

# A review on gender-inclusive WASH policies in Bangladesh

Md. Aminul Islam Khan, Anika Tahsin, & Bilqis Amin Hoque

## Abstract

Bangladesh is one of the developing countries in South Asia where multiple challenges exist in the field of WASH. In this regard, gender is a vital issue. It is necessary to include gender-responsive issues in WASH policies and legal frameworks as gender is a key factor in achieving sustainability in this sector. In every phase of a project cycle, the role of every gender group must be ensured. The review brings forth a broader understanding of the role and status of gender in the current WASH-associated legal frameworks of Bangladesh. Through the content analysis method, the inclusiveness of gender in WASH policies and legal frameworks has been evaluated based on selected issues. After that frequency score is given in each issue based on the number of documents addressed that particular issue. From the frequency score, it was observed that, in existing policies and legal frameworks, all the selected issues were not given due priority from the perspective of gender inclusiveness. Issues like 'women-specific needs', 'equality', 'participation and representation', and 'Climate change, adaptation, and disaster management' received high significance, whereas other key issues like 'site selection, operation and maintenance, and 'hygiene promotion' which are crucial in the field of WASH were found to be addressed rarely. On the other hand, while addressing gender, only men and women were mentioned overlooking one of the vulnerable gender groups which is the transgender and hijra community. To achieve the SDG targets, the policies of Bangladesh need to be more gender-responsive. It is expected that the review will contribute towards refreshing the debate for updated gender-responsive policies and related materials.



IJSB

Accepted 17 December 2021

Published 20 December 2021

DOI: 10.5281/zenodo.5793142

**Keywords:** Gender, Women, WASH, Policy, Transgender, Hijra, Sustainable Development Goal (SDG), Bangladesh.

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## 1. Introduction

Safe water, basic sanitation, and proper hygiene practice are obligatory to maintain a population's well-being. These practices are collectively referred to as WASH, and each of its core fields depends on another. For instance, without the provision of proper sanitation facilities, the potable water source becomes vulnerable to pollution, and without all these basic hygiene practices is futile ("About WASH", 2020). Unfortunately, globally, the number of people deprived of WASH facilities is still alarming in this twenty-first century because of numerous social, economic, cultural, and geographic conditions. Worldwide around 2.4 billion people and 663 million people are deprived of basic sanitation and improved water, respectively ("Water, Sanitation and Hygiene", 2020). Water sources as well as the distribution system are vulnerable to contamination (Khan et al., 2017, Tahsin et al., 2021). Inadequate and improper WASH facilities have an adverse effect on a population's health, education, mortality rate, and socio-economic condition (Gautam et al., 2018). Bangladesh, being one of the developing countries of South Asia, confronts all these difficulties. In Bangladesh, inadequate WASH facilities are one of the prime causes hindering the country's progress ("Bangladesh: Access to Clean Water Will Reduce Poverty Faster", 2020). According to the Bangladesh Multiple Indicator Cluster Survey (MICS), only 51% of people fall under basic water sanitation and hygiene services (BBS and UNICEF, 2019). As a result, only due to the unsafe WASH services, the mortality rate in Bangladesh was estimated to be 11.9 (per 100 000 population) in 2016 (GED, 2020). Moreover, gender equality is also a significant concern as gender issues are not emphasized in this region. The women, marginalized people, and poor people are disproportionately affected due to limited access and insufficient WASH facilities (Graham et al., 2016; Stevenson et al., 2016). Most of the time, water collection and transportation for the whole family are the sole responsibility of the women and girls for which they have to spend much of their time. Due to latrines' unavailability, women and girls have to relieve themselves out of their home, which makes them vulnerable to sexual assault, embarrassment, and harassment, which sometimes bound them to avoid their needs ("WASH and Women and Girls", 2020). Furthermore, many schools do not have the facility of separate latrines for girls. For this single reason, severe problems like low attendance, quitting school, and fall of grades of the girls in schools are emerging. In addition to that, the lack of separate latrines with appropriate menstrual hygiene management facilities creates obstacles for the schoolgirls and working women during menstruation (Snehalatha et al. 2015; Nahar et al. 2006). Due to these causes mentioned above, women and girls have to suffer from chronic constipation, infection, psychological trauma and stress, pain, and musculoskeletal damage for carrying heavy load along with an increase in maternal and infant morbidity rates (Caruso et al., 2015, Schuster-Wallace et al., 2019). Moreover, the transgender and hijra community is one of the most neglected people of society who are socially excluded and deprived of WASH services (Boyce et al., 2018; Khan et al., 2009). Although different planning and policies associated with the WASH sector have enabled the country to make considerable progress in achieving Millennium Development Goal (MDG) targets, it still lags behind to achieve Sustainable Development Goal (SDG).

