WATER & SANITATION IN BANGLADESH
A CLEAN FUTURE

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Water and Sanitation in Bangladesh
Bangladesh is a lower riparian country enriched by snowmelt water and fed by rainwater flowing through a huge network of rivers that retain in the water bodies and recharge underground. These rivers and water bodies are stretched over 15 percent of the total area of the country.

Although in the global level the Millennium Development Goal (MDG) target on the water supply was met in 2010 (WHO and UNICEF 2015), more than 600 million people still lack access to safe drinking water. The MDG target on sanitation was not met, leaving some 2.5 billion in developing countries have no access to improved sanitation facilities. Therefore, proper management of freshwater becomes necessary and accordingly it has been prioritised in the 2030 sustainable development agenda, with water-specific goals explicitly linked to other development targets.

Bangladesh is a highly populated country and the population growth combined with the economic growth will increasingly stress water resources leading to environmental and possibly the most important development issues facing Bangladesh. Sustainable use of water resources has become a part of strategy for reducing poverty, improving welfare, reducing inequality, rural development, pace of economic growth, productivity and health. Sanitation coverage has an important role in Bangladesh’s track record of success in health and development. The decades-long work that had gone into making Bangladesh a pioneer in the field of water and sanitation is often missing from the public discourse.
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1. Achievements

1.1 ACCESS TO WATER

Bangladesh made a tremendous effort to ensure safe drinking water supplies to a vast majority of the population with bacteriologically safe tubewell water. This was considered as the largest population coverage by safe water supply in the region. Piped water supply is more common in the urban areas while the rural areas obtain water supply primarily through handpump tubewells and other water points like pond sand filters, ring wells, and rainwater harvesting units. The other achievement with regards to water is that Bangladesh has successfully increased access of the bottom 40 percent of the population to basic water services, similar to the increase in the provision of sanitation facilities (General Economics Division 2015).

87% has access to improved water supply
98% has access to water points

70% Sanitation Coverage Through Pit Latrines
39% Sanitation Coverage Increased Since 1990

Open Defecation
42% 2003
1% 2015

1.2 SANITATION COVERAGE

The reduction in open defecation has made Bangladesh the second South Asian country after Sri Lanka to effectively eradicate open air defecation from their system. The journey towards zero open defecation is integral to Bangladesh's development success story, and one that needs to be better understood to prepare for the upcoming challenges. From over 34 percent in 1990, less than 1 percent of the population now practice open defecation. The government led National Sanitation Campaign resulted in rapid progress of over 9 percent per year in sanitation coverage. More importantly, Bangladesh has successfully reduced the percentage of the severely disadvantaged population without access to basic sanitation facilities.
2. Key Success Factors

WASH in Schools

The provision of water, sanitation and hygiene (WASH) facilities in schools using a range of approaches including “School Led Total Sanitation”, engages children as change agents in their homes and communities to increase the demand for access to safe water and improved sanitation.

WASH in Urban

Government agencies worked with institutions, NGOs and community groups to improve the access to water and sanitation in low income communities in cities across Bangladesh.

Hygiene Promotion

Government supported the dissemination of key messages on hygienic behaviour in households, communities and schools in the grassroots through the training of government health workers and mass media campaigns using a range of communication channels.

Women Involvement in WASH

The projects enabled women’s participation in the monitoring, implementation and raising awareness in their respective communities.

Emphasising Low Cost

A common strategy has been to encourage people to start with the simplest latrines and then to progress over time towards higher-specification and higher-cost options, known as the “sanitation ladder.”

A Vibrant Private Sector

Bangladesh WASH Alliance (BWA) partners, NGOs and World Bank are working to promote entrepreneurs and market development for sustainable WASH services, while Water and Sanitation Sectors (WSS) facilities are dominated by the small scale hardware market (about 80 percent of rural water supply and sanitation).
2.1 ACCESS TO FUNDS

The government’s commitment to the Water and Sanitation Sector (WSS) development and the increasing trend of budgetary allocation is expected to continue during the SDP implementation. Furthermore, as demonstrated by the donors’ active participation in the preparation of the Sector Development Plan (SDP), the Development Partners and the private sectors will also continue their support. The WSS sector is also eligible to access three recently established intra-sectoral funds, two of which are provided from the government’s own resources.

