

41st WEDC International Conference, Egerton University, Nakuru, Kenya, 2018

**TRANSFORMATION TOWARDS SUSTAINABLE
AND RESILIENT WASH SERVICES**

**Making sanitation accessible:
accessibility audit of public toilets in Ujjain City, India**

C. Kumar, (India)

PAPER 3019

It is now more than three years since launch of Clean India Mission, and undoubtedly, despite a steady march of sanitation over two decades, it was the first time, the sanitation Programme of India acknowledged the need of making sanitation with universal approach. While implementing such a huge Programme, this is important to look sanitation beyond open defecation free and ensure these facilities be accessible to all. Accessibility Audit is a tool and integral component of ensuring rights of differently abled people. WaterAid India being development partner of Municipal Corporation, Ujjain, conducted an accessibility Audit in all public Toilets of the City with an objective to assess their designs and inform Municipal Corporation so that they realize the accessibility issues, and ensure all toilets adhere the designs considering the needs of differently abled people. Moreover, this is important for a religious city like Ujjain which is visited by significant number of floating population throughout the year.

Introduction

Around one billion people in the world live with some form of disability and face physical, social, economic and attitudinal barriers that exclude them from participating fully and effectively in the society (WHO, 2011). They lack equal access to basic resources like education, employment, sanitation, healthcare with social and legal support systems and consequently have a higher rate of mortality. Despite this, issues around disability has remained largely invisible in the mainstream development agenda in most of the countries. There is a need to have barrier-free environment which could enable people with disabilities to move about safely and freely and use all facilities within the built environment like roads, parks, gardens and other facilities including water and sanitation. An accessibly built environment is considered a core element of an inclusive society providing citizens freedom to pursue an active social and economic life. Hence, this is high time to realize that universal and sustainable approach of sanitation services can not be realized if they are not viewed with the lens of accessibility. This makes need of integrating accessibility audit within the Programme.

Background

Though statistics on the number of differently abled persons are debatable and the data vary due to different definitions of disability and reliability of sample surveys, India census 2011 counts 21.9 million persons with disabilities. This is also to be noted that there has been an increase of 22.4% of people with disabilities between 2001 and 2011. It is projected that by 2020 the total population of persons with disabilities would be 70 million and that of the elderly be 177 million with majority having multiple disability conditions. This is fourth year since launch of Clean India Mission and undoubtedly, despite a steady march of sanitation over two decades, it was the first time, the sanitation Programme of India acknowledged the need of making sanitation accessible with universal approach. However, despite growing numbers of such sections of community, leaving aside malls, airports and some high-end hotels, accessible toilets and other basic services are very difficult to come across in public spaces even though there are Acts and government guidelines that aims to ensure all public spaces and built environments barrier-free. Clean India Mission, though at policy level aims to adopt an inclusive and progressive approach in making sanitation facilities

accessible but at implementation level, approach is limited to just construction of toilets. There is urgent need to realize that if India actually aims to become open defecation free it is necessary that access to sanitation services to differently abled people be ensured.

WaterAid adhering to sustainable development goals created in 2015 moves ahead with a vision of a world and society where everyone, everywhere has safe water, sanitation and hygiene (WaterAid, 2015) because it believes that someone, somewhere have been left out for various reasons. Realizing the fact, most of the Programmes strive to transform the lives of the poorest and most marginalised people by improving access to safe water, sanitation and hygiene. But within this it is also realized that water, sanitation and hygiene (WASH) programme can support persons with varied kinds of disabilities to claim their rights by helping to increase their visibility, dignity, self-confidence and active participation in policy and decision making often by working closely with urban local public bodies which are supposed to provide. With this objective WaterAid India under its citywide approach, collaborated with Ujjain Municipal Corporation, a Project city, in conducting accessibility audit of all Public Toilets of the City to understand the seriousness of the issue.

Ujjain, a city located in state of Madhya Pradesh with a population of 515, 525 (Census of India, 2011) along Kshipra river and in current times is known as for its religious importance of having Mahakal Temple, one of the rare shiv Jyotilinga across the nation and for hosting Maha Kumbh Fair every twelve years. Besides there are two Fairs organized annually. Ujjain is also locally called city of temples and pilgrims and tourists visit the place round the year. In other words, this is one of city in the state, which receives highest number of mobile population from all communities throughout the year. WaterAid started working in the City since 2015, when District Administration and Urban Local Body sought technical support in suggesting sanitation technologies in planning of its mega fair, Maha Kumbh to be visited by around 65 million people. After successful collaboration, WaterAid was requested to provide technical support in implementing Clean India Mission which aimed at making City open defecation free. Conducting accessibility audit was one of the tool used under City wide approach for making sanitation facilities located in public spaces accessible.

