



European Union

Water and Beyond

EU transformative approaches
for international partnerships



REPUBLIC OF SLOVENIA
MINISTRY OF FOREIGN AFFAIRS



European
Commission



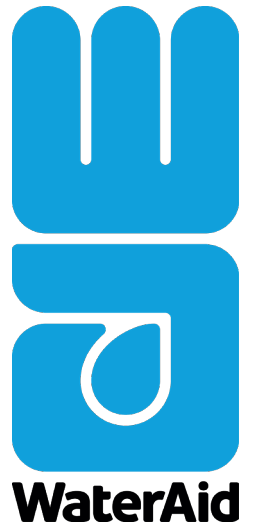
UNECE



Climate adaptive endeavors: water, sanitation and hygiene

Hasin Jahan

19 January 2021



Water and Beyond

Bangladesh ranks number 9 for most vulnerable country according to the climate change index (Germanwatch)

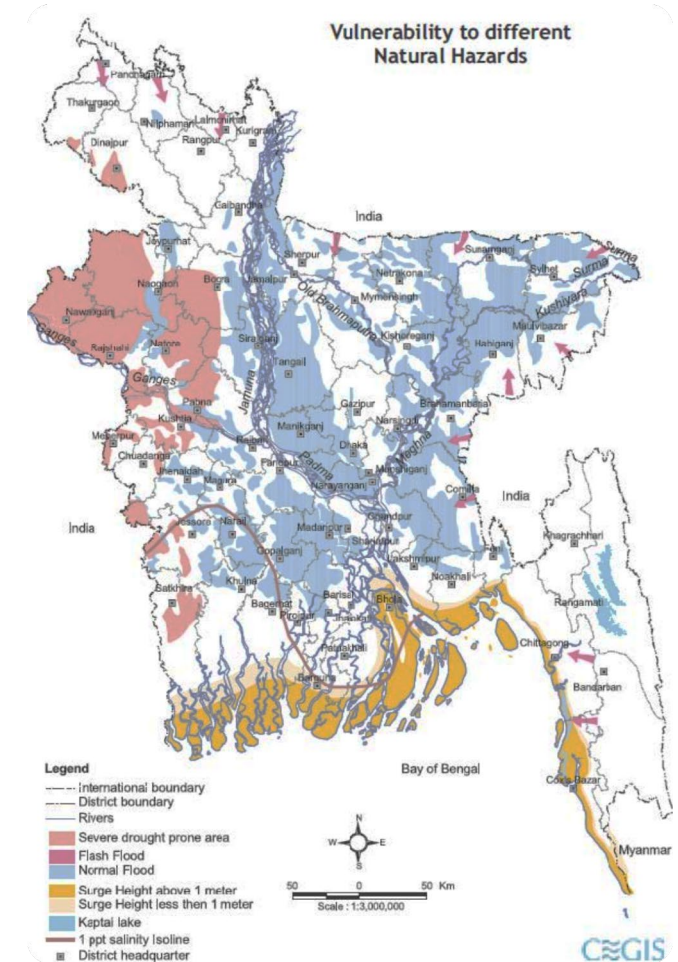
Over 35 million people across 47,201 square km of the coastal belt of the country are facing the impacts of climate change



