cloth washing, urinal, gardening, drinking, cafeteria services and other related purposes. The water demand can meet with appropriate selection of water sources and provision of adequate storage facilities. The source of water may be spring, shallow well, roof water harvesting, and piped water supply system from a nearby community supply sources. Water should be enough quantity and availability all the time. Water tanker is required to collect water for later use in case of interruption. If any water source is not available, rainwater harvesting should have to be considered.

## 7. Light and electricity

Electric supply and light are very important for public toilet to ensure the safety of the users and employees working in it. Adequate lighting should be provided both in the interiors and in exterior of the block. Toilet cubicles must be glow well. Local electricity utility will be responsible for providing required electric supply for the toilet block. Responsible entities for management and operation of public toilet facilities should closely work with local authorities to ensure provision of adequate electric supply for the public toilet facilities.

Natural or solar lighting can be used as option to electrical lighting. The public toilet design should incorporate the use of as much natural light as possible through sunlight by using transparent corrugated plastic sheets.

## 8. Disposal

Human waste from public toilets needs to be properly managed to keep sanitary conditions, to ensure that there are no adverse consequences on health and the environment. It should be environmentally friendly and should not be hazardous for public health. Different technological options may be adopted for safe treatment and disposal of waste. Appropriate technology must be selected based on site and hydro- geological condition of soil type. On-site disposal techniques need to be considered in absence of connectivity to sewer lines. For on-site disposal of human wastes, septic tanks and biogas technology may be used based on the existing conditions.

### 8.1. Using Septic Tanks

A septic tank is a combined sedimentation and digestion tank where the retention time of sewage is one to two days. During this period, settle-able solids settle down to the bottom. This is accompanied by anaerobic digestion of settled solids (sludge) and liquid, resulting in reasonable reduction in the volume of sludge, reduction in biodegradable organic matter and release of gases like carbon

dioxide, methane and hydrogen sulphid. In the septic tanks, only the toilet and urinal wastes should be connected. Septic tanks need to be cleaned every 1-2 years depending on its size and the number of people using public toilet.

### 8.2. Biogas Technology

Generation and utilization of biogas from public toilet is a sustainable option. In this case, biogas is produced through anaerobic digestion of human wastes in a bio digester. Biogas constitutes mainly methane (around 65 %) that is used for cooking, lighting and electricity generation. This option is useful and alternative source of energy and should be considered.

Liquid waste from public toilets needs to be properly managed by connecting to a sewer line if it is available within a distance to maintain sanitary conditions, to ensure that there are no adverse consequences on health and the environment. The different technologies may be adopted for safe treatment and final disposal of wastewater. Appropriate technology must be selected based on site condition.

## 9. Equity and Inclusiveness

Addressing equity and inclusiveness is very important when designing public toilet facilities. The toilet facilities should be accessible for all users and should not cause harm and difficulty on users. There should be sex separate toilets for male and female users. There should be

menstrual hygiene facilities in the public toilet where one shower room should be dedicated for use by women and girls, and must have a dust bin with a lid; water and soaps should be available in a private space for washing.

The public toilets should have one squat hole accessible without stairs or steps, have handrails for support attached to either the floor or sidewalls, a door, which is at least 90 cm wide, and the door handle and seat within reach of people using wheelchairs or crutches. These toilets should have wider door for wheelchair access and railings for support near the toilets. It should be accessible for older people as well as children at all time. It should consider privacy and security for female users. The application of Universal Design (UD) is to cater to the needs of various demographic groups and persons with different needs. UD, in the broadest term, is “design for all people”.

The provision of the user-friendly features is strongly recommended to be included in the design of public toilets.

## 10. Handwashing

The application of Universal Design (UD) is to cater to the needs of various demographic groups and persons with different needs. Universal design, in the broadest term, is “design for all people”.

The importance of handwashing at critical times such as after defecation and before

eating and preparing food is to prevent the spread of disease. Users should have the means to wash their hands after defecation with soap or an alternative (such as ash) and should be encouraged to do so. There should be a constant source of water near the toilet for this purpose. For this reason, the design of handwashing facilities should be provided in both male and female blocks as per the sizes of the users. It need to be close to public toilet and urinal and must be located within easy reach of all users and in addition to this; the design must have a drainage that leads the grey water to a soak away pit or to a conventional waste treatment plant.

Moreover, the design of the hand-washing water storage containers should be sized to hold at least twenty-four hours a day of hand-washing water. All wash hand basin taps shall be designed with mechanical or sensory taps or with self-closing delayed action feature, as much as possible.

## 11. Ventilation system

Proper ventilation of a public toilet is one of the highest priorities of toilet designs. An ineffective ventilation system can make a public toilet unbearable. Natural ventilation should be achieved through windows, doors, or other openings to the outdoors. The design should consider openings accessible and controllable by the workers.

An ineffective ventilation system can make a public toilet intolerable, even if it is well designed. An effective ventilation system ensures that vitiated air is quickly extracted and helps to avoid dampness and subsequent growth of mold on floors and walls. However, the system shall dispel the air directly outdoors without causing any nuisance to neighboring premises.

Effective ventilation of the toilet premise should allow for recycled air to be dispelled quickly outdoors without causing nuisance to the neighboring premises. Ventilation can be either natural or mechanical or both:

### **11.1. Natural Ventilation**

For natural ventilation, the design should be suitable to let fresh air into the structure to ensure an air exchange rate of 10 air changes per hour. In this case, natural ventilation should be achieved through windows, doors, louvers or other openings to the outdoors. In general, the toilets design should have appropriate ventilation system installed in the toilet or at least have open windows for air circulation.

### **11.2. Mechanical Ventilation**

Where mechanical means are used for ventilation, there should be cross ventilation and the air exchange rate

should have a minimum of 20 air changes per hour. The mechanical ventilation system of exhaust fans and, where applicable, ventilation ducts and grilles should ensure that every part of the toilet is within 3m of the fan inlet or an intake grille, measured horizontally. Preferably, intake grilles should also be provided at low levels near the WCs to enable foul-air to be extracted quickly before diffusing into other areas of the toilet.