Meaning of accessible and accessibility audit

Accessible means a site, building, facility or portion thereof that complies with recommended accessible design that makes the site easily approachable, entered and easily used by persons with disabilities. An accessibility audit is regarded as the first step towards improving accessibility and inclusion of all persons including those with disabilities in the society. It may be pertinent to mention that accessibility audit is not a fault-finding exercise rather a tool to assess the existing facilities and provide suggestions for further improvement, which benefits not only persons with diverse disabilities but also persons with reduced mobility such as senior citizens, pregnant women, temporary ill etc. Hence, the accessibility audit provides a "base-line" assessment against which recommendations can be made that comprises of accessible design standards to make them barrier free. With the results of the accessibility report, the building / site will be better equipped to bring key changes that make these facilities universally accessible and barrier free.

Objectives

The aim of the Audit was to document the existing designs and facilities available in Public Toilets of the city with respect to existing relevant Acts and guidelines. It was done as part of technical advisory support to Ujjain Municipal Corporation to guide them with findings, which would contribute towards building an inclusive society ensuring accessible sanitation facilities for persons with different disabilities and reduced mobility, which could enable them for full and effective participation in socio-economic activities.

Methodology

WaterAid and its local Partner Bhartiya Grameen Mahila Sangh (BGMS) after consultations with Ujjain Municipal Corporation (UMC) decided to conduct this audit in all 56 Public Toilets of the City. Before formation of Team, a detailed desk review of relevant Acts and guidelines was done and a mobile-based questionnaire using a tool called mwater with geographical position system (GPS) enabled data was developed. The set of questions selected for the Audit were based on accessibility guidelines issued by government (Accessible WASH, MoSE, 2015); originally developed by organization Samarthyam, a lead organization working on the issue at National level. A Team comprising of BGMS and UMC were formed and effort were made to include disabled Community Volunteer who were engaged in our Programme. After this, a two-day training of the Team was conducted and a field-testing was done in two Public Toilet.

Existing laws and legislations

Towards the creation of tangible options for all segments of the disabled population to access a safe and secure environment, convention that needs special mention is United Nations Conventions on Rights of Persons with disabilities (UNCRPD) 2006. The convention includes people with different types of disabilities, for example people with long-term physical, mental, intellectual or sensory disabilities that can hinder their participation in society on an equal basis with others. Article 9- Accessibility and Article 20- Personal Mobility of UNCRPD is based on the concept of 'universal design' and focuses more on the individual and the specific requirements of the person enabling one have independent movement.

The Government of India (GOI) signed and ratified it in May 2008 to bring about 'change' in the lives of persons with disabilities. To do this, the process of enacting a new legislation in place of the Persons with Disabilities Act, 1995 (PWD Act, 1995) began in 2010 to make it compliant with the UNCRPD. After series of consultation meetings and drafting process, the Rights of PWD Act, 2016 (RPWD Act, 2016) was enacted which lays stress on non-discrimination, full and effective participation and inclusion in society. It laid emphasis on respect for difference and acceptance of disabilities as part of human diversity and humanity. The principle reflects a paradigm shift in thinking about disability from a social welfare concern to a human rights issue. Another major Programme which address these issues are Education for all and Right to Education Act, which has an important component targeting special needs of children with disabilities that ensures schools to be accessible including having accessible toilets. It further emphasizes the importance of an accessible toilet having potential to support change in attitudes and encourage children with disabilities to go to school. Barrier Free Guidelines "for children with special need" (CWSN) under education for all Programme detailed out essential design standards on accessibility (Handbook on Right to Education for children with disabilities, 2007). Besides, there is National Building Code 2005 that mandates to build all infrastructure barrier free. If these all guidelines are implemented, India would become one of the most barrier-free in terms of accessibility, country in the world. (National Building Code of India, Bureau of Indian Standards, 2016).

Findings of accessibility audit

Accessibility Audit was conducted on eight parameters, namely availability of Accessible Toilet within a Public Toilet Complex, Accessible Route, Main Entrance, Handrail, Ramp, Stairs, Corridors and the actual toilet in terms of dimension. Following were the findings from 56 Public Toilets on these indicators:

1. Availability of Accessible Toilet

This is important that accessible toilets are available for both male and female. Moreover, this is also need to be seen in actual sense rather just perception. In most of the cases, it is seen that just providing a western commode seat is perceived as accessible toilet. Following were the observation in terms of availability of accessible toilet.

