RESILIENCE AND GENDER IN WATER
SNAPSHOTS

CONTEXT

In cities with inadequate sanitation systems, risks of flooding and water-logging, can multiply vulnerability of women and girl-children living in poor communities. In the rainy season or during flooding events, fecal matter from pits and septic tanks spill over into open areas, and wastewater in over-flowing open drains becomes contaminated with untreated sewage. This poses major health risks to the poor, who often live in low lying or unplanned settlements. In Dhaka, Bangladesh’s capital city, floods have led to a significant increase in incidents of diarrhea, fever and cold (Rashid, 2002). Poor women and girls living in slums are disproportionately affected. Most of the toilets in these slums are community latrines or insanitary – during floods, these are submerged or inaccessible severely restricting access for women and girls. This forces women and girls to either adopt unhygienic practices or venture out to alternative locations for their own needs and to dispose children’s feces making them vulnerable to sexual assault and harassment. They are unable to find secure defecation or bathing places or enclosures, which further compromises privacy and safety. Being caregivers, women and girls have to bear the brunt of looking after the elderly and children, forgoing their work and bearing increased health expenses. Floods pose a barrier to women and girls’ ability to maintain menstrual hygiene. Finally, the lack of voice and participation in planning and decision-making processes renders women and girl’s water, sanitation and hygiene (WaSH) needs as completely neglected.

To address the urgent need for improved sanitation in Dhaka, the Dhaka Water Supply and Sewerage Authority (DWASA) has developed a sewage master plan. The World Bank is supporting DWASA in implementing the master plan and is financing the Dhaka Sanitation Improvement Project (DSIP) to implement the first phase of the plan in the Pagla Catchment (one of the five catchments in Dhaka), that includes parts of the old core Dhaka city, has more than 200 Low Income Communities (LICs) and is home to 4.1 million people. The Project will support the construction of a sewage treatment plant, trunk and sewer networks and demonstrate alternate sanitation innovations, while also strengthening the capacity of DWASA to deliver sanitation services.

As part of the DSIP preparations, the World Bank conducted a Participatory Gender Vulnerability Assessment (PGVA) with the financial support of the Global Facility for Disaster Reduction and Recovery (GFDRR). The aim of the exercise was to better understand how poor sanitation affects men and women differently, and what are the specific needs of poor women and girls, particularly during climate-exacerbated disasters. The rationale of the study was to ensure that DSIP responds to women’s and men’s differential sanitation needs and supports resilient sanitation infrastructure and practices for the city. This snapshot presents the highlights and recommendations of the assessment.
CONDITIONS OF WOMEN LIVING IN THE SLUMS

Through slum mapping, 209 low-income communities (LICs) were identified in Dhaka’s Pagla Catchment. The PGVA was carried out in 20 of the identified LICs and comprised transect walks, focus-group discussions (FGD) and key-informant interviews (KII) with 400 women and men. The study revealed that 97 percent of the users rely on community latrines and a small proportion use hanging latrines. 98 percent of the fecal wastes from slums drains directly or through small drains and pipes and flows untreated into water bodies. A minuscule number of toilets discharge into holding tanks. These latrines and tanks are major public health hazards, especially during Dhaka’s long rainy season and frequent flood events. Although these poor sanitation conditions affect both men and women, women and girls bear the disproportionate risk burden due to inadequate sanitation combined with their higher vulnerability.

More than 90 percent of FGD participants and 86 percent of the Key Informants opined that women were indeed more vulnerable than men to climate-exacerbated floods due to their physical and social characteristics, the lack of access to and control over economic resources, and lack of participation in the decision-making process of their communities.

Care-giving: As the main household care-givers, women are primarily responsible for assisting the children and the elderly when they contract water and sanitation-related diseases such as diarrhea, dysentery, typhoid, chikungunya, dengue, etc., all quite common during the long rainy season. Respondents reported that care-giving responsibilities resulted in loss of income for women who were otherwise working as laborers or ran small enterprises, and there was an increase in the family’s healthcare expenses too. Cultural norms require adolescent girls to assist mothers, and hence many girls stopped attending school when disasters such as floods occurred.

Sanitation: Heavy floods and water-logging often cause latrines to be submerged, forcing women to have to queue for hours for their turn or to find latrines elsewhere. Occasionally, they are forced to defecate in the open or improvise the use of submerged latrines posing grave physical danger of injury apart from discomfort. The study found low traction for de-sludging toilets among the LIC residents. One FGD respondent noted: “LIC residents do not consider removal of fecal sludge as it is too costly and requires support from emptier. We wait for the rainy season and flood for a natural wash-out.”

Safety and Security: Survey results also showed that flooding severely compromises women’s privacy and security. During flooding, latrines and bathrooms cannot be locked leading to fear and distress, especially at night. Flooding and intense rain events often cause the suspension of electricity. During such times, most latrines remain without lights or with poor lighting. Respondents reported incidents of sexual harassments, sexual abuse, and violence during such events.

RECOMMENDATIONS

The PGVA found that priority should also be given to the use of appropriate alternative sanitation technologies that can address the overflow of untreated wastewater and manage fecal sludge better in LICs, especially during the rainy season. This must be accompanied by addressing the social, economic and strategic gender vulnerabilities of women and girls. DSIP supports resilient and city-wide inclusive sanitation systems as an important first step to addressing some of the most critical public health challenges associated with flooding and its differential impacts on women and girls in Dhaka’s LICs. The Project’s interventions will include infrastructure provision (both network and alternate sanitation solutions), operations and maintenance management, institutional strengthening of DWASA, improved communications, awareness building, and outreach to communities resident in LICs. For the success of these interventions, DSIP will include measures to specially reach out to women and girls in the slums and provide forums for them to actively participate in developing and implementing such sanitation systems and practices that will help mitigate their differential needs and vulnerabilities.

Sources and additional information:
Participatory Gender Vulnerable Assessment Report and notes prepared based on inputs from Arif Ahamed, Nishtha Mehta, Ravikumar Joseph, Somnath Sen, Ayumi Koyama and Elaine Panter

Gender Snapshot #2. May 2019
Water Global Practice http://www.worldbank.org/water
For more information about this snapshot, please contact:
Arif Ahamed (TTL of the DSIP), aahamed@worldbank.org