According to SDG 6 (clean water and sanitation), availability and sustainable water and sanitation management should be ensured for all. Under this goal target, 6.1 aims to ensure equitable distribution of safe and affordable drinking water to all. It can be seen that here all members, in other words, all genders are given equal priority. Similarly, SGD 5 aims to achieve gender equality along with the empowerment of women and girls. As gender equality and the right to water and sanitation are associated with one another (Leahy et al., 2017), without the accomplishment of SGD 5, SGD 6 cannot be achieved. While both men and women are equal contributors to society, women are lagging. Moreover, due to body function, men's and

women's needs are different, and compared to men's, women require special attention. Thus, women, girls, and vulnerable people were given special attention in SDG target 6.2. In SDGs, WASH is a significant contributor, and Bangladesh has targeted to reduce the mortality rate to 4.5 (which is currently 11.9) per 100,000 due to unsafe WASH facilities by 2030 (GED, 2020). Therefore, to achieve the SDG targets, emphasizing the role of gender in WASH is indispensable. When all gender groups including men, women, transgender, and hijra along with the marginalized people will be taken under consideration only then ubiquitous access to safely managed WASH facilities and proper water resources management will become a reality which will ameliorate the scenario along with profiting both in terms of economy and time (Grant et al., 2016; Fisher et al., 2017). Furthermore, in a study of 122 water-related schemes, World Bank reported that the projected efficacy increases to 6-7 times greater if women were involved than where they are not (Bazilli, 2013). Besides all these, the role of women in WASH can significantly contribute to fighting any pandemic (Carter et al., 2017). Therefore WASH, women, pandemic, and SDG goals are linked inherently. At present, the COVID-19 situation has again focused on the importance of gender-responsive WASH emphasizing women in achieving SDGs. Hence, addressing gender-responsive WASH and the arrangement of special provisions for women's needs through targeted plans, programs, and policies is mandatory for achieving sustainability and SDG targets.

Any sector's sustainability depends mostly on the sector's policies and legal frameworks (Söderholm et al., 2019; Patlis, 2005). Recently, in Bangladesh, many policies and frameworks have been formed to address the WASH sector and ensure its sustainability. But then again, without incorporating the whole population, sustainability can't be safeguarded. Though several studies have been conducted on the WASH sector and the prevailing WASH policies, to our best knowledge, no studies have yet reviewed the all-inclusive role of gender in water, sanitation, and hygiene associated policies and legal framework of Bangladesh (Arnold et al., 2013; Unicomb et al., 2018; Rahman et al., 2018; Begum et al., 2020; Pickering et al., 2019; Ahmad et al., 2003; Hoque, 2003; Hoque et al., 2006; Khan et al., 2020). Therefore, our study's target is to review the scenario of current WASH policies in terms of gender inclusion. Here, gender inclusion denotes if gender-specific activities have been addressed in these policies or not. This study also brings into light the issues regarding gender putting special attention to women in WASH facilities that have been and that need to be emphasized. It is expected that the policy review will facilitate the policymakers to make and update policies to incorporate gender issues accordingly.

## **2. Methodology**

### **2.1 Content analysis of selected documents**

The review process was mainly based on the study and content analysis of selected documents. The analysis method of any literal, oral, or ocular message is called content analysis (Cole, 1998). As a research method, it is the process of analyzing documents that permit the researcher to analyze the theoretical contents to intensify the data's perception (Elo et al., 2008). The process helps evaluate the relationship of text and its purpose in the documents (Yu et al., 2011). For content analysis, different acts, plans, policies, and strategies of Bangladesh have been studied. The main purpose was to determine if there is any gender-specific representation of WASH among these documents and if there is then in which way it has been addressed. Among these documents, those containing gender-specific water, sanitation, and hygiene issues are chosen. The approach of choosing documents is shown in Figure-1 which shows that among all the policy and planning frameworks in Bangladesh, those which addressed both genders and wash issues are screened out labelling as gender-inclusive wash policy in Bangladesh.



Figure-1: Venn diagram of gender-inclusive wash policy.