- 1 toilet complex was found to have western commode facility for differently abled in only male section.
- 5 toilets had commode seat facility for differently abled people for both male and female separately.
- 8 toilet complex, had western commode seat facility common for male and females.
- 42 toilet complex had no arrangement of any kind that could help differently abled people.

2. Getting there- Accessible Route

For toilets remain accessible, it is necessary that there are accessible paths, which make it easier to reach the toilet facilities in terms of route, non-slippery surface, appropriate signage and enough light. There were following observations in terms of accessible route:

- 47 toilets were found to have connected with the main entrance Gate with accessible route.
- 48 toilet complexes were found to have firm and non-slippery path.
- No toilet Complex was found with any kind of tactile and warning tiles in the route that could guide persons with low vision for independent navigation.
- 12 toilets were found to have directional signage, which could help in locating toilet.
- 51 toilets had arrangement of artificial light, which could make them easy to use after sunset.

3. Main Entrance

For making toilet complex accessible, it is necessary that main entrance also remains accessible and adhere to guidelines because inaccessible entrance will make whole toilet inaccessible despite other components like corridors and toilet room are accessible. Following were observations on the Main Entrance:

- 46 toilets had presence of steps at the Entrance with only 5 having handrails along steps. There were only just 3 toilets which had presence of handrails on both the sides of steps.
- Only 6 toilets had Ramp with just two having handrail. There was only one Toilet which had handrail along both sides of Ramp.
- 53 toilets had clear door width with at least 900 mm however; there were only 5 toilets whose entrance door could be operated independently.
- Entrance Gate of only 13 toilets were clearly identifiable however, 18 of them had non-slippery landing surface at the entrance.

4. Handrail

A handrail is a rail, which is used in circulation area like corridor, ramp, passageways and stairways to assist users in continuous movement. This is essential component of an accessible toilet as it helps differently abled to use the toilet with comfort. Following were observations on Handrail:

- Only 7 toilets had handrails fixed firmly on the ground making it safe for users.
- Only 3 toilets had handrails which had enough space with at-least 50 mm to hold firmly.
- Only 3 toilets had handrails which were of contrast colour for easy identification.
- Only 1 toilet had handrail with outer diameter of correct prescribed size 38-40 mm.
- There was not toilet which had handrail mounted at two levels of height between 760 – 900 mm.
- There were no toilets with tactile strip (braille plate) identification on the handrails for the emergency stairs and floor levels.

5. Ramp

It is an “inclined way” connecting one level with another. A walking slope that has running slope. For a toilet complex to be accessible, it is very essential that for any change of level within the premises right from main entrance to the toilet should be connected with Ramp with a gradient not steeper than 1:12. Moreover, for a ramp accessible for people with low vision, it should also have guiding tactile which could be perceived using sense of touch. Following were detailed observations on the Ramp:

- Only 2 toilets complex were found having gradient not steeper than 1:12.
- 4 toilet complex had presence of landing at every change in direction and only 3 had landings at top and bottom of every ramp.
- There were only 4 toilets which had minimum width of the Ramp 1200 mm and just one with shed on long ramp.
- There were no toilets, which had continuous handrails on both sides of Ramp at a height between 760-900 mm.
- There was only one toilet, which had edge protection on both sides of Ramp.

6. Stairs

Stairs help people in easy movement from lower to higher level; however, for stair to be accessible, it is necessary that it be of correct width, riser with correct height and user friendly for persons with low vision. Following were detailed observation on Stairs:

- Only 2 toilets complex were found having gradient not steeper than 1:12.
- 43 toilets had required minimum width of stairs i.e. 1200 mm.
- Only 1 toilet had handrail installed in between of stairs with width more than 3 meter.
- 33 toilets had stairs with sharp nosing, which could hurt differently abled persons.
- Only 1 toilet has stairs with contrasting colour helping people with low vision.
- No toilet had warning block installed at the beginning and end of all flights.
- Only 12 toilets were found with risers with correct height (150 mm maximum and 300 mm minimum).

7. Corridors

Corridor is the open area within the toilet complex generally between main entrance and toilet itself. For a corridor to be accessible, it is necessary that it does not have any obstruction and have proper signage, which help in locating accessible toilet. Following were detailed observations on Corridor.

- 40 toilets had minimum obstructed space with minimum 1200 mm space that allow manoeuvring through doors.
- Corridor of 37 toilets had arrangement where persons with low visions could detect all protruding objects.

- 53 toilets had no overhead obstructions in the corridor area, which means all over hanging obstructions were mounted above manual height of 2100 mm.
- There was no Toilet, which had signage or other support system in the corridor area, which could be helpful for persons with low visions in locating toilet.

