



Contextualizing Youth-led **WASH** Initiatives in Peri-urban Bangladesh

Introduction

Bangladesh is a country with over 160 million people facing water and sanitation challenges, particularly in peri-urban areas. The proportion of the population using safely managed drinking water in Bangladesh in 2020 was 59% [1]. Only 39% used safely managed sanitation [1]. Drinking water supply coverage reached 90% in urban areas in 2020 (67% for rural areas), but piped water was provided to only 27.5% of urban households in 2018. Almost three-quarters (71.4%) of the water supply is sourced from tube wells, depleting groundwater, especially in larger industrial areas in and around Dhaka. Of all improved water sources, 41% are contaminated with *E. coli* bacteria [2]. Over 5 million people are impoverished annually by healthcare costs [4]. The situation is particularly dire in slum areas, where access to safe drinking water is limited, and available water quality is often poor. 75.4 million people don't have a decent toilet. 45% of the population in Bangladesh still does not have access to improved or at least basic sanitation [4]. Poor WASH conditions still account for 842,000 diarrheal deaths every year and constrain effective prevention and management of other diseases, including malnutrition, neglected tropical diseases (NTDs), and cholera [5]. To address these challenges, scalable and sustainable youth-led social enterprises are essential, given that Bangladesh's population is over 60% youth (age 15-40) population. Youth-led social enterprises offer the innovation of modern-day requirements and sustainable solutions to WASH challenges, thus creating employment opportunities and economic development opportunities in peri-urban areas. This article aims to explore the challenges of WASH in Bangladesh's peri-urban areas and the potential for scalable and sustainable youth-led social enterprises to address these challenges.



Challenges in Bangladesh's WASH Sector

Going Up the Service Ladder

[The Existing Gaps Within the Status Quo]

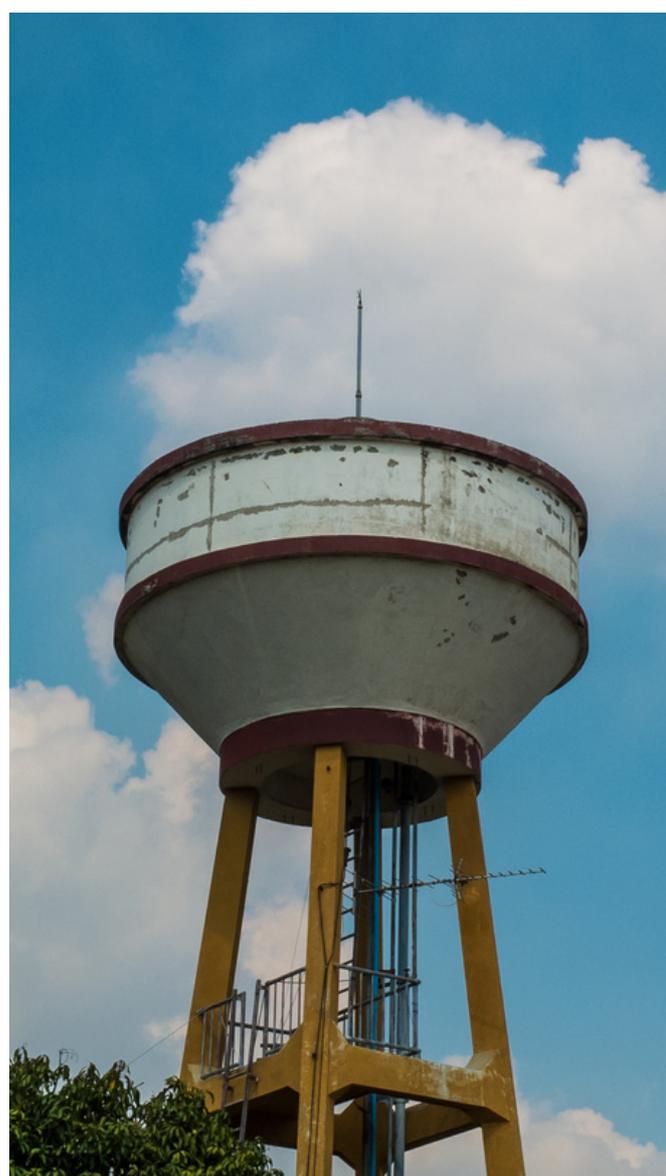
In Bangladesh, open defecation has ceased to exist because of the efforts of over 119.5 billion USD worth of WASH projects since the 2000s by Public and Private sector initiatives [6]. Although there is a visible decrease in the NO SERVICE state in the service ladder defined by WHO, the transition from a LIMITED-SERVICE state to a BASIC SERVICE state is the main challenge. Currently, 54% of the total population is in the LIMITED-SERVICE bracket, while 31% have access to BASIC SERVICES. According to the Joint Monitoring Programme (JMP) report, access to safely managed sanitation services in Bangladesh increased from 1% in 2000 to 26% in 2020, but this still falls far short of the SDG target of universal access by 2030 [7]. To go up the service ladder and bridge the existing gaps, it is crucial to prioritize investments in WASH infrastructure, strengthen governance and regulation, and ensure the effective implementation of policies and programs.