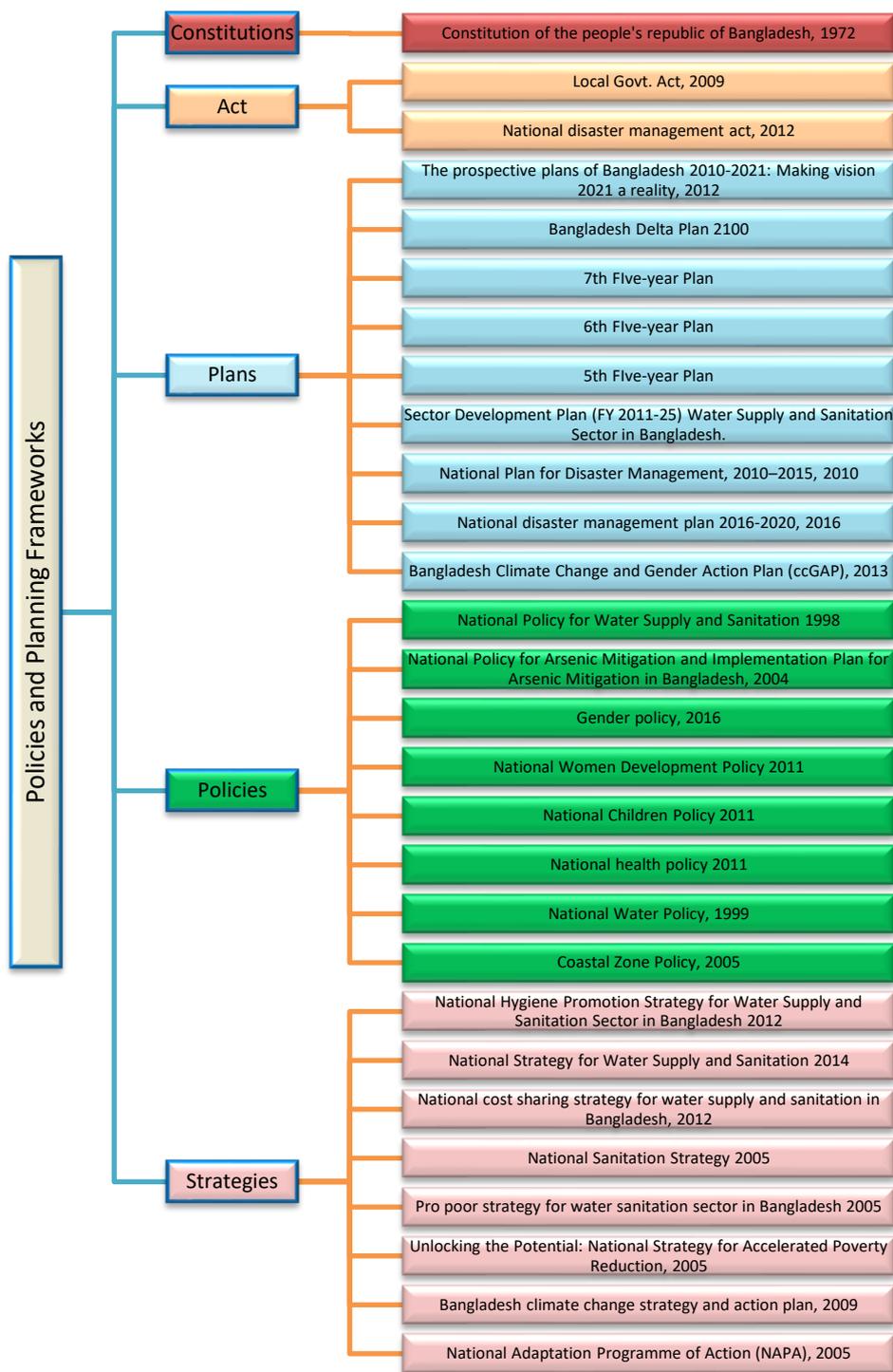
A complete list of documents that have been selected addressing gender-inclusive wash issues are presented in figure-2.

## 2.2 Selection of gender-sensitive issues associated with WASH

After reviewing, the policies and framework containing gender-oriented contents were screened out. From these, the extraction of data related to WASH, gender, and any other social, economic, or technical issues related to gender in WASH was done by text refining and knowledge distillation processes. These two processes are collectively known as text mining. Text data mining or text mining, or knowledge discovery, is the extraction of innately unstructured and fuzzy (Tan, 1999). By text refining, the unstructured text documents were converted into an intermediate form, and from this intermediate form, the information was deduced by the knowledge distillation process. By this technique, information extraction, analysis, grouping, and summarization of text data were done. Only the issues associated with gender in the field of WASH were taken into consideration. Ten issues were identified which are considered to represent the efficacy of the role of gender in the filed WASH (figure-3), they are (i) Women-specific needs (ii) Equality (iii) Participation and Representation (iv) Empowerment (v) Gender association in climate change, adaptation and disaster management plan (vi) Decision-making (vii) Planning and Management (viii) Site Selection, operation and Maintenance (ix) Hygiene Promotion (x) Addressing transgender and hijra community.



Figure-3: Selected gender-sensitive issues associated with WASH



**Figure- 2:** Studied gender-oriented WASH policies and planning frameworks in Bangladesh

**2.3 Frequency scoring of the selected issues**

At this stage, it was observed that whether the issues are addressed in the screened documents or not. The frequency score is assigned based on the number of documents addressed to that particular issue. For example, for a particular issue, the frequency score of 2 means the issue has been addressed in two different documents. From this, it can be deduced that the issue containing higher frequency scoring has been addressed by a higher number of policies and planning framework.

### 3. Findings

#### 3.1 Status of Selected Issues:

Based on the review, the detailed findings of the ten selected issues have been discussed here.

