

Enhancing **safe drinking water** security and **climate resilience** through **rainwater harvesting**

Summary

The project intervention addresses the communities' dire need for safe drinking water in Mongla upazila (sub-district) by establishing rainwater harvesting systems at the household and community levels. Mongla, a climate hotspot in Bangladesh, faces the challenge of salinity intrusion, resulting in severe scarcity of safe drinking water: more than 60 percent of the population lack access to safe drinking water, leading to health problems and loss of income; women in particular have to travel 2 to 5 kilometers to fetch water for their families.

BRAC's Climate Change Programme (CCP) has been assisting coastal communities in building resilience and addressing the drinking water crisis. CCP, with support from the Danish Ministry of Foreign Affairs, has been promoting the Rainwater Harvesting System (RWHS), a simple solution that will be installed by households and community-level institutions to ensure safe drinking water. The project aligns with the 'The World We Share' Danish Development Strategy and national priorities.

Highlights



Project Location:
Mongla upazila



Severe scarcity of safe drinking water due to salinity intrusion is the key challenge



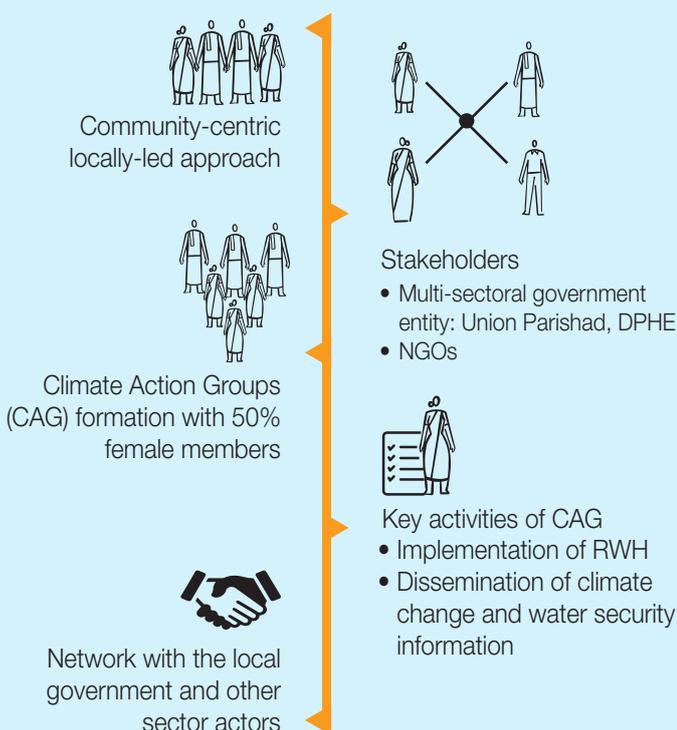
Sixty percent of the population lacks access to safe drinking water



Health problems and loss of income are the major effects



Household and community women in particular are the affected people



Approach

Climate Change Programme (CCP) of BRAC has been following a community-centric locally-led approach in coordination with the multi-sectoral engagement of government (e.g. union parishad, DPHE) and non-government stakeholders, by implementing household and community institution-based climate adaptive water interventions.

The project has formed community-based 'Climate Action Groups (CAG)' which has been instrumental in driving the project forward as ward-level platforms. Each CAG has at least 50% female members and 20-25 members from across the ward, regardless of ethnicity, gender, or religion. The CAG has aided in the planning and implementation of RWH interventions for safe drinking water, as well as the dissemination of climate change and water security information. CAG maintains network with the local government and other sector actors to address the safe drinking water crisis in Mongla upazila (sub-district).

Achievements

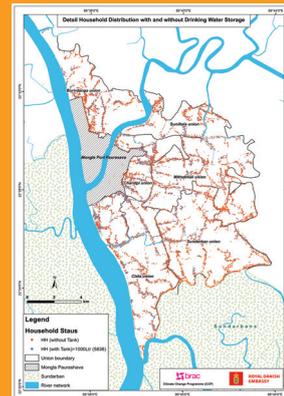
- Initiated the installation of filtration-equipped rainwater harvesting systems, **benefiting 67,300 people** in Mongla upazila, including **32,048 women**, with **32.04%** gaining access to safe drinking water
- Established **54 Climate Action Groups** to promote the importance of safe drinking water
- Successfully installed **4,200 household-based** rainwater harvesting systems, each with a 2,000-liter capacity in Mongla upazila
- **26 community-based** rainwater harvesting systems have been installed, boasting a substantial 40,000-liter capacity each
- Implemented both household and community-level rainwater harvesting interventions with a special filter, **reducing 98% of bacteria**, following a community-centric, locally-led approach
- **Stored a total of 6,278,500** liters of water through RWHS in Mongla upazila
- Achieved a total **value** of stored water amounting to **3,139,250 Tk**
- **Successfully completed** the establishment of a rainwater harvesting system with **a capacity of 120,000 liters**, in collaboration with the local government
- Implemented two **solar-power** operated Pond Sand Filter (**PSF**), each capable of treating **10,000 liters daily**, benefiting **250-300 households** through surface water treatment system at community level
- A total of **29 Water Management Committees** (WMCs) have been formulated for community engagement to ensure the **sustainability** of the interventions.

Way Forward

Building on the insights gained from the project's life cycle, it is apparent that addressing the pressing issue of fresh water scarcity in Mongla goes beyond ensuring safe drinking water alone. Recognizing the interconnectedness of water security and food security in the region, the next phase of our intervention must focus on integrating fresh water into both livestock and agriculture. By meeting the demand for water required in these crucial sectors, we can bring about a holistic transformation in the livelihoods of the affected communities. This expanded approach will not only safeguard their health through access to safe drinking water but also contribute to sustaining their agricultural practices and

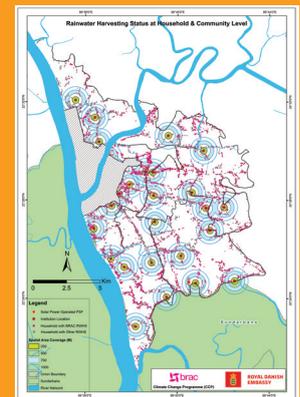
An estimated investment of \$4 to \$5 million and a two-year timeline are required to achieve complete coverage of safe drinking water through a rainwater harvesting system at every household's doorstep in Mongla upazila.

Current status of RWHS in Mongla upazila



Project area before intervention

Project area after intervention



livestock, which are essential for their economic well-being. As our intervention has received positive recognition from governmental bodies, UN Agencies, and local NGOs, the momentum is ripe for scaling up this model. In recent engagements, the government of Bangladesh, including the Department of Public Health Engineering, along with UN Agencies and various local NGOs, have not only visited but also expressed admiration for our proposed intervention. Their enthusiastic endorsement extends to urging the replication of our successful Rainwater Harvesting system in all water security-related development initiatives within the Mongla upazila.