**Annual Development Budget for Ministry of Water Resources**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Annual Development Budget in Million</th>
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<tbody>
<tr>
<td>2009</td>
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<td>2017</td>
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- **87%** entrepreneurs received loans
- **$1000** average loan size
- **ASA brac** major loan providers
- **$500** entrepreneurs monthly sale capacity
The urban slum community-based approach focuses on improving the right to water supply for slum dwellers without legal entitlement to land. Sanitation challenges in the capital were overcome with the help of Dushtha Shasthya Kendra (DSK), UNICEF and UKAid in building sanitary toilets in the slums of Dhaka. Drastic fall in diseases such as cholera, diarrhoea, dysentery, jaundice and skin diseases has been witnessed since this project came into effect. The beneficiaries were provided with training on maintenance before DSK pulled out. Later septic water tanks, underground drainage pipelines and bathrooms for disabled people were built keeping the main lane dry and free from waste water overflow.

Dhaka WASA after receiving funds from Asian Development Bank (ADB) joined in on this movement, building water pipe lines in slums, which previously lacked a supply of running water. According to the latest reports, 456 water points have been activated in Korai - the largest slum in Dhaka. WASA is now earning revenue from this as a result of the residents' willingness to pay and contribute towards their water and sanitation facilities. DSK plans to pilot larger scale projects, like onsite sewerage system water and waste treatment due to the success of the previous projects.

Dhaka South City Corporation in association with Water Aid Bangladesh and H&M Foundation has launched a programme to set up 500 drinking water fountains in key areas of the capital as a part of an initiative toward public health development. The drinking fountains will go along with modern toilets equipped with separate facilities for male and female, lockers, shower, 24-hour electricity, CCTV camera, professional cleaner and female caretakers.

The accomplishments in the sanitation sector in Bangladesh is largely credited to the Community-Led Total Sanitation (CLTS), which was developed in Bangladesh by WaterAid and the concept adopted by the Government of Bangladesh (GOB) in the early 2000s. The approach is led by and works for communities rather than individuals. Through CLTS, communities are facilitated to conduct their own appraisal and analysis of open defecation and take necessary actions to achieve “open defecation free” status. It also emphasizes the behavioral change required to ensure sustainable improvements. The aim is to raise awareness regarding the risks involved for the wider community, even if a small percentage of the community practices open defecation.
3. WASH in National Development

3.1 HEALTH BENEFITS

Increasing access to clean drinking water and sanitation (alongside nutrition, advanced medicine and economic development) are some of the prime reasons for the overall increased life expectancy. The overall health indicators have also shown significant improvement over the past few years. Diarrheal infections are almost always transmitted as a result of improper sanitation and hygiene practices, leading to ingestion of contaminated food or water. The resulting diarrhoea frequently leads to dehydration, which in turn can result in death especially for young children.

- **Diarrhoea cases worldwide**
  - can be prevented by adequate sanitation, hygiene and water supply
  - 90%

- **Children Mortality**
  - 65 years in 2001
  - 72 years in 2016
  - 1990: 50%
  - 2016: 8%

- **Sanitation interventions**
  - reduce diarrhoea morbidity by 1/3

- **Hygiene interventions**
  - reduce diarrhoea morbidity by 1/2

- **Average Life Expectancy**
  - 2001: 65 years
  - 2016: 72 years

- **Child Mortality**
  - 1990: 50%
  - 2016: 8%

3.2 ECONOMIC BENEFITS

Bangladesh is one of the developing countries in the world where the water and sanitation coverage benefits are estimated to be one of the greatest. The economic benefits from sanitation interventions have been estimated in a WHO study to be considerable, and include foregone medical costs, the cost of time lost at school and work, and the time saved from closer access. Estimates show worldwide economic benefits at $63 billion per year from reaching the MDG target for sanitation.

- **Annual global economic losses**
  - associated with inadequate water supply and sanitation
  - estimated at US$ 260 billion

- **Attaining universal sanitation would**
  - triple the benefits compared with current coverage
4. Challenges

4.1 IMPROVEMENT NEEDS

Around 40 percent of all latrines still classified as being “unimproved”, while approximately 20 percent of the water supply is arsenic contaminated at the source and 12 percent at point of use, while the service provision is often unreliable and intermittent. The National Arsenic Communication was developed along with mass media and inter-personal communication tools for a wide range of field-level workers.