Drinking Water Supply Coverage and Piped Water Distribution

According to data provided by the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), as of 2019, 98% of the population in Bangladesh had access to at least basic drinking water services, and just 37% had access to safely managed drinking water services [7]. This indicates a need to improve drinking water supply coverage in the country. Additionally, piped water distribution remains a challenge, particularly in rural areas. The SDG 6 Data Portal (2) reports that in 2017, only 18.7% of rural households in Bangladesh had access to a piped water supply [8].

Groundwater Depletion and Contamination

Groundwater depletion and contamination are concerning issues in Bangladesh's WASH sector. Over 40% of Bangladesh's population depends on unsafe water sources, which can lead to waterborne diseases. Additionally, excessive extraction of groundwater has led to a decline in groundwater levels, which can heighten contamination and reduce the availability of safe drinking water. [7]





Impacts on Health and Poverty

According to JMP WASH Data, in 2021, over 100,000 healthcare facilities in Bangladesh lacked basic water services, putting patients and healthcare workers at risk of infection. This is especially concerning given that Bangladesh has one of the world's highest maternal and newborn death rates. In healthcare facilities, a shortage of safe water and sanitation facilities raises the risk of infections and illnesses, which can lead to maternal and newborn mortality. Poor WASH conditions also contribute to poverty, as families may spend over 55% portion of their income on medical treatment for waterborne illnesses such as diarrhea, cholera, and typhoid. These diseases can cause long-term health problems and result in missed workdays, further exacerbating poverty. [9]

Poor Access to Safe Drinking Water in Slum Areas

Slum areas in Bangladesh face unique challenges when it comes to access to safe drinking water. [10] reports that as of 2019, only 58% of households in slum areas had access to at least basic drinking water services. This highlights the need to prioritize access to safe drinking water in slum areas.

A comprehensive approach is needed to address these challenges. While government and international organizations have an important role, involving youth-led social enterprises in WASH initiatives can provide scalable and sustainable solutions tailored to the specific needs of peri-urban areas. Youth-led social enterprises can leverage existing technology and upcoming innovations to create sustainable and scalable solutions that address water and sanitation challenges in peri-urban areas. These social enterprises can also create economic opportunities for youth in these areas, providing them with the skills and resources to improve their communities actively.

Governments and International Efforts

In Bangladesh, there are a variety of actors involved in the effort to address WASH issues, including government organizations (GOs), non-governmental organizations (NGOs), international NGOs (INGOs), and financial institutions such as the Asian Development Bank and UNICEF. These organizations are essential in implementing programs and projects to improve WASH services and support the government's initiatives in this field. For example, the World Bank has provided financing agreements to improve sanitation and water access in rural areas of Bangladesh [2]. In addition, according to data from the Organization for Economic Co-operation and Development (OECD), the international community provided \$1.3 billion in development assistance for water and sanitation in Bangladesh in 2019 [11].

The World Bank has signed a financing agreement worth \$450 million to support the government of Bangladesh's efforts to improve access to safe water and sanitation in rural areas. This project aims to provide 1.4 million people with access to safe drinking water and sanitation services. It is expected to contribute to reducing waterborne diseases and poverty in rural communities [12]. Peri-urban areas in Bangladesh face challenges in terms of access to safe drinking water and sanitation services. Rapid urbanization and population growth have resulted in increased demand for WASH services, leading to inadequate coverage and service quality. These areas are also prone to waterlogging and flooding, which further exacerbates the WASH situation [8].



Youth-led Social Enterprises in Peri-Urban Areas

Empowering youth to lead social enterprises in peri-urban areas is important in addressing WASH issues. It brings a fresh perspective and helps in bridging the technology gap between existing technologies and upcoming innovations. Social enterprises can provide sustainable and scalable solutions, and involving young people in such initiatives can yield fruitful results. Bangladesh has seen several successful examples of youth-led social enterprises in the WASH sector.

