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IMPROVING ACCESS AND SUSTAINABILITY****Accessibility audit for mainstreaming the rights of the
persons with disabilities in Bangladesh**

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Accessibility audit is an integral component of ensuring rights of the persons with disabilities. WaterAid Bangladesh along with a Disabled Persons' Organization, Bangladesh Society for the Change and Advocacy Nexus (BSCAN) conducted accessibility audit in twenty important buildings of the two major cities of Bangladesh. The main objective of the study was to assess the buildings by persons with different kinds of disabilities and share the findings with the authorities and with media so that they realize the importance of accessibility audit before designing and building any infrastructure considering the rights of the persons with disabilities and also to make sure these facilities have universal accessibility.

Introduction

An accessibly built environment has been recognized as a core element of an inclusive society. An accessible environment provides citizens with autonomy and the means to pursue an active social and economic life. However, necessary steps have not been taken adequately and no comprehensive accessibility audit has been performed yet which is very essential for the safe movement of persons with disabilities. By realizing this context, WaterAid Bangladesh along with B-SCAN, a Disabled People's Organization (DPO) thought of an accessibility audit which in turn can be used for evidence based advocacy along with other DPOs and NGOs. Accessibility audit of different public places and buildings means that all the steps needed for a person with disabilities to reach from their home to destination safely could be measured. It also ensures that they can participate in any kind of socio-economic activities without any hindrance. These issues are all interrelated and if anyone of these links is broken, the whole accessibility issue might become questionable.

Background

People with disabilities in Bangladesh are faced with barriers that exclude them from acting as a regular citizen of the state. These barriers can be physical, attitudinal or social and affect people with different disabilities at different times of their lives. The case for making our society more accessible is a compelling one on many fronts. It is not only an issue of justice but it makes good business and social sense. According to World Health Organization 2011 report, 15% of any particular population is persons with disabilities and they are the most vulnerable as well as deprived population in any aspect. General Assembly of United Nations has passed a convention for persons with disabilities named United Nations Convention on the Rights of Persons with disabilities (UNCRPD) in 2006 and entrée into force in 2008. Bangladesh government has signed as 91 and ratified the convention as the 8th country. Bangladesh government has also enacted a new rights based law titled "Persons with Disability Rights and Protection Act-2013". Accessibility features have been also included in the "Dhaka & Chittagong Building Code 2008". However, the accessibility features have yet not been ensured in public buildings and thus participation of persons with disabilities is still hindered in their regular lives. It is mostly the duty of the government to build or make reasonable accommodation in the public buildings to make it accessible for all. Unfortunately their initiatives are mostly stuck into policy making. None of the responsible authorities to supervise the

implementation of the policies are active, even the DPOs cannot perform as pressure group or rights defenders of their proper initiatives. Most of the time people think that ensuring accessibility would be expensive, but some reasonable accommodation in the design of the buildings such as ramp in a building or footpath, braille blocks for visually impaired persons, elevator floor announcements, using braille buttons, using color for persons with low vision and pictures or maps inside a building for hearing impaired persons make their lives much easier compared to the money invested. In addition to contributing to the development of a more inclusive and equal society, an accessible environment increases the pool of potential new workers that an employer can tap into. It also helps organizations to retain existing employees who may acquire a disability. An accessible building enables more people with disabilities to enter the premises and to use the services. Government has National Building Code Rule 2008 where it says accessibility needs to be ensured. But very few people know about it and is often overlooked. This particular audit initiative will make the building owners think about their buildings and at the same time it will show a clear picture of the situation of important public buildings' accessibility.

What is accessibility?

Accessibility is the degree to which a product, device, service, or environment is available to as many people as possible. A person who has temporary or permanent or environmental disability can live a regular life on his/her own capability if the person gets supportive environment harmonic to his/her needs. So when the variant ability is not recognized then the universal accessibility faces obstruction.

Objectives

The aim of the study was to document the lessons learnt through conducting an accessibility audit which may contribute towards building an inclusive society for persons with disabilities for full and effective participation in socio economic activities.

Methodology

WaterAid and B-SCAN chose total 20 public buildings and places of Dhaka and Chittagong through consultation with other DPOs and the persons with disabilities working in different sectors. Focus has been given to the buildings and places where the persons with disabilities usually go to meet their basic needs. These public buildings are generally used by the mass people to communicate in their daily lives, claiming their citizen services, legal protection or health and education. Persons with disabilities are also not out of them.