4.2 GROWING PACE OF URBANIZATION

Piped water supply is available primarily in urban areas and the coverage reaches about 30 percent of the population and only one-third of the Municipalities (Pourashavas). The growing majority of the population still relies on shallow handpumps connected to each household for drinking water. With the intermittent and often unreliable piped water supply, most households connected to piped water are forced to treat this water for drinking or continue to drink water from handpumps.

4.3 INADEQUATE HYGIENE

Lack of hygiene practices have been documented in the Sustainable Development Plan (SDP) 2011–25 as one of the major challenges of the water and sanitation sector, according to the Local Government Division (LGD). To respond to this challenge, the Government of Bangladesh (GOB) has formulated a Hygiene Promotion Strategy in 2012 emphasising improving the hygiene practices in the draft National Strategy for Water Supply and Sanitation 2014.
5. Policies

5.1 NATIONAL LEVEL POLICIES

The Perspective Plan (2010–21) of the government prioritizes interventions for ensuring access to drinking water, sanitation, and good hygiene practices for all. The Government of Bangladesh (GOB) has its post-2015 development agenda (2016–30), with the goal of “Safe and sustainable sanitation, hygiene and drinking water used by all.” This proposal contains specific targets and indicators to meet Bangladesh’s post-2015 Sustainable Development Goals. The recently formulated Delta Plan-2100 in cooperation with the government of Netherland, integrates planning from delta-related sectors to come to a long-term, plan for the Bangladesh delta. One of the key features of this hundred-year strategy is water and food security along with the economic development of the country and overcoming the challenges of climate changes.

5.1.A POLICY OBJECTIVES

The water policies of the Government aim to provide direction to all agents working in the water and sanitation sector to achieve specified objectives. These objectives are:

- To address issues related to the harnessing and development of all forms of surface water and ground water and management of these resources in an efficient and equitable manner
- To ensure the availability of water to all elements of the society including the poor and the underprivileged, and to take into account the particular needs of women and children
- To accelerate the development of sustainable public and private water delivery systems with appropriate legal and financial measures and incentives, including delineation of water rights and water pricing
- To bring institutional changes that will help decentralise the management of water resources and enhance the role of women in water management.
5.2 LEGAL FRAMEWORK


5.3 SECTOR STRATEGIES

The Sector Development Plan (SDP) 2011–25 highlighted the need for having an integrated strategy for the water and sanitation sector. The SDP 2011–25 documents how national policies address the main areas of concern—reduction of open defecation, ensuring supply of safe water, mitigation of arsenic contamination, and forging strategic partnerships for expanding coverage of water and sanitation facilities. With this overall goal, a set of 17 strategies has been formulated and broadly grouped into three themes: increasing WASH interventions, addressing emerging challenges, and strengthening sector governance. The five-year strategy intends to provide uniform strategic guidelines to the key stakeholders of the sector, including government institutions, the private sector, and NGOs.
Right now, Bangladesh stands at a unique point in time that could prove to be the next revolution in sanitation in Bangladesh. The state has made a number of commitments on sanitation in SACOSAN VI and the 7th Five Year Plan. SDG 6 provides the opportunity and the impetus to take comprehensive action on ensuring access to safe drinking water and sanitation for all. The recent assessment on health and the SDGs is further evidence that we need to take action immediately, if we are to keep pace with the world. Bangladesh now looks forward to hard work, devotion, commitment and sincerity in the future ahead to bring access to water and improved sanitation to 100% of the population by the target date in 2030.

The Prime Minister of Bangladesh Sheikh Hasina is currently one of the only heads of government involved in the formulation of the Millennium Development Goals (MDGs) and as a result her counsel was later sought by UN Secretary General Ban Ki Moon during the formulation of the post-2015 Sustainable Development Goals (SDGs).

The Prime Minister has also been appointed a member of a UN high-level panel on water along with nine other heads of states by Secretary-General and World Bank Group President Jim Yong Kim at the 2016 UN General Assembly. She had recently stressed on the importance of global fund on water SDG to support research, innovation and technology transfer along with the availability and sustainable management of water and sanitation at the Conference of the Parties (COP 22) at Marrakesh.