##### 3.1.1 Women-specific needs

Though women play the central role in household-level water management, they are among the most vulnerable groups with limited access to proper water, sanitation, and hygiene facilities (Gautam et al., 2018). Therefore, special provision for the women needs to be ensured in WASH facilities. Constitution of the People's Republic of Bangladesh, 1972 declares that nothing shall make barrier the state from arranging special arrangements for the advancement of women, children, or and backward sections from the citizen (GoB, 1972). Following this, several plans and policies in Bangladesh have addressed this issue. It is essential to address women, girls, and children's special needs through a gender-sensitive approach (LGD, 2012a). The availability of water in every society's rank must be ensured, especially considering the particular requirements of women and children (MoWR, 1999). In public toilets, separate requirements must be ensured for women users (LGD, 1998). Moreover, promotion of gender-specific technologies, facilities and addressing women's special needs such as menstrual hygiene management must be included in sanitation programs (LGD, 2014; LGD, 2005a). Women with disabilities and hard-core poor category must be accounted for special provisions (LGD, 2012b; MoWCA, 2011a; GED, 2005). Moreover, while designing and implementing any capacity enhancing activities, DoE should consider the different needs and roles of men and women (DoE, 2016). Women should be given particular importance in hard-to-reach areas. In those locations, ' women have to bear a significant burden and heavy workload for fetching water for domestic purposes (LGD, 2011; MoWR, 2005).

In educational institutions, productive learning and living environment must be ensured in primary, secondary, and tertiary levels of education (GED, 2012). In the case of numbers of toilets or urinals, one per 50 children and one for each 10-female staff, and one for each ten male staff must be ensured (MoPME and UNICEF Bangladesh, 2011). It is also mentioned that toilets shall be child friendly, age and gender appropriate, easily accessible to all the members of the school (no more than 50 m from all users), privacy and security ensured against rape, harassment and animals and when possible male and female toilets are separated (MoPME and UNICEF Bangladesh, 2011). For the girls in school, separate latrines must be built where adequate menstrual hygiene management facilities must be ensured (PC, 2015; DMB, 2010b). In the educational institutions and workplaces, separate sewerage systems along with proper sanitation facilities must be ensured for female children and adolescents (MoWCA, 2011b). During disaster events, women's overall security must be ensured in shelters or safe places (DMB, 2010a). Moreover, the provision of separate latrines must be ensured in the shelters, and the needs of women, children, elderly, disabled, and poor people must be protected (DMB, 2010b).

##### 3.1.2 Equality

In Bangladesh, precedents suggest that economic development and enhancement of practice, and the outcome of maternal and child health and nutrition development are associated with gender equality and women empowerment (Billah et al., 2019; Headey et al., 2015). In the Constitution of the People's Republic of Bangladesh, 1972, article 28 (2), 19 (2), and 29 (1) have declared equal rights of men and women in all spheres of the state and public life (GoB, 1972). Moreover, in article 65(3), it has been stated that 45 seats should be reserved for women (GoB, 1972). Several policies also have been stated about ensuring gender equality (DMB, 2010b; MoEF, 2005; MoEF, 2013). The National Women Development Policy, 2011 states that men and women will have equal opportunities, and equal claim in fundamental rights and discrimination to women and girls shall be eliminated (MoWCA, 2011a). Women will be

recognized as equal contributors to economic, social, and political development (PC, 2015). The National Water Policy, 1999 has narrated about developing a country where the knowledge and capability will facilitate in designing such water resource management plans which will hold gender equality along with ensuring social justice, economic efficiency, and environment responsive to assist in achieving the water management objectives by comprehensive public involvement (MoWR, 1999).

It is stated that safe water, sanitation, and health facilities shall be ensured for all without any gender-based discrimination (GED, 2005). Moreover, women's physical and mental health has to be ensured while women and children should have privileges in receiving healthcare and nutrition facilities (MoHFW, 2011). In ethnic groups and all other disadvantaged groups, including persons with disabilities, gender equality and their rights will have to be ensured (GED, 2012). Primary health care, sanitation facilities, and improvement of pure drinking water should be ensured for all along with eliminating contagious diseases (GED, 2012). In attenuating gender inequality, both genders' sensitive and participatory approaches shall be taken (MoWR, 2005). The cross-cutting issues like gender equality should form integral parts of projects in the water supply, health, and agricultural sectors (GoB, 2004).

### **3.1.3 Participation and Representation**

Generally, active participation and representation in WASH committees lead to women's empowerment (Ahrari et al., 2017). Moreover, women's participation in elected committees also influences women-friendly policies in a state convention to women's lives (Caiazza, 2004). Due to its importance, several policies have addressed this issue. According to LGD, Participation and representation of women in management committee boards have to be ensured (LGD, 1998). Besides, women's representation should be increased in community-based organizations, Water and Sanitation (WATSAN) Committees, and other committees involved in the sector (LGD, 2014). To sustain gender balance, the Gram Sarkars (a supportive body of Union Parishad but not an administrative unit) must ensure the number of women leaders at a village would be 1:3 (LGD, 2005b). To increase women's participation in economic, political, and social life, the prevailing obstacle to women's progression must be eradicated (PC, 2011). In addressing gender-based discrimination, a two-prolonged approach can be taken. The first approach aims to integrate gender into sectoral interventions, and the second approach aims to remove all policy and social inclination against women (PC, 2011). It has been mandated to ensure women's participation in project activities (DoE, 2016). Active participation of women in environmental protection activities have been established (PC, 1998). While consulting with a broad class of participants, special attention should be given to women, and adequate representation must be ensured (GED, 2005). In the decision-making process, women's role and participation must be ensured (GoB, 2009; PC, 2015). Furthermore, during disaster events, several policies addressed ensuring women's participation in preparedness and disaster management activities (DMB, 2010a; DMB, 2010b). In all these, the government will play the lead role in ensuring women's greater participation (MoWR, 1999).

