



Adaptation in Indian Bengal Delta (IBD)

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Embankment Reconstruction



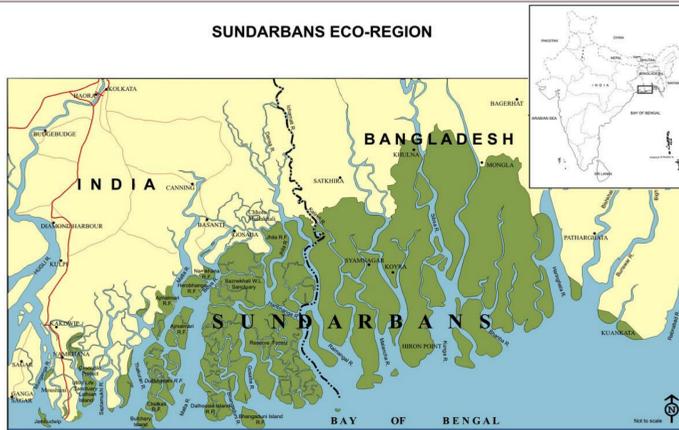
Efforts are being made to ensure reconstruction of 1300km breached embankments on the islands of IBD, with support of Central Governments Grant

Salt Resistant and Flood Resistant crop variety



The Adaptation Practice involves reintroduction of five varieties viz. *Nona-bokra*, *Talmugur*, *Lal Getu*, *Sada Getu* & *Hamilton*, of Salt Tolerant Paddy (known from the IBD 80-100 years back, but largely lost due to Green Revolution) by ENDEV, a Kolkata based NGO to the agricultural farmers, besides other Flood Resistant crop varieties.

Local NGO PUPA has collected more than 26 such varieties but due to lack of financial support they are unable to promote such varieties.



Introduction

Indian Bengal Delta (IBD) is the Indian part of Great Ganga-Brahmaputra-Meghna (GBM) Delta or popularly known as the "Mega-Delta". ISD supports a population of about 4.5 million and often frequented with intense Cyclones and Storm Surges. Large densely populated Deltas in the world are identified as the critically vulnerable areas as a result of Climate Change impacts. The process of response to the climate stress conditions in these regions could not be more apt than opting for 'Adaptation'.

Development of Seed Bank



The Communities were taught the necessity of setting up and maintaining Seed Banks that are accessible to the farmers of the salt affected blocks during natural calamities, which, in turn ensures their own food security during crisis.

Multipurpose Cyclone Shelters

National Disaster Management Authority, reported that 15 multipurpose cyclone shelters have been completed in South 24 Parganas district in IBD and another 12 out of 20 targeted MPCs have been completed and handed over to the competent authority by end of April, 2016.

Flood Shelters in North 24 Parganas

158 flood shelters have been planned/constructed under District Disaster management scheme

| Name of the Block | Number of Flood Shelters |
|-------------------|--------------------------|
| Haroa | 44 |
| Hingalganj | 28 |
| Minakhan | 31 |
| Sandeshkhali-I | 10 |
| Sandeshkhali-II | 28 |

Climate resistant farming and empowerment of community through Aquaculture



In the islands of Sagar and Basanti, identification and cultivation of both fresh water & brackish water fish species (both Finfish & Shellfish) at different Salinity levels have been done along with raising the height of pond dykes to prevent saline water intrusion & fencing of pond with net. Space utilisation has been maximised by planting vegetables and fruits (salinity tolerant) on the raised pond dykes

Discussion

It is an attempt to present a compilation of examples of Adaptation in practices that have occurred in the study area. This will help to develop an idea and create a record of the existing scope and methods of various Adaptation measures taken up at the local level within the Deltas. Moreover, it would serve as a reference point to the currently observed Adaptations.

Acknowledgements

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