

BANGLADESH NDC FACTSHEET

Income group: lower middle income

- NDC submitted by nation
- Some detail in adaptation plan

Stated Vulnerabilities

- Agriculture / livestock
- Water
- Biodiversity / ecosystems
- Health and wellbeing
- Highly vulnerable groups
- Transport / infrastructure
- Fisheries
- Forestry
- Rural population

Nature-based Adaptation Vision

Key areas to address adverse impacts of climate change: ecosystem based adaptation (including forestry co-management) and community based conservation of wetlands and coastal areas.

Adaptation Actions

- Engineered
- Nature-based
- Hybrid
- Indirect

Adaptation Outcomes

- Increase resilience / reduce risk
- Protect against extreme events / disasters
- Protect biodiversity / ecosystems
- Water security
- Food security
- Human well-being / health
- Sustainable development / green growth
- Economy
- Livelihood security
- Protect natural capital / ecosystem services

Broad type of indirect action

Investment in climate change research / monitoring
Disaster risk reduction
Institutional capacity building
Raising public awareness
Community capacity building
Resilient livelihoods

Broad type of hybrid action

Climate Smart Agriculture

Broad type of engineered action

General

Current Nature-based Action in Adaptation Plan

Bangladesh Forest Department (BFD) is currently implementing the Sustainable Forests & Livelihoods Project (SUFAL) supported by World Bank, to improve forest management and increase benefits for forest dependent communities in targeted sites by financing nearly 79,000 hectares of forests on public and private lands, including about 22,000 hectares of coastal green belt across 147 Upazilas (sub-districts). The project emphasises sustainable livelihood options for the forest dependent communities and engages them in ecosystem management to ensure the sustainability of the forest resources.

Some of the completed projects for sustainable ecosystem management are – Climate Resilient Ecosystem and Livelihoods (CREL), Integrating Community-based Adaptation into Afforestation and Reforestation Programme in Bangladesh and Climate Resilient Participatory Afforestation and Reforestation Project (CRPARP). These projects helped reduce forest degradation and to build the long-term resilience of selected communities to climate change.

Re-vegetation of Madhupur Forest Through Rehabilitation of Forest Dependent Local and Ethnic Communities.

Community Based Adaptation in the Ecologically Critical Areas Through Biodiversity Conservation and Social Protection.

Bangladesh's national afforestation programme has led to significant afforestation in newly accreted lands along the coast in the Bay of Bengal as well as reforestation in the adjacent denuded hills. About 195,000 hectares of mangrove plantations have been raised so far and these new plantations are also playing an important role in carbon sequestration.

Bangladesh Forest Department conducted National Forest Inventory (NFI) during 2016-2019 to identify the status of forest and tree resources, carbon and biomass stock, dependency of local people on trees and forests and the ecology. Government estimated the carbon emission for Agriculture, Forestry and Other Land Use (AFOLU) sector to develop the Forest Reference Level (FRL) and submitted to the UNFCCC. To reduce the carbon emission from forestry sector, Bangladesh formulated Bangladesh National REDD+ Strategy (BNRS) and established a National Forest Monitoring System (NFMS) for periodical monitoring of tree and forest cover.

Planned Nature-based Action in Adaptation Plan

The Forest Investment Plan (FIP, 2017-2022) has been developed to identify the future investment opportunities to increase the forest cover, reducing the deforestation and forest degradation, improving the livelihoods of the forest dependent people through the implementation of participatory/social forestry.

As a first CVF plan, the draft “Mujib Climate Prosperity Plan”, aims at mobilising financing, primarily through international cooperation, for implementing climate resilience initiatives such as an expansion of locally-led adaptation [...] climate-resilient and nature-based agricultural and fisheries development, climate resilient well-being programs...

Studies of nature-based solutions in Bangladesh

Livelihood vulnerability and adaptation strategies of coastal areas in the face of climate change in Bangladesh: A literature review

Hossain, M.N., et al. (2021) *Journal of Materials and Environmental Science*

Socio-economic outcomes of ecological infrastructure investments

Vang Rasmussen, L. et al. (2021) *Ecosystem Services*

Multi-dimensional well-being associated with economic dependence on ecosystem services in deltaic social-ecological systems of Bangladesh

Adams, H. et al. (2020) *Regional Environmental Change*

Oyster breakwater reefs promote adjacent mudflat stability and salt marsh growth in a monsoon dominated subtropical coast

Chowdhury M. S. N. et al. (2019) *Scientific Reports*

Ecosystem-based approaches to adaptation: evidence from two sites in Bangladesh

Reid, H. and Alam, S.Q. (2016) *Climate and Development*

Community-based climate change adaptation strategies for integrated prawn-fish-rice farming in Bangladesh to promote social-ecological resilience

Ahmed, N. et al. (2014) *Reviews in Aquaculture*, 6, 1, 20-35

Unlocking ecosystem-based adaptation opportunities in coastal Bangladesh

Ahammad, R. et al. (2013) *Journal of Coastal Conservation*

Mangrove management for climate change adaptation and sustainable development in coastal zones

Chow, J. (2017) *Journal of Sustainable Forestry*

Forest Dependent Indigenous Communities' Perception and Adaptation to Climate Change through Local Knowledge in the Protected Area- A Bangladesh Case Study

Rahman, M.H. and Alam, K. (2014) *Climate*