### **3.1.4 Empowerment**

In equitably promoting WASH services, empowerment bears a significant role (Dery et al., 2019). Several policies emphasize women's empowerment, poor, disadvantaged, and marginalized people as they are the community being at risk during disaster events or belonging from ecologically vulnerable regions (DMB, 2010a; DMB, 2010b; GED, 2005). It should be ensured that the project interventions contribute to women's empowerment, giving importance to equal participation of women and men along with co-ordinate with the Ministry of Women & Children (LGD, 2014). In this regard, special project implementation has been addressed for underprivileged women (MoWR, 2005). Empowerment of women in the legal, administrative, political, social, and economic sectors must be ensured (MoWCA, 2011a). In

section 1.4 of chapter-1 of "the Seventh Five-Year Plan FY2016-FY2020: Accelerating growth, empowering citizens, 2015", gender empowerment, social inclusion, and social protection based on gender equality have been addressed mainly in terms of enhancing their capabilities as well as ensuring their access to resources and opportunities. (PC, 2015).

### **3.1.5 Gender association in climate change, adaptation, and disaster management plan**

Globally, more than 1.5 million people are affected by natural calamities (United Nations, 2015). In any disaster event, women, children, the elderly, the sick, and the poorest part of the community are most adversely and disproportionately affected. Women's mortality rate is found to be higher than men's (United Nations, 2015; MoEF, 2005). Bangladesh is a country that is susceptible to several types of natural disasters, which are the prime causes of the devastating cause of lives and property (Shaw et al., 2013). Moreover, the scale and the intensity of these disastrous events have been exacerbated due to climate change (Islam et al., 2020). It has been found that one of the impacts of climate change is the scarcity of safe drinking water, especially in coastal and drought-prone regions, and an increase of salinity intrusion (Mojid, 2020). This may increase women and children's torment who have to carry drinking water for households (MoEF, 2009; MoEF, 2013). As a result, it is anticipated that climate change may worsen the condition of women than men.

More advanced knowledge on gender and adaptation from the last decade indicates that these two issues are interlinked (Angular et al., 2012). For this reason, from the perspective of climate change adaptation and disaster risk reduction, promoting gender sensitivity training has been emphasized (DMB, 2010b). National Plan for Disaster Management, 2010–2015, 2010 have highlighted considering gender mainstreaming and ensuring the social protection of women, children, people with disabilities, elderly, and other vulnerable groups against susceptibility (DMB, 2010b). While implementing any activity under the climate change action plan, the need for women, children, and poor and vulnerable people must be prioritized (MoEF, 2009), and preference must be given to them for risk reduction (MoDMR, 2012). To increase resilience, better access to essential services and social protection must be ensured (MoEF, 2009). Regarding the increase of resilience, research on the linkage between climate change, poverty, and health (water, sanitation, disease, and nutrition) must be done to identify probable interventions (MoEF, 2009). The need for women during any decision making on climate change must have to be considered (MoEF, 2013). Furthermore, in any initiative regarding the adaptation and mitigation program of climate change, equal emphasis on men's and women's needs should be given (MoEF, 2013; PC, 2015). In all disaster management associated programs, two areas must be included: incorporating gender issues in decision-making and women and men's participation in actions. Another one is to ensure adequate consideration for the vulnerable group in any implementation (DMB, 2017). As women are the disproportionately affected group after any disaster, they require more emphasis, and for that, the risk management must be gender-responsive (DMB, 2017).

Disaster events have incited to formulate several policies, and it is crucial to include the role of women in different disaster management policies (Hasan et al., 2019). In the National Policy for Women's Advancement (NPWA) (2010), gender issues were first introduced in disaster events (MoEF, 2013). During disasters, special security arrangements for the girls should be made (MoWCA, 2011b). There should be provisions for a separate place for men and women (MoEF, 2009). Rehabilitation and support must be safeguarded for the women and children victims of disaster (MoWCA, 2011a; DMB, 2010a). Women's participation in preparedness and disaster management activities have to be ensured (DMB, 2010a). Comprehensive disaster risk reduction and emergency management approach shall emphasize gender issues, and the local disaster management committee shall assist in women representation (DMB, 2010b). In the

case of riverbank erosion, the displaced population, both male and female, should be rehabilitated on the newly accreted chars and khas lands (newly created lands which is the government's property)(GED, 2018a). Judicial procedures in this regard are stated to be gender friendly. Moreover, water security and sustainable sanitation during disasters must be ensured (GED, 2018b).