Youth-led social enterprises have emerged as a promising approach to addressing WASH issues in peri-urban areas. The following points are relevant to this topic:

Some innovative initiatives in WASH involving youth are the use of plastic latrines, which are affordable and easy to transport and have been developed and promoted by a youth-led social enterprise called Waste Concern in Bangladesh. Another example is the use of jerry buckets, which were designed by a young engineer in Zambia to improve handwashing and water collection in communities with limited access to water. Additionally, young innovators have developed solar pumping systems and urine diversion dehydration toilets (UDDTs) to improve access to water and sanitation in areas with unreliable electricity and water supply [13]. According to an article by YY Ventures, some of the existing technologies used in WASH services include hand pumps, tube wells, and gravity-fed water systems. There are various innovations being developed to address remaining challenges in the WASH sector, such as low-cost water filters, mobile water treatment units, and water quality testing kits. Established organizations and startups, including youth-led social enterprises, are developing these innovations. Some of the organizations working on these innovations mentioned in the article include BRAC, WaterAid Bangladesh, and mPower Social Enterprises. [14]. Social enterprises can leverage technology and innovation to improve WASH services. They can design and implement low-cost, scalable solutions that are tailored to the specific needs of the communities they serve. Combined with the potential to promote behavioral change. By working closely with communities, they can raise awareness about the importance of good hygiene practices and promote the adoption of healthier behaviors. [15].

Swachyuta Collective has developed a mobile app that allows residents to report and track water, sanitation, and hygiene issues in their communities. The app also provides information and resources for improving WASH practices. Shurokka, on the other hand, has implemented a community-based approach to sanitation, which involves training local youth to build and maintain toilets and promoting hygiene and sanitation practices through peer education [14].



The Way Forward

The WASH challenges in Bangladesh cannot be solved overnight, but it is crucial to continue making efforts to address them. This requires a sustained and committed approach from all stakeholders involved. Youth-led social enterprises have the potential to make a significant impact in addressing WASH challenges in Bangladesh. These enterprises bring new ideas and energy to the sector and can develop innovative solutions to long-standing problems. Collaboration between government, international organizations, and youth-led social enterprises is essential to achieve sustainable and scalable solutions. We can leverage each other's strengths and resources to tackle WASH challenges effectively by working together. We need greater support and investment in youth-led social enterprises to ensure sustainable and scalable solutions to WASH challenges in Bangladesh. This can include financial support, mentorship, and partnerships with established organizations to help these enterprises grow and scale their impact.

Looking forward, the persistent WASH challenges in Bangladesh require sustained attention and action. In this context, youth-led social enterprises represent a promising avenue for generating significant impact. However, to achieve sustainable and scalable solutions, it is crucial that government and international organizations collaborate closely with these enterprises. Accordingly, there is a pressing need for greater support and investment in youth-led social enterprises. Let us heed this call to action and work together towards a more equitable and accessible WASH future for all.



References

1. Asian Development Bank, 2020. Retrieved from <https://www.adb.org/what-we-do/topics/water>
2. State of the Worlds Drinking Water, WHO, 2023. Retrieved from <https://www.who.int/publications/m/item/state-of-the-world-s-drinking-water-executive-summary>
3. Universal Health Coverage Advocacy Brief Final, UNICEF, 2023. Retrieved from <https://www.unicef.org/bangladesh/media/5241/file/Universal%20Health%20Coverage%20Advocacy%20Brief%20Final.pdf.pdf>
4. WHO/UNICEF, Joint Monitoring Program (JMP) Report 2021. Retrieved from <https://www.wateraid.org/bd/bangladesh-facts-and-statistics>
5. Water, Sanitation and Hygiene, WHO, 2023. Retrieved from https://www.who.int/health-topics/water-sanitation-and-hygiene-wash#tab=tab_2
6. Annual report 2021/2022, Water Aid. Retrieved from <https://www.wateraid.org/bd/annual-report>
7. Joint Monitoring Programme 2021, WHO/UNICEF. Retrieved from <https://washdata.org/data/household#!/table?geo0=country&geo1=BGD>
8. UN Water, Bangladesh 2023. Retrieved from <https://www.sdg6data.org/en/country-or-area/Bangladesh>
9. Progress on WASH in health care facilities 2000–2021: special focus on WASH and infection prevention and control. Retrieved from <https://washdata.org/reports/progress-wash-health-care-facilities-2000-2021-special-focus-wash-and-infection-0>
10. Progress on drinking water, sanitation and hygiene in schools: 2000-2021 data update, JMP. Retrieved from <https://washdata.org/reports/jmp-2022-wins>
11. Development Finance Data 2023, OECD. Retrieved from source: <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/>
12. SWA at UN Water Conference, 2023. Retrieved from source: <https://www.sanitationandwaterforall.org/news/world-bank-approves-450-million-financing-support-bangladeshs-rural-water-sanitation>
13. WASH Innovation 2023, Oxfam. Retrieved from source: <https://www.oxfamwash.org/en/innovation>
14. Bold Innovations, YY Venture. Retrieved from source: <https://yy.ventures/news/bold-innovations/>
15. Lessons for government, the private sector, NGOs and donors, 2018, IRC. Retrieved from source: <https://www.ircwash.org/blog/why-innovations-wash-sector-rarely-scale>



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