The exhaust air should be discharged to the exterior of the building at a position at least 2 m above the pavement level and at least 5 m from any window or fresh air intake. Replacement air should be supplied to the toilet to make up for the exhaust air. The replacement air may be taken directly from the exterior, or from adjacent spaces that are permanently air-conditioned or naturally ventilated. The replacement air may be drawn through louvers in the doors, cuttings under the door, or other openings. If replacement air is taken from the exterior, the quantity should be lower than that of the exhaust air so that a lower pressure is created in the toilet, which minimizes the possibility of vitiated air entering the adjacent spaces. Replacement air should preferably be discharged close to the floor level near the washbasins to help keep the floor dry.

## 12. Super structure

Toilets are designed, built and located to have the following features of design that can be used by all sections of the population, including children, older people, pregnant women and physically and mentally disabled people. It is very rare to find toilets that have been adapted for access by the elderly, the incapacitated, pregnant women and the disabled. Providing access to the service to all needs a principle that should be integrated into the whole toilet block design process. Each toilet should have at least one toilet for the disabled. The toilet blocks must have separate entrances for men and women, which lead them to their respective blocks in the facility. This design component is essential to ensure privacy and safety for women. The design must also include a waiting area for both women and men where they can queue up in case the WCs/ bathing areas are occupied.

### 12.1. Accessible Toilet

Where sanitary provisions are to be made for persons with disabilities, children, urinals for children where in female toilet, a minimum of one urinal with modesty board should be provided for male children accompanied by their female parents/ guardians. The public toilets should have one squat hole accessible without stairs

or steps, have handrails for support attached to either the floor or sidewalls, a door, which is at least 90 cm wide, and the door handle and seat within reach of people using wheelchairs or crutches. These toilets should have bigger doors for wheelchair access and railings for support near the toilets. It should be accessible for older people as well as children at all time.

### 12.2. Doors and windows

The design of the toilets should have wider doors for wheelchair access and railings for support near the toilets for differently disable people.

The design of the toilet should also consider windows to facilitate the easy drying of floors to prevent slippage and kept it clean every time. The design of doors and windows and other fixtures must to be provided as per standard design and suitable to the specific users, considering climatology aspects and frequency of usage. For disabled using a wheelchair it needs sufficient door space to move their wheelchairs. Hence, all toilet floors shall be kept clean and does not retain water and be dry at all times. By doing so such toilets, designs shall prevent bad odor for the comfort of the visitor.

### **12.3. Floors**

The design of floor has to ensure that it is easily cleanable. The public toilet floors should have good grip or are made of non-slippery material. Non-slip ceramic tiles, natural stone, homogeneous tiles, terrazzo etc.

### **12.4. Wall**

The design of wall must ensure that it is easily cleanable. If it is made from ceramic tiles, it will be easy to clean. Ceramic tiles, natural stone, homogeneous tiles, stainless steel, enameled steel panels, glass block, aluminum panels, phenolic cladding etc. The design of the walls must be tiled, allowing the cleaning attendants to sponge down the walls and floors thoroughly with little difficulty. Another alternative is to use ceramic tiles or wall cladding (covering). Wall and floor tiles of large surface areas are encouraged for easy maintenance.

### **12.5. Ceiling**

Ceiling must be carefully designed, and the use of selected and durable materials will reduce the need for maintenance and prevent misuse. It is highly desirable that painted finishes are avoided, together with any materials, which are affected by moisture or corrosion (e.g. woodchip products and ferrous metals).

The most common type of ceiling finishes includes calcium silicate board and suspended ceiling tiles. If there is piping above the ceiling, for example, suspended tiles will permit easy access for maintenance and are more easily repaired in the event of spot damage.

### **12.6. Waiting / Circulating Area**

A waiting/ circulation space must be provided for persons waiting for their turn to use the toilet/ bath. Adequate space for waiting must be provided in women's blocks as women usually experience sexual harassment / assault while waiting around toilets. The design must have circulation space to be kept open to the sky for good ventilation and light. In case of areas with rainfall or heavy rains and strong sunlight open circulation space must be avoided or covered with glass shelters, usually it is 2-3 m wide depending on the area available. Circulation space must be kept open to the sky for good ventilation and light. In case of areas with snowfall or heavy rains, open circulation space must be avoided.

### **12.7. Construction Materials**

The Public Toilet should be provided with durable materials due to expected high usage:

- **Internal:** all fixtures, fittings, piping, valves, accessories should be durable such as they will withstand the effects of weathering, heavy utilization, vandalism, heavy cleaning application and similar challenges. Use preferably anti-graffiti material. Floors should be made of waterproof, and anti-slip surfaces (i.e.: stone, ceramic tiles, composite granite with Nano coating and other durable surfaces); walls should be covered with durable surface material (i.e. ceramic tiles, glass block, natural stone and other durable surfaces).
- **External:** exterior surfaces should be coated with or constructed with durable, anti-graffiti material, when possible. There should be no signs of structural cracks/defects.

### 13. Urinals

Urinals are individually hung units placed on toilet walls; they should be more than 30 cm wide and the lip of the urine collection area should protrude from the wall by at least 30 cm.

Urinals must be provided in the men's block of public toilet. Urinals should be equipped with a flush valve and an automatic flush device to allow for flushing after use. The use of modern urinals, especially for new facilities, is recommended, as these allow

for dual flush. The fittings of urinals are better concealed to avoid vandalism and support ease of maintenance.

### 14. Signage

Appropriate signage can ensure users are aware of the location of the toilet blocks. If the public toilets are poorly signed especially visitors, cannot find them. Therefore, the design of the signage must use suitably sized fonts written in dark colors against a contrasting light color background so that it can be easily seen. The universal signage of a man, woman and person in a wheelchair should be used.

The location of the signs should be near the entrance to each toilet facility and clearly displayed at noticeable locations in main traffic passageways to direct the public to the toilets. The design of the signage should indicate the distance or time e.g. 100m or 5 minutes' walk from the current location to the nearest public toilet.

## 15. Additional service areas

The surrounding area of the toilet should be kept clean, safe and provide easy access for visitors. The exterior and interior design can either use traditional or modern architecture.

The external front of the toilet block should be aesthetic and pleasing to the eye. The local art, cultural and heritage elements should be incorporated, wherever possible. This is likely to result in a greater acceptance among users.

**Storeroom:** One room for storing cleaning material/equipment and other things such as toilet paper, towels and soap is essential in all toilet facility. Its size can be decided depending on volume of such items that need to be stored.

