



CYCLONES IN BANGLADESH

Protecting and creating livelihoods

A HUMPOL case study

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THE CONTEXT Frequent climatic and environmental stresses and shocks, including extreme weather events, make Bangladesh highly vulnerable to climate change. Cyclones, with their increasing intensity and storm surges are a serious cause of concern. Our research looked at ways to expand the scope of current disaster risk reduction practices (mainly aimed at saving lives) to a new approach that also saves/ replaces livelihoods and the assets on which livelihoods are based.

THE METHOD We built on two quantitative surveys done in 2009 and 2014 by Karlsruhe Institute of Technology, Germany and Vanderbilt University, US. At one of the field sites, Polder 32, a low-lying tract of land enclosed by dikes in Khulna district, we conducted 70 interviews with people affected by Cyclone Aila of 2009 and Cyclone Sidr of 2007. We also interviewed people who have migrated to Khulna city, and Chalna, a small town.

THE FINDINGS Low levels (10 per cent) of cyclone shelter usage, Shelters are often inaccessible in the rain due to bad roads and muddy paths, Cattle and poultry almost always die in the storm surge. Farms and fish ponds get salinised – leading to destruction of livelihoods based on farming and cattle rearing. People are unable to resume farming for over two years due to salinity. People lived on the roads and embankments for 2 months or even more. People migrate for work.

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Raise the level of houses (left) and village roads (middle), strengthen them

- People build *killas*, or raised platforms to save cattle and poultry from floods and storm surges
- People build houses on raised plinths to save assets from floods.
- Better and safer roads, space beside raised roads/embankments for safety. People often take shelter on these structures during and after cyclones
- Forecast-based financing for saving livelihoods and assets such as crops, seeds and cattle.



Option to migrate to towns, cities (below)

- Be proactive about migration options, including seasonal migration and planned resettlement
- Preparing and moving vulnerable people into alternative livelihoods: skill training for urban jobs, supported migration
- Identifying and preparing migrant destinations other than big cities such as Dhaka
- Bangladesh government has started acknowledging migration as a climate change adaptation measure
- Possible linkages with climate finance mechanism and emerging loss and damage compensation



Spin-off papers:

- Why are cyclone shelters unpopular?
- Why do people live on the road after cyclones?

Thanks to **Bishawjit Mallick**, Karlsruhe Institute of Technology, Germany, and **Sarder Shaifiquel Alam**, International Centre for Climate Change and Development, Bangladesh

Photos: **Gazi Mahmudul Alam**, **Pronob Ghosh** (top) and **Steve Evans** (left)