### **3.1.6 Decision-making**

Studies show that along with men, women's participation in the decision-making of WASH interventions like planning, management, and transparency has a strong association with the projects' effectiveness and sustainability (Routray et al., 2017; World Bank, 2010; Wakeman et al., 1996). In Bangladesh, several policies ensure women's active participation in the decision-making process (LGD, 1998; LGD, 2005a; PC, 2015). Along with this, attempts shall be made to increase women's numbers in policymaking and decision-making positions (DoE, 2016). A 30% post shall be appointed to women in national administrative policymaking levels to ensure full participation at decision-making stages (MoWCA, 2011a).

### **3.1.7 Planning and Management**

It has been observed that, rather than decision making, more gender-inclusive approaches are mentioned about planning and management in policies of Bangladesh. Women's roles in planning and management in management committees' boards and WASH services have to be ensured (LGD, 1998; LGD, 2014; PC, 2015). In disaster management activities, women shall play an active part in determining the gender gap and implementing accordingly (DMB, 2010a). As women play the key role in overall water management of the family, a convenient environment will be established for particularly women so that they can efficiently play their role in the management of water resource and the welfares of the women along with the low-income people will be considered in water resource management (MoWR, 1999). Any planning and development activity shall be inclusive such that it ensures participation and provide services to women (LGD, 2011). The economic distribution in every sector for men and women shall be made separately after considering resources (MoWCA, 2011a).

### **3.1.8 Site Selection, Operation and Maintenance**

Without proper site selection, operation, and maintenance, WASH infrastructure can become inoperative quickly. Nevertheless, these issues were found addressed rarely in existing policies. However, the National Policy for Arsenic Mitigation and Implementation Plan for Arsenic Mitigation in Bangladesh, 2004 provides a comprehensive guideline specifying women's role in site selection, operation, and maintenance (GoB, 2004). It mandates that site selection has to be done under the women member's overall supervision for the respective Union Parishad. Moreover, it also emphasizes that women must have easy access to water sources. Water supply agencies should have prior communication with the community, especially the women, to incorporate the information on the map. In case of operation and maintenance, it urged women members of the respective Ward of the Union Parishad are in charge to ensure proper maintenance of public water resources (GoB, 2004). Besides, To ensure women's collaboration in WASH services, the National Strategy for Water Supply and Sanitation (2014) emphasized women's involvement in the project cycle phases, which are planning, executing, operation, and maintenance (LGD, 2014).

### **3.1.9 Hygiene Promotion**

In developing countries, hygiene promotion can significantly improve WASH programs' services at little cost (Sijbesma et al., 2009). In promoting hygiene at the household level, women play the most significant role (LGD, 2012a). Therefore, their hygiene promotion role should be considered an actively participated empowered group rather than only as a representative role. In this regard, a high priority for active women to women communications or interactions has been given. Other policies also included women's role in adopting a gender-

specific approach during the promotional campaign (LGD, 2014) along with ensuring education related to health and hygiene (GED, 2012).

### 3.1.10 Addressing transgender and hijra community

Though transgender and hijra communities are one of the most vulnerable groups, still protecting their rights and addressing this group has been found seldom in studied policies. While addressing gender issues, most of the policies addressed only men and women who leave them behind in all development activities, which may obstruct achieving SDG goals. Though recently, in 2013, the Government of Bangladesh has declared them as a 'third gender' of the country, their incorporation into various policies still needs attention. Only the 7th five-year plan has mentioned their rights and discriminations in our studied documents, ensuring that this sexual minority group may live with dignity, respect, justice, and social tolerance (PC, 2015).

### 3.2 Frequency Scoring of Issues

From the content analysis and text mining, it was found that all the selected issues were not addressed in every document and the extent of gender specification also varied in different documents. Based on how many documents have addressed a particular issue, the frequency score has been assigned on each issue (Table-1).

Table 1: Gender-inclusive issues, addressing documents and corresponding frequency scores of these issues