**Recreational areas and other services:** Public toilet shall have recreational place in the catchment area, including other services like coffee and tea, shop and it is possible provide food and drink services. The catchment area should be clean and attractive and should have office for the managing bodies

## 16. General Considerations

In general, public toilets design need to be constructed in such a way that;

- It minimizes security threats to users, especially women and girls, throughout the day and the night
- It provides a degree of privacy in line with the norms of the users
- It is sufficiently easy to use and keep clean; and it does not present a health hazard to the environment and operators
- It is appropriately provided with water for handwashing and/or for flushing
- It allows the disposal of women's menstrual hygiene materials and provides women with the necessary privacy for washing and drying menstrual hygiene materials
- It minimizes fly and mosquito breeding site
- It is provided with mechanisms for desludging, transport and appropriate disposal if the toilets are sealed or are for long-term use and there is a need to empty them
- In high water table or flood situations, the pits or containers for excreta are made watertight in order to minimize contamination of groundwater and the environment.



# Part Three: Management

## 1. Operation

### 1.1. Cleaning

Public toilets must stay clean and sanitary for the employees' working there and customers' use. Toilets shall have no bad odor for the comfort of the visitor. Lack of clean toilets will quickly create unhappiness among users. A dirty toilet may also be a cause to turn away a client, lose their business and encourage open defecation. Managers of the toilet must ensure there are no dirty areas in the toilet such as at corners, behind toilet, bowls etc.

### 1.2. Checking Toilets and Urinals daily

Ensure toilets and urinals are clean and clog-free after each use. Employees need to clean toilets to be used throughout the working hours. A dirty toilet may be a cause to turn away a client and as a result lose business. Maintaining the cleanliness of the toilets and urinals is an investment in public toilet business.

### 1.3. Monitoring the toilet supplies

Ensure the presence of water, and supplies such as rolls of toilet paper, soap, detergents, broom, mop, dust bin and paper towels in toilet throughout the day. Putting supplies in the restroom where visitors can easily find them is compulsory.

To reduce the impact of public toilet on the environment, considering the stocking bathroom with eco-friendly products is necessary.

### 1.4. Empty trash bin

Trash receptacles should be empty before they get full. Unable to dispose - used toilet papers and sanitary pads will cause patrons to become unhappy, and may result in a messier restroom, which will create conducive environment for vectors and rodents. Ensure restrooms always have an adequate amount of pedal type of waste bins with coverlid.

### 1.5. Keep Floors Clean

The floor can be one of the unhygienic surfaces in a public toilet. A dirty floor does not attract clients, so be sure to maintain the cleanliness of the toilet floor. Do not leave floors wet, because this can be a safety hazard. Consider mopping floors after business hours but picking up and disposing of litter throughout the day.

### 1.6. Clean Fixtures Daily

Clean your public toilet's sinks, mirrors, counters, walls and other fixtures daily. Surfaces that people touch often can be contaminated with microorganisms. so,

things like sinks and counters need regular cleaning. Mirrors and walls can quickly acquire water spots. These surfaces may need to be wiped down daily to keep them dry and clean for clients and employees.

## 1.7. Operation Hours

Public toilets have different operating hours. Most users stated the earliest opening time is 6:00 a.m.; and the latest time to offer service is until 7:00 p.m. local time. Most of the facilities have been providing services from the early morning hour of 6:00 a.m. to 6:00 p.m. in the evening local time. There are also enterprises that begin the service at 7:30 – 8:00 a.m. local time and offer services until 6:00 - 7:00 p.m. local time. Based on the context, it may open before 6:00 a.m.; and closed after 6:00 p.m. local time.

## 1.8. Amenities

Provision of amenities such as tissue, toilet paper/hand dryer, waste bin or sanitary bin, soap, water and hand wash must be available at/in the toilet/cubicle at all time. Public Toilets Amenities refer to the following aspects:

- Sanitary / Waste bins (hand-free with foot pedal) with liners.
- Hand-dryer blower or tissue dispenser.
- Sanitizers in every closet and urinal.
- Refuse bins (for used tissues).
- Toilet brush.

- Soap dispensers.
- Air freshener.
- Toilet chemicals/ Dettol.

## 1.9. Safety

Safety refers to an adequate degree of protection/ no exposure to potential risks of danger or injury, whether deliberate or accidental.

Adequate consideration should be given to providing a clearly defined, accessible and safe pedestrian path to the toilet facility, including ramps. The path must be well lit to ensure that the user's personal safety is not compromised, particularly for women and adolescent girls, disabled people.

## 1.10. First-aid Kit

It is a collection of supplies and equipment that is used to give emergency medical treatment. The first aid kit is required for cleaners, staffs and customers if there is an accident of any form of injury.

## 1.11. Fire-extinguisher

Fire extinguishers are extremely important, as they are the most commonly used form of fire hazard protection. In many cases, they are a first line of defense and often contain or extinguish a fire, preventing costly damage.

## **1.12. Personal Protective Equipment (PPE)**

PPE is equipment that will protect workers against health or safety risks on the job. The purpose is to reduce employee exposure to hazards when engineering and administrative controls are not feasible or effective to reduce these risks at acceptable levels.

PPR usually consist of standard precautions: gloves, mask, gown, face protection or face shield, goggles, gown or coverall, head cover, and rubber boots.

## **2. Staffing (minimum staff required to operate public toilets)**

For effective public toilet, day to day service management at least a minimum of administrator, accountant, cashier, cleaners and guard staffs will be required. Presence of a women attendant would ensure that the women feel comfortable and safe while using the facility and also have good skill for cleaning and tolerance of providing services.

Provision of a staff room for the operating staff / caretaker of the toilet is essential. It is even more significant in case of public toilets located at railway stations, bus stands and other areas, which are open round the clock. If there are woman and male caretakers, a separate room must be provided for the female caretakers.

## **2.1. Administrator**

The administrators will be responsible for overall management of the facilities, operations and maintenance (O&M) and upkeep of the facilities, regulate the use of a “first come, first served basis”, issue of cleaning materials and equipment and maintaining the complaint register.

## **2.2. Accountant**

The accountant will be responsible for preparing ledgers and payment sheet, registered all revenue, prepare payment sheet, and prepare financial data collection and financial report generation.

## **2.3. Cashier**

The cashier will be responsible for collection of user fee, purchases of needed materials, and providing different payments needed for public toilet management.

