BANGLADESH
Piloting climate-resilient development initiatives at Char Kazal, Galachipa, and Patuakhali

BACKGROUND
The Community-Based Adaptation Programme (CBA) is a five-year UNDP global initiative, largely funded by the Global Environment Facility (GEF) along with other donors. Delivering through the GEF-Small Grants Programme (SGP) and UNDP Country Office, the goal of the Project is to strengthen the resiliency of communities addressing climate change impacts. UNDP partners with the United Nations Volunteers (UNV) programme to enhance community mobilization, recognize volunteers’ contributions and ensure inclusive participation around the project, as well as to facilitate capacity building of partner non-governmental organizations (NGOs) and community-based organizations (CBOs).

Testing the Vulnerability Assessment Reduction (VRA) and other community-engagement tools, the Project is generating invaluable knowledge and lessons for replication and upscaling.

The Government of Japan, the Government of Switzerland, and AusAID provide additional funding.

This CBA project aims at improving community and environmental resiliency to increasingly frequent cyclones and storms. Char Kazal is a riverine island bounded by the BuraGaurango and Tetulia rivers with a population of approximately 21,100 people. During monsoons, the BuraGaurango swells to 7 to 10 kilometres making it difficult to reach the mainland. Limited access to resources on the mainland such as emergency medical services and market centers increases the vulnerability of the Char Kazal community to the negative effects of extreme weather. The community is almost entirely dependent on natural resources for their livelihood, engaging in agriculture, wage-labor and fishing as their primary occupations. Over the last 10 to 15 years, soil erosion and degradation has decreased the amount of arable land on the island making it more difficult to grow sufficient crops. Sand carpeting and salinity intrusion are the main causes of soil degradation and are exacerbated by recent climate shifts. Poor crop yields have forced many community members to change occupations that are further away from the village and are not always as profitable. A recent census in the area showed that approximately 60 percent of households do not have access to land for farming and are constantly at threat from food insecurity.

Many residents fear rising waters, intense cyclones, and reduced freshwater resources but have largely been unable to combat the increased climatic hazards and often struggle to recuperate from damages after each storm. Without proper coping strategies, the community of Char Kazal risks falling into further poverty and vulnerability where they are increasingly unable to recover from natural hazards.

CLIMATE CHANGE RISKS
Climate change projections for Bangladesh predict an increase in temperatures, reduced and erratic rainfall, heat waves, and...
more frequent rainstorms. In the project area, cyclonic events and storms are likely to increase in frequency and intensity. Strong cyclones in recent years have caused increased salinity, incidence of abnormal high tides, frequency of rough sea weather conditions, and riverbank erosion. Combined with erratic rainfall and rising temperatures, the changing climate conditions will likely reduce the availability and productivity of agricultural land as well as disrupt aquaculture practices. Damage to natural resources, especially along the coastline, also threatens the biodiversity that further increase the impacts on natural resources. Increased stress on livelihoods potentials and living conditions, and reduced access to services on the mainland will make it increasingly difficult for resident of Char Kazal to uplift their standards of living.

**PROJECT DESCRIPTION AND ADAPTATION MEASURES**

The main objective of this project is to promote community-based adaptive capacity through piloting adaptive agriculture practices, promoting cyclone-resilience through infrastructure improvements and ensuring the protection of the local ecosystem. Improving sustainable agricultural output reduces food insecurity and makes the community more self-reliant, which is especially critical during the rainy season when access to the mainland is limited. The project consists of the following activities:

- Demonstration of saline-tolerant rice varieties and alternative crops;
- Promotion of crab fattening and duck breeding;
- Demonstration of crop intensification methods;
- Rehabilitation and reforestation of mangrove forests
- Establishing live fences to protect homesteads and cattle during cyclones;
- Renovation of house and boat structures to improve resiliency from cyclones; and
- Conducting workshops, presentations, and meetings about climate change impacts and adaptive strategies.

Improving the communities’ ability to withstand and rebound from natural hazards reduces their vulnerability to climate related risks. Building on the communities existing knowledge, the project also plans to improve organizational and technical capacity skills that will be invaluable in continued development initiatives.

**FOCUS ON...**

**Global environmental benefit**

*Shrinking mangrove forests surrounding the island will be rehabilitated to promote a sustainable ecosystem. Mangrove trees provide important habitats for small aquatic animals and the maintenance of forests will promote biodiversity while also reducing soil erosion along the coastline.*

**Community participation and sustainability**

*Inclusive participatory planning on land use and activity planning for a variety of community members (men, women, and youth) will ensure that all needs and constraints of different groups are considered. A community-based management committee (CMC) will be formed with the local stakeholders to implement the project. The CMC will receive training and support to ensure the continued sustainability of activities.*

**Policy influence**

*Project activities and lessons learned will be promoted at the national level to influence the national development strategy for rebuilding environmental resources.*

**For more information about CBA or CBA projects visit:** [www.undp-adaptation.org/project/cba](http://www.undp-adaptation.org/project/cba)

Further information, lessons learned, and experiences gathered from climate change adaptation activities globally can be found at the Adaptation Learning Mechanism: [www.adaptationlearning.net](http://www.adaptationlearning.net)