MANAGING FLOODING RISK IN BANGLADESH

Avoiding flooding disasters with pragmatism and inclusivity

- Village communities work with NGOs to build dwellings that can cope with flooding.
- Earth observations data is used for decision-making at national, state and local levels.
- Multiple, tested communications channels alert and warn people, who act on the advice.
- People act on advice because they are involved in the planning of disaster response.

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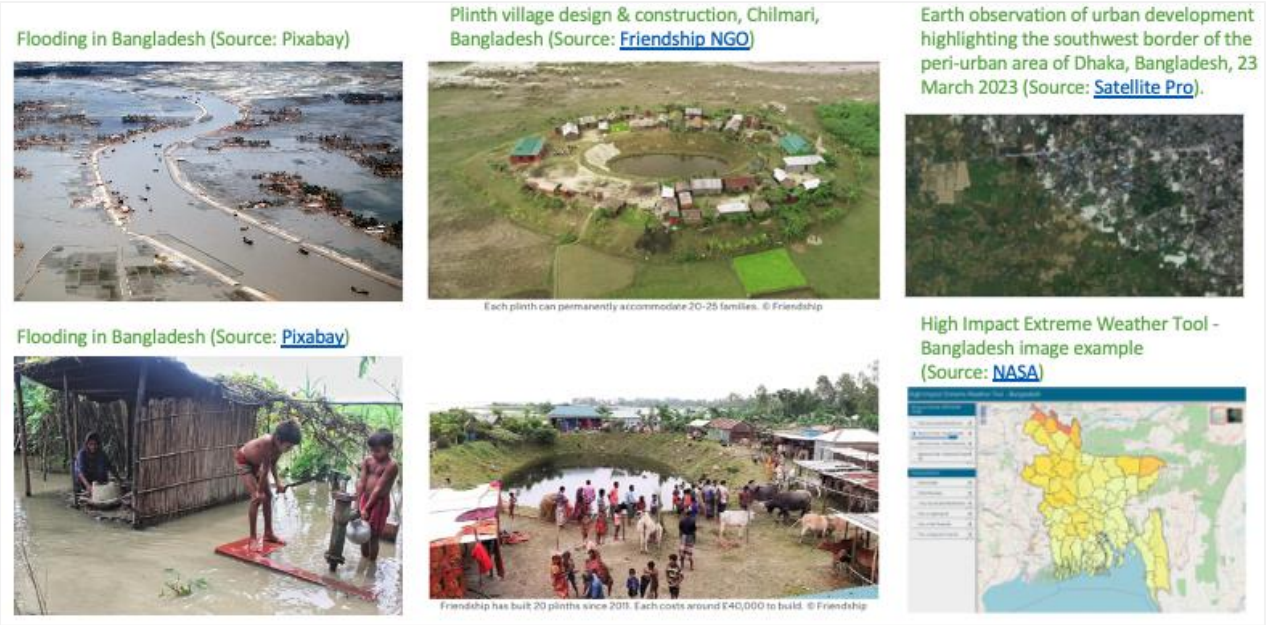
Aftermath of floods in Bangladesh, and work to avoid flooding disasters (images collage: various)



Brief general context:

- The geographic location of Bangladesh and its low-lying land mass make it vulnerable to flooding caused by cyclones, monsoonal rains, coastal surges and fluvial discharges.
- Major cyclones in 1970, 1985, and 1991 involved huge numbers of fatalities.
- Today, Bangladesh is an example of country that is avoiding some flooding disasters. Despite many ongoing challenges, some flooding disasters are avoided through hard work and lives are being protected and saved, including in very challenging situations.
- The economy of Bangladesh is intrinsically linked to its continued efforts and investment / funding to avoiding flood disasters.

The right mindset:

- The country is tackling its flood hazards and focusing on minimising the threat they pose.
- Stretching back since 1970, people in a range of capacities and roles have had a mindset to diligently work on practical and pragmatic ways to avoid flooding disasters.

The right investment / funding:

- The national government has invested in pragmatic flood resilience measures as part of its economic development strategy (linked to overall economic drivers).
- Ongoing investment in technology to monitor flood risk is helping to save lives and is demonstrating economic, financial and social benefits.
- The economic benefits are real. Lifting the quality of life of the population, investing in a sustainable economy, and demonstrating resilience amounts to billions of dollars net gain.

Good governance:

- National governance (inc. the Delta Plan 2100) and local governance, working with communities and businesses, have been refined over many years to address flooding risk and to be ready to deal with flooding when it occurs.

Good data:

- Earth observations monitor land use and trends, and specific weather threats and events.
- Data is being used to inform how to create better communications channels for people in remote areas, and how to help people protect their livelihoods.
- Local communities use data such as storm forecasts to make informed decisions.

Meaningful inclusion:

- Good community communications and engagement ensure the public understand and act quickly on warnings (issued through various mechanisms).
- Local people are engaged about the use of cyclone shelters. Addressing their concerns when they are asked to go to a shelter, for example by protecting their property / livelihood, is key.
- The role of trusted local volunteers to support communications with families, check that the elderly are OK and carry out other crucial actions helps to avoid disasters.

Meaningful targets:

- The number of fatalities from cyclones and other types of flooding has reduced significantly since the cyclones of 1970, 1985, and 1991. Saving lives is the primary target.
- The growth in the number of cyclone shelters across the country is an example of being able to monitor steady improvements being made to infrastructure.

Examples of action helping to avoid disasters:

- Village design that is inspired by nature, for example plinth villages which have a teardrop shape to deal with water flow, is helping to avoid flooding disasters.
- In 2014, more than 1,500 households in the Sirajgani district in Bangladesh benefitted from a flood insurance scheme, the first index-based insurance scheme for flooding in the country, set up in 2013 by Oxfam GB and SwissRe, for the Manab Mukti Sangstha NGO.
- Forecast-based financing by the Bangladesh Red Crescent Society (2022 Averted Disaster Award winner) led to crucial early relief and humanitarian response during Cyclone Amphan.
- Practical Action has been working on flood early warning dissemination for many years and has been exploring with local people what can be done to reduce the impact of flooding on the poorest, most flood-affected communities in Bangladesh.
- Cyclone Amphan struck Cox's Bazaar in 2020, with the COVID-19 pandemic creating many added challenges. The cyclone's impacts could have turned into a disaster for thousands of people. Whilst it caused problems, a disaster was avoided because of coordination action by government, supporting international agencies, humanitarian workers and others, using the Cyclone Preparedness Program (CPP). Some 33,000 people were evacuated with physical distancing and countless lives and livelihoods were saved.
- Cyclone Mocha skirted Cox's Bazaar in May 2023. Preparations were enacted in an inclusive way (from government action to refugee volunteers at Cox's Bazaar helping to prepare drainage) and around 800,000 were evacuated. The cyclone missed, but people were ready.
- Cyclone Michuang in December 2023 did not have a severe impact on Bangladesh, but the authorities remained on alert throughout the storm's development and were ready to implement heightened measures if they had been required.

Further reading:

- Managing Flooding Risk in Bangladesh – Case Study Supporting Paper (TO ADD LINK)
- The country trailblazing the fight against disasters (BBC).
- Bangladesh has saved thousands of lives from a devastating cyclone (the Conversation).
- Community Resilience to Cyclone Disasters in Coastal Bangladesh (Sustainability).
- Resilience to flash floods in communities of north-eastern Bangladesh (International Journal of Disaster Risk Reduction).