## **2.4. Attendants / cleaners**

The attendants / cleaners will be responsible for keeping the public toilet clean by carrying out the day-to-day cleaning activities. Since users of public toilet may be prone to incidents of sexual harassment and assault, women attendants should handle such incidents and ensure their safety while using the facility.

## 2.5. Guards

The guard will be responsible to keep public toilet property from stealing and vandalism; and the security of the staffs and users and greening of the surroundings.

## 3. Services management

Every organization relies on a mix of functions and services to provide the support essential to its core business operations. Ensuring that this support is available in the right form, at the right quality and for the right cost is the domain of facilities management.

The public toilet management group or any legal entity is expected to provide an integrated WASH service like toilet, shower, handwashing, soap, soft, sanitary pads and bottled water selling services with affordable and sustainable prices. To increase the daily income from the service, the management must diversify the business opportunities related to the facilities. As an example, there is a practical experience of integrating tea/coffee service, shoe polish, mobile charging, growing fruits and vegetables, cloth washing, availing water for cart hoarse and others.

### 3.1. Sludge management (desludging)

Operational management and design affect the fill-up rates and post fill-up management operations. Proper

sanitation services have a fundamental role in improving public health, economic stability, dignity, and protection of the local environment. Proper human excreta disposal has greater importance than provision of safe water, since it significantly lowers the possibility of fecal contamination of environmental resources. Moreover, appropriate human waste disposal controls the spread of diseases and minimizes transmission of water-borne diseases.

The public toilet has to be emptied when a single pit is full to within 75 cm of the top, either the better way to manage sludge's is whether to connect with the sewer line or using pit emptier truck and dispose to the proper place. It is also recommended to change the sludge in to compost and properly use as a fertilizer for farming purpose. If a pit is to be emptied, it is usually 'lined' with walls of stones, bricks or concrete. If the pit is not lined, there is a danger of collapse when solids are removed. If the sludge is too firm, jet on water, agitate the mixture of sludge, and water with the end of the suction hose.

### 3.2. Solid waste management

Anal cleaning and sanitary pads must be properly disposed. It can be managed through locally made incinerator within the public toilet compound.

### 3.3. Promotion and awareness creation

Awareness programs need to be conducted in the community on the ill effects of open defecation and to encourage the use of public toilets. The programs should focus on the relationship between open defecation and faeco-oral transmission and associated diseases. The main objectives to be achieved by a well-structured, targeted and executed public education program are:

- Deepening user knowledge of the facility;
- Changing attitudes and practices;
- Improvements in individual hygiene practices.

Posters showing awareness messages and other visuals could be used on the external walls of the structure to increase user awareness and education. The usual means of message placement in public toilets are posters and stickers. The language of public education must be kept simple and local. Urban Department of Health, Education, and Welfare (HEWs), public toilet staff, nearby health facility staff/health sector and other partners are responsible to disseminate the message. This helps ensure that the message reaches everyone regardless of their educational level.

- Keep toilet seat clean and dry
- Check that the toilet is properly flushed thoroughly after use

- Keep the floor clean and dry
- Please put litter into pits or closed bins
- Aim properly on the pit hole
- Use amenities with care
- Wash hands with soap properly after visiting toilets etc.

### 3.4. Service charge tariff

All PTs users except poor will bear the full cost of service. The city or town municipality or administration will determine the tariffs by discussing with the relevant service providers to be used and will publicize them in order to discourage exploitation. Periodical reviews of user charges may be needed, for example, when there are significant changes in the input costs of providing services. When a review of user fees is sought, the service provider shall prepare detailed justification for the increase and present it to the authority for decision.

The PTs operators will be expected to make special arrangements for the impoverished, older citizens, and children, who may not be able to afford user charges. They could use the services for free or at a subsidized rate and service provider will be expected to take this into account in their user charge. If surpluses income is generated it will be decided by the city/town administration how much percent is to pay to the administration for monitoring purpose.

## 4. Maintenance

Routine and periodic operation and maintenance is intended to keep a toilet functional and keep in a condition that makes patrons comfortable to consistently utilize it. Poor operation and maintenance of public toilets is identified to be key constraints for the consistent and continuous use of sanitation facilities. It is the responsibility of operators, the municipality, the health sector and other stakeholders.

### 4.1. Water system

Regular water line maintenance is essential as it ensures continuous water supply and prevents pipes from bursting which is costly to repair and replace. Water is vital to toilet facilities and hence the need to ensure that there is a good flow of water into the toilets and shower system. The pipes system should be checked whether it contains leakage and there is presence of cross contamination. Appropriate measures have to be taken timely if there any such defects.

If any problem happened which is beyond the capacity of the public toilet management bodies hiring of a professional water system maintenance operative is essential to check on the water lines, they will maintain the problem accordingly. They use their equipment to determine if there is any problem that

could arise in the future and they look for ways to prevent it. The technician will provide advice on whether to repair and replace the water line systems.

### 4.2. Electrical system

Electrical line and equipment should be kept cleaned of dirt and/or dust accumulations on a regular basis. Doors and windows should be maintained in proper working order and kept closed during routine operation. Access doors should be clearly marked to alert personnel that live electrical equipment is in use. Electrical equipment should be examined for evidence of water leakage. Inspect insulators and conductor supports for signs of cracking, broken pieces, and other physical damage or deterioration. Repair or replace damaged insulators and supports as necessary. Examine insulation for signs of deterioration, cracking, flaking, or overheating. Examine all connections for signs of overheating, cracked or broken connectors, and signs of tracking or arcing. Ensure that conductors are clean and dry. Check the electric line wire insulation and replace the wire if the insulator is deteriorated or removed from the wire.

### 4.3. Drainage system

Check for clogging of the drainage pipe and remove clogging if any. Check for overflow and level of sludge in the collection pit, check for any leakage on the drainage

system and accomplish the maintenance service instantly. Public toilets need to be emptied on a regular basis dependent on the number of users to avoid overflow, which may drive users to open defecation or illegal dumping of pit contents. Before the sewage overflow, Septic tanks need to have solids removed on a regular basis dependent on the number of users. Leaky, septic tanks and cesspits should be maintained timely to avoid environmental contamination and bad odors, which may disturb the patrons and employees working there.

#### **4.4. Super structure**

Check for any cracking on the floor, damage of the wall and door, roofing, flood diversion ditch, make repair or maintenance, and take immediate repair/maintenance action if there is any observed problem.