WaterAid/ Salah Uddin



WaterAid

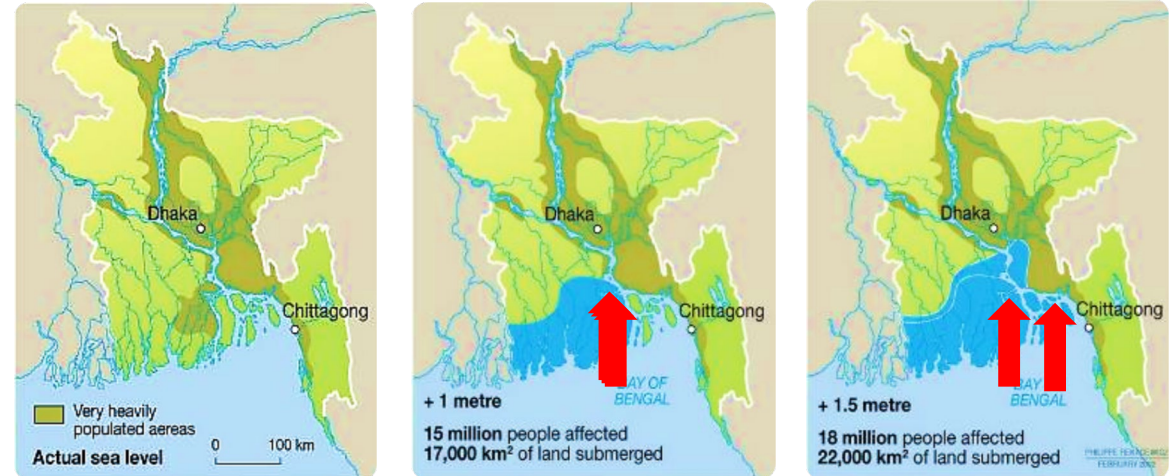


Water and Beyond

Salinity and Sea level rising map:



Likely salinity ingress in southern Bangladesh for different amounts of sea level rise (SLR)



Land submerged in case of a 1.0 or 1.5 meter sea level rise

Significant sea level rise has been measured in Bangladesh, with 4 mm per year at Hiron Point in the west, **6 mm per year at Char Changa in the centre of the country**, and **8 mm per year at Cox's Bazar in the southeast**.

Sea level rise has been one of the factors that led to an increase in soil salinity in Bangladesh, **from 1.5 million hectares under mild salinity in 1973 to 3 million in 2007** (Ministry of Foreign Affairs, UK)

Water and Beyond

Current climate trends:



- Significant increase in frequency of the **extreme events**
- Decrease of the **cool and dry seasons**
- **Higher temperatures and erratic rainfall** leading to wetlands drying up and ecosystems degrading
- **Substantial sea level rise**
- **Increase in soil salinity**



Water and Beyond

Impacts of Climate change:



- The availability of drinking water is **scarcing in the coastal belt**; women travel for long hours to collect safe water far from their homesteads



- **Girls drop out of schools** in order to help their mothers in fetching water



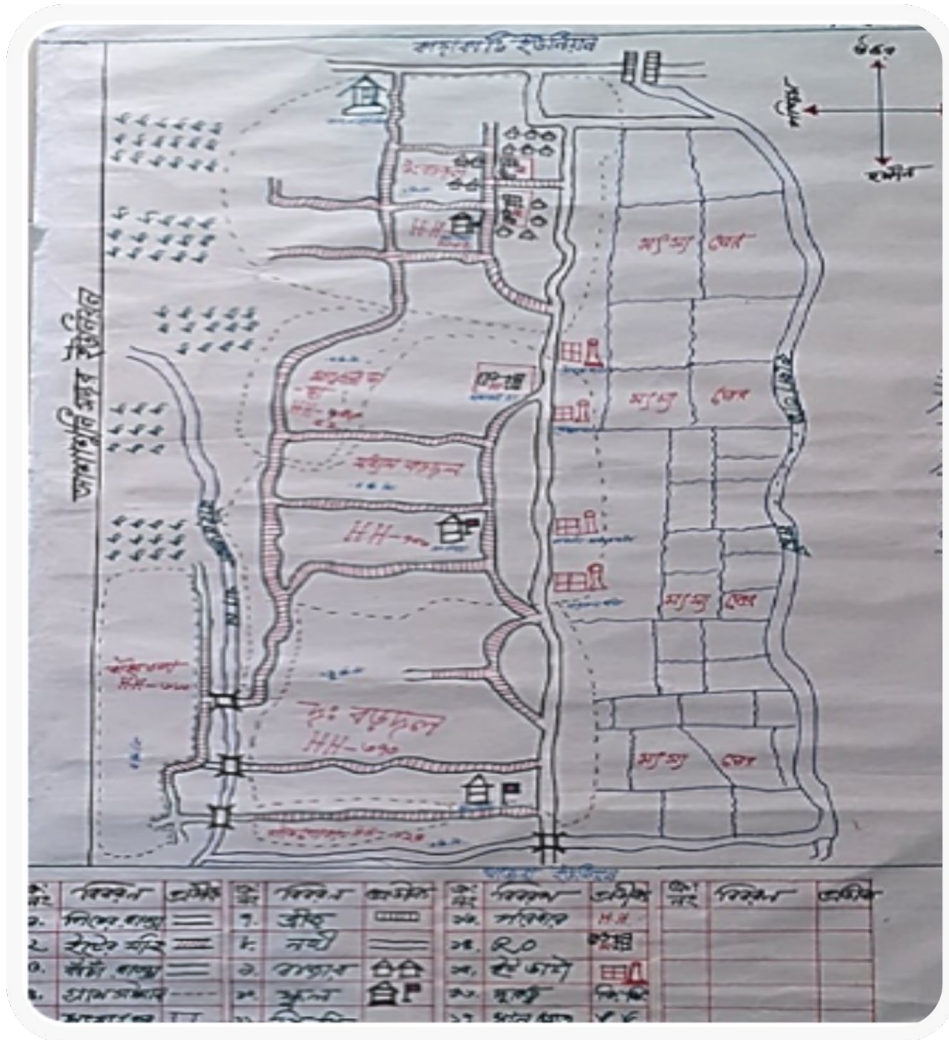
- Use of saline water for bathing and often causes skin and other diseases like eclampsia, hypertension etc