8. Toilet

- Only 11 toilets were found with door having correct width (one leaf having at least 900 mm).
- Only 14 toilets had all door accessories located at correct height between 800 mm-1000 mm.
- 11 Toilets were found with flushing arrangements.
- Only 3 toilets were found with skid proof, well drained and water proof floor.

Ironically, in whole city no toilet was found accessible on following prescribed parameter

- Toilet clearly and easily identifiable inside complex.
- Prescribed sufficient space to maneuver a wheel chair.
- Prescribed dimension between opposite walls (2000 x 2200 mm.)
- Water closets mounted at a height between 450 – 480 mm.
- Wash Basin mounted at a height of 700-800 mm.
- Lowered urinal with chest support grab bar.
- Toilet having mirror with lower edges positioned at a height exceeding 1000 mm.
- Accessible showers provided with a folding seat/stool/bench.
- Grab-bar installed near WC and showers.
- Grab-bars having knuckle space 50 mm.
- Emergence alarm system at height of 300- 900 mm from floor level.
- Having doors that can be locked from inside and released from outside.

Since the whole exercise was done in collaboration with Ujjain Municipal Corporation with objective to help them understand the issues of accessibility in public toilet of the City so it was important to share the findings with them so that this can be transformed into actions. Moreover, the Accessibility Audit was not able to inform only on gaps but also was able to suggest the solutions that could make them accessible. Importantly accessibility audit also suggested that 90% of the existing toilet complex, which have gaps, could be converted into accessible toilet with some modification.

Way forward

As planned, the findings of Accessible Toilet was shared with Team of Ujjain Municipal Corporation and they were surprised to see the status. In-fact most of them expressed their unawareness of the detailed parameters of accessibility. After the Presentations, followings key decisions were taken by Commissioner:

- Took ownership over Report and requested WaterAid to share toilet wise profile so that specific required action can be taken accordingly.
- WaterAid was requested to support Municipal Corporation in designing a pocket booklet in hindi language based on existing norms and designs of accessible toilet with measurement specifications.
- Requested for advisory support at zonal level helping engineering team in making first two Toilets – accessible in every zone so that it can be replicated later independently.
- Instructed Engineering Team to factor accessibility while planning and budgeting any public toilet.

Consequently, WaterAid supported in demonstrating one Accessible toilet modifying the existing one located near main Shiva Temple, which was used by different communities including differently abled. Designing of booklet is almost finalized for publication. Now Ujjain Municipal Corporation is ready to begin its Campaign on accessibility converting all existing Public Toilets into accessible beginning with the ones, which could be done with minimum modification.

Concluding remarks

Throughout the audit process, it was observed that there is a common perception among people and also the service provider that a ramp and a toilet with western commode seat is all needed to make a toilet accessible. They failed to realize that accessibility has many other aspects ranging from accessible route and entrance to ramp and handrail with correct dimension, barrier free corridor with adequate signage to different

accessories used in the toilet. This is important to understand that a small child, an elderly person, a pregnant woman, the temporarily disabled, all are differently abled and vulnerable to barriers thus it is the duty of service provider to consider different relevant design elements while planning for any infrastructure. There is immediate need to look these issues with human right approach.

As WaterAid moves ahead towards sustainable development goals with a vision of a world where everyone everywhere has access to safe water, sanitation and hygiene by 2030, it is very important to understand that without addressing and ensuring the issues of accessibility this is not possible. There is also need to integrate the issues of accessibility and safety for disabled with programmes like Smart City, Housing for all and Atal Mission for Rejuvenation and Urban Transformation. A city cannot be smart unless there are adequate public facilities and amenities, which are accessible for all.

References

World Health Organization. World Report on disability, Geneva, Switzerland, 2011.
Office of the Registrar General & Census Commissioner, India, 2011 (<http://www.censusindia.gov.in>)
Accessible WASH, Practitioners Manual, Ministry of Social Justice and Empowerment, 2015.
UNCRPD (2006), Convention on the Rights of Persons and Disabilities
Handbook on Right to Education for children with disabilities, UNESCO, 2007.
The Gazette of India, The Rights of Persons with Disabilities Act, Ministry of Law and Justice, 2016.
WaterAid's Global Strategy, Everyone Everywhere 2030, 2015.

Contact details

Chanchal Kumar
WaterAid in India,
E7/698Arera Colony,
Bhopal, Madhya Pradesh, India
Tel: +91 755 42222482; 7694810102
Email: chanchalkumar@wateraid.org
www.wateraid.org