### **5. Management Models**

Due to multiple constraints to growing access to household level private toilet, public toilets have become the only means for many poor slum-dwellers and for those people who have inadequate access to sanitation. Even if there are different management models for public toilets, in Ethiopia, majority of public toilets are managed (owned and maintained) by the municipality or its designated government structure. Because of this, in

Ethiopia, significant numbers of existing public toilets are non-functional. Even among functional public toilets, there are problems of utilization and infrequent or poor cleaning of the toilets. To mitigate the management problems, we proposed to use Contract /MSE/ management model, Public Control management Model and Community management model respectively.

#### **5.1. Contract /Mse/ Management Model**

It is one of the public private partnership (PPP) approaches widely implemented in developing countries, where the private sector has limited capacity to endure the projects that require huge investment. It is a partnership arrangement that involves transfer of authority from a public partner to a private partner to manage a public facility/operation and provide services, including full responsibility and authority to manage all necessary functions and staff with the objective of enabling more efficient management.

Responsibility for operation and maintenance of publicly owned facility is contracted out to private sector for agreed up on years that use a pay-per-use business modality to cover operating costs and to provide a profit for the operators.

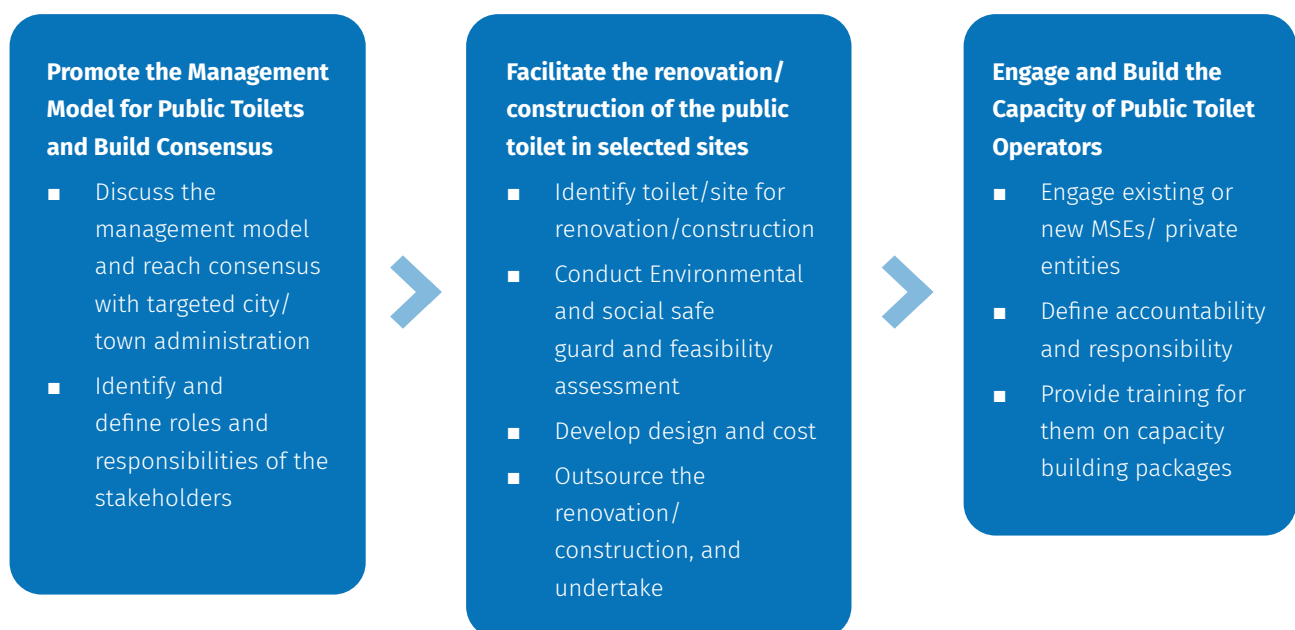
The objective of this model is to demonstrate a sustainable solution for

the public toilet management; thereby ensuring the provision of quality services in a sustainable fashion through engaging MSEs and other private entities in the management of the public toilet. The approach, capitalizes on integrating additional business opportunities along with the public toilet services like shower, outdoor games, mini-shop, cloth washing, photocopy, café/ traditional coffee ceremony, mobile charging, water point, shoe shine, barbershop and any other business opportunities appropriate to the context to boosting income for public toilet operators and thereby ensuring quality of services as well as the management and maintenance of the infrastructure.

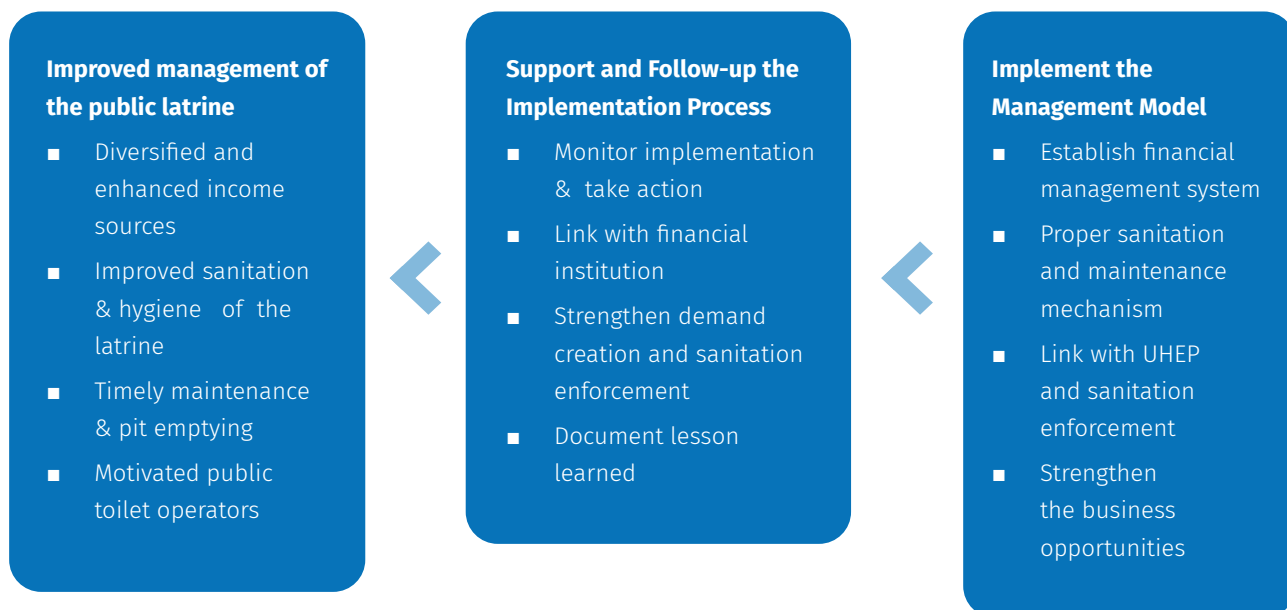
### Steps in Implementing the Contract /MSE/ management model