Serial No.	Issues	Addressing documents	Frequency scores
1	Women-specific needs	(LGD, 2012a); (GED, 2005); (DMB, 2010b); (MoWR, 1999); (DMB, 2010a); (GED, 2012); (MoPME and UNICEF Bangladesh, 2011); (LGD, 1998); (PC, 2015); (DMB, 2010b); (LGD, 2011); (MoWCA, 2011a); (DoE, 2016); (LGD, 2011); (MoWR, 2005); (MoWCA, 2011b); (GoB, 1972); (LGD, 2012b); (LGD, 2014); (LGD, 2005a).	19
2	Equality	(GoB, 1972); (MoHFW, 2011); (GED, 2005); (DMB,2010b); (MoWR, 2005); (GED, 2012); (MoWR, 1999); (PC, 2015); (GoB, 2004); (MoWCA, 2011a); (MoEF, 2005); (MoEF, 2013)	12
3	Participation and representation	(LGD, 1998); (LGD, 2014); (LGD, 2005b); (GoB, 2009); (PC, 2011); (DoE, 2016); (PC, 1998); (DMB, 2010a); (GED, 2005); (DMB,2010b); (MoWR, 1999); (PC, 2015),	12
4	Climate change, adaptation and disaster management	(MoWCA, 2011b); (MoWCA, 2011a); (DMB, 2010a); (GED, 2018a); (GED, 2018b); (DMB, 2010b); (MoEF, 2009); (MoDMR, 2012); (MoEF, 2013); (DMB, 2017) ;( PC, 2015)	11
5	Empowerment	(LGD, 2014); (MoWCA, 2011a); (PC, 2015); (DMB, 2010a); (MoWR, 2005); (DMB, 2010b); (GED, 2005)	7
6	Decision-making	(LGD, 1998); (LGD, 2005a); (DoE, 2016); (MoWCA, 2011a); (PC, 2015)	5
7	Planning and management	(LGD, 1998); (LGD, 2014); (DMB, 2010a); (MoWR, 1999); (LGD, 2011); (MoWCA, 2011a); (PC, 2015)	7
8	Site selection, Operation and Maintenance	(GOB, 2004); (LGD, 2014).	2
9	Hygiene Promotion	(LGD, 2012a); (LGD, 2014); (GED, 2012).	3
10	Addressing transgender and hijra community	(PC, 2015)	1
<b>Total</b>			<b>79</b>

From table-1, it can be seen that different issues have been addressed in different documents where some issues were addressed more frequently than others. For this reason, much variation was observed in the frequency score. To illustrate this, based on the frequency score from table-1, a pie chart diagram is shown in figure- 4.

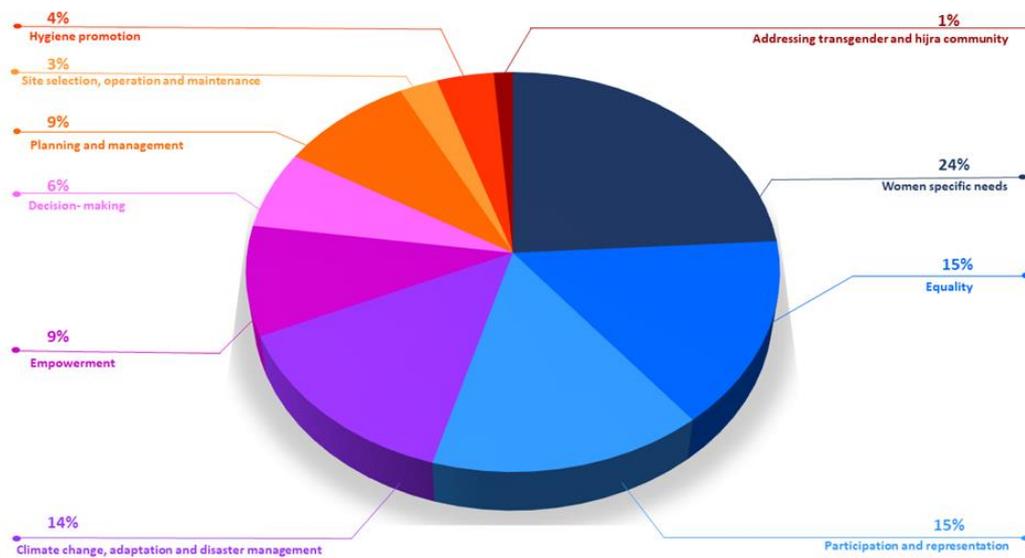


Figure 4: Pie chart diagram showing the relative importance of the issues in documents. The figure shows that the highest number of policies and frameworks have addressed the 'women-specific needs'. This issue got the highest scores of 19 (table-1), which denotes that it has been emphasized in 19 separate documents, which is quite larger than other issues, occupying the largest area in the pie chart diagram, which is 24% (figure-4). Following this, 'equality', 'participation and representation', and 'climate change, adaptation and disaster management', occupies 15%, 15%, and 14% respectively. These four issues have been addressed in most of the policies and frameworks, as shown in table-1, which cover 68% of the pie chart diagram, while the remaining six issues occupy only 32%. Afterward, both 'empowerment' and 'planning and management' occupies 9% area in the pie diagram having a frequency score of 7. 'Decision making' (6%), 'site selection, operation and maintenance' (3%), and 'hygiene promotion' (4%) have very-low-frequency score which is 5, 2 and 3 respectively. This indicates that very little significance was given to these issues in policies. On the other hand, addressing the transgender and hijra community was mentioned only in one document and occupied the pie chart diagram (1%). This means that this sexual minority group is still absent from gender mainstreaming.