Climate adaptive approaches and technologies for WASH



Water and Beyond



PWVA map prepared by community at Dacope, Khulna

Participatory WASH Vulnerability Analysis:

Introduced participatory assessment in terms of the vulnerabilities of the communities, water, development needs including sanitation & hygiene (WASH) and potential resources availability. Based on that the community prepares their own development plan and distributes responsibilities among themselves to take the initiatives forward

The approach creates sense of ownership towards adaptive and resilient development process in the communities

Water and Beyond

Community managed rainwater harvesting plant:



Community contributed for construction in cash.

Water and Beyond

Rainwater harvesting system at institutions:



Installing RWH systems in schools to be used for sanitation & handwashing purposes where groundwater is scarce



Pond Sand Filter (PSF)

Pond Sand Filter (PSF) is a locally adaptive popular technology used to filter water from pond by slow sand filtration method for domestic water demand.



Water and Beyond

Reverse Osmosis (RO) plants:

Reverse osmosis is a sophisticated proven technology to produce drinkable water from saline water using filtration through membrane. Each plant covers more than 1000 users.

This high-cost solution has been taken to the communities in the form of 'water business' by 'women entrepreneur groups. The model shows the prospect of replicability. Women empowerment is the key to this approach.





Sanitation and climate change:

Frequent disasters
destroy low-cost toilets
at communities.

‘*My toilet will collapse if there is a strong storm and then I have to rebuild it. I do want a toilet as seen in rich people's houses. A toilet with privacy and good sanitation. However, it is impossible for me to install a toilet like that with my meager income.*’

Begum, Sept 2020 – A resident of Dacope – coastal belt of Bangladesh.

Water and Beyond

Raised and resilient toilet:

Toilets with raised plinth of above average/ highest flood level offers better sustainability against damage during disasters.



Water and Beyond

Menstrual hygiene practices:

Around **50% adolescent** and **65%** women use old cloths during menstruation in rural areas of Bangladesh. Repeated washing of the cloths with saline water makes the cloths rough and using the same cloths causes itching around the genital area

- Locally made low-cost napkins made by women entrepreneurs are promoted
- Advocacy initiatives are in progress to make availability of pads at schools



WaterAid supports towards community resiliency and national advocacy:



- Together with WASH actors, **tracking government financing** in WASH sector since 2011 and **advocating through national media** for increased allocation in climate vulnerable areas
- Focusing on **local level advocacy initiatives** for ensuring that the government subsidies reach to the right people (**Leave No One Behind**)
- Jointly with **ICCCAD**, **WaterAid** is undertaking a **climate policy landscape analysis** to understand the gaps between climate and WASH policies and investment planning and; it is expected that critically important recommendations will come up for investment and national level planning from the study



Thank you