The steps involved in the implementation of the model for public toilet management are:

- Promote the management model for public toilet and reach consensus with the targeted city/town administration
- Facilitate the renovation/construction of the public toilet in selected sites
- Engage and build the capacity of public toilet operators
- Implement the management model
- Support and follow-up the implementation process of the management model
- Improve management of the public toilet







## 5.2. Community management Model

It is the other option for roadside public toilet management model, which operates like a direct public toilets management. Public toilets are managed by a committee of public officers of the local authority and community representatives, referred to as Toilet Management Committee (TMC). The committees comprise at least a chairperson, a cashier and a secretary that have the overall responsibilities of managing the public toilets. The users contribute monthly fee for operation and maintenance cost. Good management arrangement, access to desludging services, access to water supply, good ownership of the services users, very good motivation and accountability of toilet attendants and giving attention by the administrative bodies are some of the points consider for functionality and good hygienic of community managing public toilets.

## 5.3. Public Control management model

It is another type of public toilet management model. Public toilets are managed (owned and maintained) by the municipality or its designated government structure. The municipality or its designated government structure recruit adequate permanent staffs that have responsible for cleaning of the toilets in working hours. The major shortfall of public control is the lack of effective supervisory mechanisms and not have enough human and financial resources to allocate enough staff, provide quality of services and running of toilet services. With strong supervision, it is another management option for public toilet.

## 5.4. Private management model

Licensed entrepreneur management model is an entrepreneur initiative where the utility issues licenses to entrepreneurs for the development, construction and operation of public toilets. The entrepreneurs will be granted the right to provide with public land from the municipality for this purpose. The entrepreneur shall be responsible for ownership, management, operation including collect fees from the users at affordable prices, repairs and maintenance. The utility's responsibility is to control and supervise the entrepreneur's performance through a licensing mechanism for construction and operation of public toilets.

## 6. Capacity Building

For effective realization of the management model, building the capacity of those who will engage in the management of the public toilet is indispensable. Indeed, the operators might have a public toilet management experience but if that is not the case and/or the local administration believes that the operators lack the capacity required for the proper implementation of the proposed public toilet management model. Capacity building trainings on relevant issues needs to be provided by the concerned nearby health sector and stakeholders. The capacity building trainings include:

- **Basic concepts of WASH:** this training will help public toilet operators to understand basic concepts of WASH facility and services managements.
- **Promotion:** train on public toilet utilization and its importance
- **Health Safety and Keizen:** this training will help to equip the operators on first aid services provision and safety issues both for themselves as well as their customers.
- **Toilet facilities operation and maintenance:** this will equip public toilet operators with the skills necessary to better manage the sanitation of the toilet as well as to operate and repair the toilet facilities.
- **Financial management:** This training will help public toilet operators become familiar about accounting services like registration, payment sheet preparation and proper registration of lagers.
- **Customer management:** this training will equip public toilet operators about effective communication skill and handling of customers.
- **Entrepreneurship and business skills training:** This will help public toilet operators become more economically vibrant through acquiring entrepreneurial competencies that lead to the identification and integration of additional business

opportunities into the public toilet services. More importantly, entrepreneurship and business skill training will help inspire the operators to take their business seriously. On top of this, ongoing technical support will be provided to the public toilet operators by concerned government offices from the respective towns and/or other partners.

## **7. Sustainability**

Sustainable WASH facilities and systems can provide adequate services to communities for long periods, without negative impact on the environment.

Close collaboration and involvement of stakeholders would be very important to ensure local ownership from the inception phase up to hand-over and management. Increase awareness and WASH service management capacity building, facilitating a gradual shift in responsibilities towards local structures and any legal entity accompanied with guided agreements are the keys for ensuring sustainability. In any case, the public WASH facilities need to be design and manage considering the following Five Principles of Sustainable WASH.

### **7.1. Financial sustainability**

Financial Sustainability means that continuity in the delivery of products and services related to water, sanitation and hygiene is assured, if the service itself can generate income or locally financed and do not depend on external subsidies. Diversified income sources from different integrated business /services are a very important in increasing the savings and cover the daily expenses.

### **7.2. Institutional sustainability**

Institutional sustainability in the WASH sector means WASH systems, institutions, policies and procedures at the local level are functional and meet the demand of users of WASH services. Households and other WASH service users, authorities and service providers at the local and the national level are clear on their own roles, tasks and responsibilities, can fulfill these roles effectively and are transparent to each other. WASH stakeholders work together in the WASH chain through a multi-stakeholder approach.

The public toilet must be managed by any legally established youths /women with their own working guideline and procedure in a way that they can be controlled and audited by the relevant local offices. The legalization is highly important to bring transparency and accountability for the service that they are rendering.

### **7.3. Environmental Sustainability**

The element of environmental sustainability implies placing WASH interventions in the wider context of the natural environment and implementing an approach of integrated and sustainable management of water and waste (-water) flows and resources.

WASH interventions should not be connected to and affect the natural environment and hence people's livelihood. In general, the public toilet management must use an approach of integrated and environmentally sustainable management of water, waste (-water) flows and resources. Measures expected to be taken against environmental degradation, e.g. planting of trees and constructing terraces around public schemes to avoid soil erosion and increase water retention/ground water recharge.

All infrastructures should be built in compliance with national standards regarding environmental impact. The public toilet services must be transformed into clean and green areas with trees expected to be planted.

### **7.4. Technological sustainability**

Technological sustainability of WASH services is reached when the technology or hardware needed for the services continues to function is maintained, repaired and replaced by local people and it is not depleting the (natural) resources on which it depends for its functioning.

### **7.5. Social sustainability**

Social sustainability refers to ensuring that the appropriate social conditions and prerequisites are realized and sustained so the current and future society can create healthy and livable communities. Social sustainable intervention is demand-driven, inclusive (equity), gender equal, culturally sensitive and needs based.