#### 4. Discussion

The findings disclose that some of the issues received very little focus than the others. Whereas, all the issues are inter-dependent on each other, and each issue has a particular outcome. For example, in the case of hygiene promotion, several studies in Bangladesh have confirmed that it is very useful in improving the overall WASH scenario. Reduction of food contamination, an increase of adsorption of nutrients, reduced diarrhea and respiratory illness among children under five, and awareness about menstruation hygiene have increased significantly due to hygiene promotion (Nizame et al., 2013; Dey et al., 2019). Furthermore, the practice of handwashing with soap among the women who are the house maker of a house has a substantial impact on their child's health (Luby et al., 2011). Similarly, there is a window of opportunity to improve the WASH scenario through effective site selection, operation, and maintenance. Proper placement of handwashing units can be beneficial in changing people's behavior (Hulland et al., 2013; Luby et al., 2009). From this scenario, it is evident that these

issues play an important role in the field of WASH. Unfortunately, hygiene promotion, site selection, operation and maintenance were seldom addressed in a gender-specific way in studied policies and legal frameworks of Bangladesh. In addressing the transgender and hijra community, only one document has mentioned them addressing their overall rights without defining their roles in any WASH activity. But, transgender men, transgender women, and third gender (hijra) people are also vulnerable in the areas of WASH (Boyce et al., 2018). Therefore, identification of their limitations and necessities, then incorporating these accordingly into policies is mandatory. It was also noticed that, rather than decision-making, women's role was more manifested in planning and management, while decision-making in a project cycle is the earlier step. This also indicates a discrepancy in the existing policies and frameworks. A study conducted by Alam et al., 2019 demonstrated that, in decision-making, planning, designing and operation, and maintenance of WASH infrastructures, women's contribution is highly significant as their ideas and enthusiasm to execute any action plan are encouraging. It is also established that the collaboration of men and women in all the phases of WASH intervention can ensure the WASH program's sustainability (Alam et al., 2019). Therefore, every member's participation, regardless of sexual identity, is mandatory to achieve the SDG vision of leaving no one behind. From all these, it can comprehend that all the inter-dependent issues need to be emphasized congruently in policies in a gender-inclusive way for a sustainable WASH scenario. Therefore, the existing policies need to be revisited and upcoming policies should be formed in a gender-responsive way as well as its implementation needs to be ensured in practice.

## 5. Conclusion

Bangladesh has accomplished significant improvement in the WASH sector over the past few decades. One of the shareholders of this success is befitting policy-making, an appropriate legal framework, and the respective agencies' determination. However, still much more remains to be done to achieve sustainability. The study was conducted to evaluate the gender inclusiveness of the existing WASH policies and legal frameworks in Bangladesh based on selected issues. It was found that gender inclusiveness has been incorporated in most of the policies. Still, every issue has not been given due priority in terms of addressing as well as specification. Issues like 'women-specific needs,' 'equality,' 'participation and representation,' and 'climate change, adaptation and disaster management' received high significance. In contrast, other critical issues like 'site selection, operation and maintenance,' and 'hygiene promotion,' which are also crucial in the WASH field, were seldom addressed in a gender-inclusive way. Furthermore, despite being a vulnerable and neglected group, transgender and hijra communities are often deprived of their fundamental rights along with receiving special attention in policies. Unfortunately, within the studied documents, only one document has addressed the transgender and hijra people. On the other hand, the definite role of men and women, detailed process on how to implement their roles effectively, and how to monitor gender inclusiveness were rarely emphasized. Whereas, the inclusion of all gender in every part, especially in the WASH area, can benefit the whole society. Furthermore, according to SDG, no one should be left behind to achieve sustainable goals. In this regard, policy and legal framework should be gender-responsive, and for that, more involvement of policy-makers, investigators, researchers, and executants is required. It will assist in safeguarding the gender-inclusive sustainable WASH sector, which in turn will help to achieve SDG targets.

## 6. Limitation and Recommendation

Our study focused only on the issues that were addressed in the current policies and frameworks. In this regard, only the frequency of the issues was studied. But their extent of addressing still needs to be explored. Besides, these policies' gender responsiveness needs to

be compared with the SDG ladders to find out the gaps in achieving SDG targets, which could not be done here. In Bangladesh, while addressing the gender-specific issues in WASH, men and women, were commonly focused only on overlooking one of the vulnerable gender groups, i.e., third gender (transgender and hijra community). Therefore, more research is needed to explore their needs and limitations to incorporate these underprivileged groups into policies that will ensure gender mainstreaming. Furthermore, despite innumerable numbers of gender-inclusive strategies, discord lies between the practice on Bangladesh's ground level and policies. More studies are needed to identify the causes behind this to ensure applying the formed policies and legal framework at the local level. In addition to that, an assessment tool and participatory monitoring program should be developed to assess the influence of the policies, plans, strategies, and legal frameworks among the people.

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### Cite this article:

**Md. Aminul Islam Khan, Anika Tahsin, & Bilqis Amin Hoque (2021).** A review on gender-inclusive WASH policies in Bangladesh. *International Journal of Science and Business*, 5(12), 36-51. doi: <https://doi.org/10.5281/zenodo.5793142>

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