The following steps have been followed during conducting this study:

- Assumed a brief literature review & analysis of the accessibility of persons with disabilities on the following issues like: transport, public places, and local authorities
- Formed working groups in the selected districts including the representatives from local disability groups to find out the places & services to be audited
- Developed an audit tool to measure the level of the physical accessibility of the premises
- Filled questionnaires by persons with disabilities to determine what accessibility they already have in these premises and what improvement they need to suggest
- Undertook individual interviews of the users of the buildings like general mass, persons with disabilities and highest authorities of those places

For this particular study Dhaka and Chittagong have been chosen as these are the two main cities of the country having most important public buildings, where citizens including the persons with disabilities need to visit for attaining different types of services including education, health, communication etc. The study is a descriptive one and conducted following a qualitative research approach. Ten buildings each from Dhaka and Chittagong were selected for the accessibility audit.

Audit team

The audit was led by the members of B-SCAN and WaterAid. The team members consisted of persons with different types of disabilities, economist, social scientist, civil engineer and architects. B-SCAN members were mainly responsible for conducting the audit, selecting buildings, writing draft reports. WaterAid staff were responsible for leading the process, initiation of the idea, dissemination, taking forward policy and advocacy issues and disseminating the findings as and where appropriate.

Findings and recommendations

Entrance

Findings

In most of the buildings, entrances from alighting and boarding point is hindered due to variation in level, lack of visual, acoustic and tactile information. Among the 20 buildings that we have audited, only two of the buildings had ramps and only one up to the standard range. Most of the buildings do not have any curbed ramp from vehicle pull-up space to access aisle. We have also found that the entrance of the railway stations and medical college hospitals had ramp and these were made for pulling the trolleys or goods but not for wheelchairs. Even those are not completed according to the standard measurement range. But the travel path was slip resistant and firm in 70% cases. In 90% cases, the travel path was wide enough. In public places like railway stations, market and medical colleges, there were ramps for carrying goods which were frequently used by the motor cycle users. We have seen that the persons with hearing impairments had difficulties establishing effective communication with the information providers. The lack of citizen charter and location map of the buildings was also major obstacles for hearing or speech impaired persons as well as other mass people.

Recommendations

- Steps free option of entry or curbed ramp with minimum of 1:12 ratio should be provided in the entrance
- Access door should be with minimum clearance of 900mm
- Floor guidance, handrails, directional and informational signage and color contrast should be used to facilitate visually impaired person

Vertical circulation

Findings

We have found that 90% buildings had no lift which was a major barrier for the wheelchair users to visit those buildings and receive proper services. No lift had Braille key control and no lift had audio announcement for persons with visual impairment which prevented them from controlling the elevators independently. Handrail, Braille lettering, Audio description could not be found anywhere to assist persons with disabilities. Tactile indicators, directional and informational signage and color contrast were not used in stairs and lifts.

Recommendations

- Lifts is a must in public buildings. Old buildings without lifts should arrange for platform lift/ manual lift/ wheelchair stair lift
- In the transition points such as top, bottom, intermediate landing of the stairs, lift lobbies tactile warnings should be provided. Tactile indicators and color contrast should be used in the edge of the steps
- In public building tread should be wider (least 300mm) to facilitate the crutch and stick users. The riser should follow the minimum standard of 125 mm.
- There should be appropriate round shaped (35 to 45 mm diameter) handrails made of slip resistant material, with color contrasts, in both sides of the stairs. Handrails should be extended 300 mm into the level area at the top and the bottom of the stairs.
- Direction and informational signage with pictograms should be provided to indicate accessible routes.

Doors

Findings

Most of the entrance doors were wide enough for wheelchair users. But heavy weight aluminum framed glazed doors were used in the entrances which were not easily operable. There was no safety marking in the glazed doors and the width of the doors was acceptable in only 2 among the 20 buildings. The height of the door control and door lock was also acceptable only in 10% audited buildings.