## 8. Role and responsibility

Sectors	Responsibilities
Health sector	<ul style="list-style-type: none"> <li>■ Lead and coordinate national urban sanitation especially public toilet interventions and sets service standards, working modalities and approaches</li> <li>■ Develop and disseminate standard design and construction standards for public toilet technologies</li> <li>■ Advocate for and mobilize funds by negotiating with the Federal and regional state governments, industries, financial institutions, private sectors, foundations, and with development partners</li> <li>■ Adopt guidelines, and BCC materials to be used for promotion of using public toilet facilities.</li> <li>■ Coordinate biannual meetings that help to review achievements and challenges in promotion and service provision from the public toilets</li> <li>■ Monitor and follow the public toilet construction in accordance with the standards</li> <li>■ Coordinate and facilitate periodic reviews of the public toilet related interventions jointly with the sector stakeholders</li> <li>■ Document best practice concerning implementation of the public toilet related interventions, periodically share with the sector actors and use for scaling up of the interventions</li> </ul>

Water Sector	<ul style="list-style-type: none"> <li>■ The sector helps towns' water utilities through providing systematically designed capacity building for planning, implementation, follow up and monitoring of wastewater and liquid waste services delivery including accessing adequate water to facilities</li> <li>■ Introduce new approaches, solicit funds and support implementation of wastewater and liquid waste services delivery</li> <li>■ Adopt guidelines, standards related to wastewater management, water supply to the context of the region</li> <li>■ Support water utilities in analyzing quality of wastewater and follow up the changes made from time to time and share the analysis report</li> </ul>
Urban development	<ul style="list-style-type: none"> <li>■ Translation and updating of town master plans and identify lands which can be used for the construction of public toilets</li> <li>■ Play a role in expansion of biogas technology</li> <li>■ Provide capacity building on biogas operation and maintenance</li> <li>■ Promote biogas by-products to be used for urban greenery</li> </ul>
Environmental Authority	<ul style="list-style-type: none"> <li>■ Coordination and monitoring of the regulation of environmental standards with respect to sanitation services at the different level</li> <li>■ Ensure availability of institutions responsible for regulation, monitoring and follow up of urban sanitation at town level</li> </ul>
Teaching institutes/TVET	<ul style="list-style-type: none"> <li>■ Support cascaded training in fecal disposal Management, sanitation technologies</li> <li>■ Focus on curricula for urban WASH and Provide technical training for operation and maintenance groups</li> </ul>

Donors and Development Partners	<ul style="list-style-type: none"> <li>■ Assist the town administration by providing financial support and introducing innovative ideas</li> <li>■ Assist by providing a revolving fund to the MFIs that could be channeled to the community, women enterprises and youth group through soft loans</li> <li>■ Create, implement and promote WASH materials that will help the communities manage various types of wastes as described</li> <li>■ Assist communities to become self-sufficient in all aspects of WASH management</li> <li>■ Assist in providing training to enterprises (women/youth groups)</li> </ul>
<b>City/Town Administrative level</b>	
Health	<ul style="list-style-type: none"> <li>■ Play key role in the improvement of access to Public toilet and hygiene facilities.</li> <li>■ Ensure quality and sustainable service of the public toilet as per national standard</li> <li>■ Ensure behavioral change and to promote sustained use of the public toilet</li> <li>■ Continuous follow up and provide technical support for the public toilet management bodies</li> </ul>
Water	<ul style="list-style-type: none"> <li>■ Supply adequate water to the public toilet.</li> <li>■ Ensure waste water and excreta management ( desludging)</li> </ul>
Mayor office	<ul style="list-style-type: none"> <li>■ Lead all the WASH services in the town including the construction and management of the public toilet.</li> <li>■ Coordinate the WASH sectors (Health, Water, Education &amp; Finance)</li> <li>■ Arrange and provide land for construction of public toilets</li> <li>■ Approval of the public toilet management group legalization</li> <li>■ Ensure the availability of a platform where residents can have the opportunity to engage in and support the development of sanitation.</li> <li>■ Create enabling environment for the service provision from public toilets</li> </ul>

Finance	<ul style="list-style-type: none"> <li>■ Facilitate the allocated budget for construction of public toilets; monitor the proper utilization and liquidation of the budget.</li> </ul>
Small and Micro enterprises	<ul style="list-style-type: none"> <li>■ Fully engaged in the proper management of public toilets</li> <li>■ Provide affordable and sustainable public toilet and shower services</li> <li>■ Keep the toilet safe and clean for customers</li> <li>■ Manage sludge of the public toilet properly</li> <li>■ Proper handling of customers</li> <li>■ Manage finance, operate and maintain the public facilities</li> <li>■ Make transparent about the public toilet management to the relevant bodies</li> <li>■ Make the area green and conserve the environment</li> </ul>
Town food security and job creation office	<p>Organize and certified the youths/women</p> <ul style="list-style-type: none"> <li>■ Control and audit the legalized women and youths who are engaged in the management of public toilet</li> <li>■ Provide technical and management skill training</li> <li>■ Monitor and supervise all the women /youth's activities</li> <li>■ Ensure the public toilet management groups to manage both financial and service management to the expected quality in a sustainable condition</li> </ul>
MFIs	<ul style="list-style-type: none"> <li>■ Support public toilet management groups or any entity through capacity building on financial management</li> <li>■ Provide loan for the management groups or entity when need arise</li> </ul>
Community	<ul style="list-style-type: none"> <li>■ Community is responsible in using payment based service</li> <li>■ Support the public toilet construction by contributing in kind, cash, clearing roads and safeguarding the whole infrastructure</li> </ul>



## 9. Monitoring and evaluation

Monitoring and evaluation of public toilet facilities is essential to improve services quality. Routine monitoring of the public toilets against the sanitary and service standards is the key to realizing the benefits of the investment in public toilets, for improving their service, delivery and reducing open defecation. From experience, the practice of public toilet management is challenging and requires support from the service owner for mentoring and to fix some of the emerging problems. The monitoring team should follow and coach the service operation of the public toilet. Regular monitoring should be done using standard checklist. In addition, undertaking unannounced inspections should be done by regulatory body in the middle and towards the end of the contracting period.

### 9.1. Regular monitoring

To ensure the customer is satisfied with services after every use, monitoring of PT facilities is an essential activity. This can be accomplished by monitoring the service through the management team.

Service monitoring as per the contract is mandatory responsibility of management team since they are contractually bound and responsible to administer contracts in letter and spirit. Unannounced

inspections by management team staff should be carried out during the toilet's operations period at any frequency - daily, weekly, monthly, bi-monthly, bi-annual or yearly.

### 9.2. Self-monitoring and reporting by operator

In order to foster accountable services, it is desired operators follow their own monitoring mechanism of activities carried out to maintain cleanliness and safety in the toilet facility. The monitoring could be during different shifts of the day, daily, weekly or monthly, which the cleaner and caretaker normally records and authenticated by caretaker / supervisor of the toilet. This record, when maintained systematically also provides as a reckoned for daily operations and maintenance activity plan.

### 9.3. User satisfaction surveys

The idea of such surveys is to ascertain user desires and expectations to be fulfilled, while charging them with user charges. Such surveys can be conducted periodically which helps to understand & address any complaints consistently observed in toilet facilities, which have not been fixed by the operator.

The management should conduct routine monitoring checks of the following items with the recommended frequency:

- **As and when required:** Effluent discharge arrangements, sludge levels and desludging.
- **Daily:** Toilet block exterior and interior cleanliness, availability of amenities, health and safety hazards, other nuisance factors.
- **Weekly:** Site safety and security.
- **Monthly:** Provision of supplies and tools, public health awareness, management, operating schedule.
- **Quarterly:** Repairs, structural integrity, rate of usage and user satisfaction.

#### 9.4. Feedback mechanism

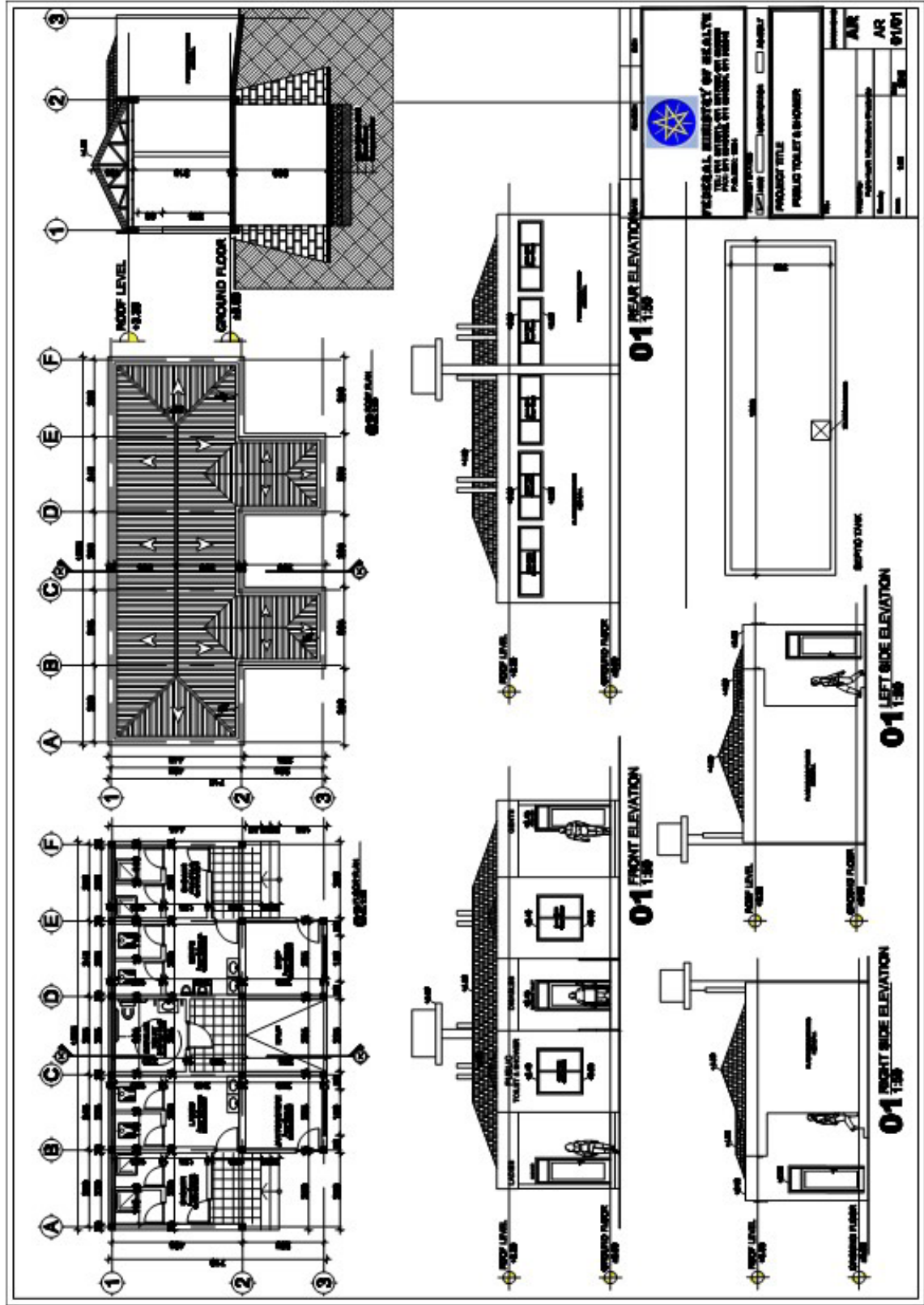
Apart from physical monitoring of the toilet facility there should be monitoring of feedbacks from the users. There should be one questionnaire/suggestion book containing different aspects of operation and maintenance of toilet facility and users should be requested to evaluate the performance. User feedback machines should be emplacing in the toilets. User-friendly mobile application can also be used for monitoring purpose. Simple and effective complaints reporting mechanism can provide good feedback to management team and cause it act against it to remedy the situation.

#### 9.5. Recording and Reporting

Operator team record their daily activities exclusively for later consumption and reporting system. In addition to service monitoring by the urban local body, supplementary methods like introducing citizens' report cards, citizens' monitoring committees etc. can be introduced to increase monitoring efficiency. Third party agencies- MSE, NGO and CBOs may be involved extensively in reporting.

## 10. Annex

### 10.1. Public Toilet & Shower design





## 11. Reference

- <https://www.i-fm.net/fm-info>
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