Recommendations

- Doors should be with minimum clearance of 900mm
- Doors should be double way swing and light weighted so that it can be easily be operated
- Door control should be in a height of 900mm to 1100mm from the floor
- Door handle should be grabbing bar handle or lever handle. Door knob should not be used as it cannot be operated by the persons with impaired hand function

- Color contrast should be used in door controls, door locks, door bells etc.
- Vision panel should be provided from a height of 800mm to 1500 mm with a width not less than 150mm, for visibility to avoid accidental struck by the door
- Glass door must have safety marking to avoid accidents. For the persons with low vision, glass door is a potential threat to safety

Emergency evacuation

Findings

Most of the building did not have any emergency escape, let alone the facilities for persons with disabilities. We have not found any emergency evacuation exit except in 1 out of 20 buildings. The door of the fire stair was locked in most of the floors. In the ground floor level it was locked with a collapsible gate. The fire stair was dark and dirty. No visual alarm as well as the audible alarm was found for hearing impaired persons. In case of any fire incidence, persons with disabilities would be the worst victims as there was no specific policy for the persons with disability to evacuate in emergency situations.

Recommendations

- Escape routes should be made accessible for all. Provision for the fire lift should be provided
- Fire proof waiting areas should be provided where people can stay before rescuing
- For safety measures visual alarm should be communicated with light signals for hearing impaired person
- Acoustic information or audible alarm should be used for visually impaired person such as audio signal in the direction to escape routes
- Tactile mapping should be provided in the escape routes
- Escape route should be designed with high contrast colour, directional light and audio-visual alarm

Toilet and water points

Findings

Most of the toilets and washrooms were neither accessible nor usable in public buildings because of lack of space for wheelchair, floor curbed, inappropriate door width, low level of lighting, absence of grab bars, absence of high commode, and inaccessible placement of washroom accessories. We have found only 3 toilets where there were high commodes. The basin height was always on higher side. We found only 1 accessible toilet out of the 20 buildings. Most of the toilets were obstructed by floor curbed. None of the facilities were provided in proper height for persons with disabilities. Even among the 10 buildings and places in Chittagong, we found only the water point in Chittagong Railway Station was accessible.

Recommendations

- At least one washroom for persons with disability should be designed in both male and female toilet cluster.
- Height of the top of the water closet should be between 450mm to 480mm from the floor.
- Mirror should be placed at a height of 1000 mm from the bottom of the mirror to floor.
- Wash basins should have a knee space of at least 750 mm wide/ 200 mm deep/ 680 mm high with an additional toe space of at least 750 mm wide/ 230 mm deep/ 230 mm high.
- Washroom accessories, operable parts and controls should be in colour contrast with the adjacent wall and be positioned in between 1000mm to 1200mm from the floor.
- Doors should be with minimum clear space of 900mm.
- Foldable grab bars should be provided,
- Signage and pictograms should be provided to convey information

Doctors' chamber

Findings

Chambers were accessible as the doors were wide enough and there was no level variation. The level of light was acceptable in 20% buildings. In 5% cases beds were adjustable for easy transfer for wheelchair users.

Recommendations

- Medical facilities should be accessible and functional for the persons with disability
- Adjustable and portable examination equipment should be provided

Concluding remarks

As a Disabled Peoples Organization B-SCAN had limited financial and human resources so it was a huge challenge for them to complete this audit. WaterAid partnered with them and made the audit a successful one. Time constrain was one of the major limitations for the auditors. The accessibility audit done by WaterAid and B-SCAN is an indication of goodwill and motivation to ensure the rights of the disabled persons. However, it is the government and respective building authorities who should be conducting accessibility audits before building an infrastructure to realize and assess the needs of the persons with disabilities. WaterAid and B-SCAN shared these findings with the building owners and the media and are looking forward to conduct a repeat audit in the future.

WaterAid as an international development organization is inclusive and wants to ensure universal WASH coverage by 2030. As a part of this movement we want to ensure that persons with disabilities will have access to safe water, sanitation and hygiene services. In this consideration we decided to conduct this accessibility audit. We initially shared the report with the building authorities and had bi-lateral meetings with each of them although most of the suggestions have not been addressed yet. To create pressure on them we organized a roundtable meeting at the most popular English newspaper of Bangladesh and came up with a full page supplementary in the newspaper which created lots of sensitization in the sector and now as a reaction to that some of the building authorities like city corporations have taken measure to make their buildings accessible. Within the next one year we believe at least half of the buildings will address the findings of the report and make their buildings accessible which then again will be disseminated with other government and non-governmental organizations of Bangladesh for wider adaptation.

A major learning of the study is that it is very helpful for the service provider to include disabled persons in their team before going for construction any infrastructure. In case of the WASH sector, most of the modification for making WASH facilities disabled friendly the investment would be very low but the mind set up is very important to accept the changes. Accessibility Audit should be considered as a must before providing any services at field.

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