

Technology Fact Sheet for Adaptation

Technology Fact Sheet: Comprehensive disaster management involving community-based programs and early warning systems for storm surge and cyclones ⁱ

Sector	Water/ Comprehensive disaster management
Technology Name	Comprehensive disaster management involving community-based programs and early warning systems for storm surge and cyclones
Adaptation Benefits	The technology will increase sense of security, reduce magnitude of disaster; reduce casualties and loss of properties and livestock.
Background/ Notes, Short description of the technology option	In the last decade, the frequency of cyclone and storm surge in the coastal area has increased significantly due to global climate change. The traditional preparedness, warning system and rescue measures against pre and post cyclonic surge has been proven of not being adequate and needs improvement & modernization. Coordination and monitoring of Pre-and post-disaster activities should be strengthened. This will require medium and long-term program using modern technology.
Implementation assumptions, how this technology will be implemented and diffused across the subsector	Important considerations for the community-based comprehensive disaster management program and early warning system for storm surge and cyclones are: • Research for development of system management to minimize casualty and loss of properties and livestock against cyclonic surge. • Development of appropriate and meaningful range & duration of warning system • Dissemination of forecasting up to the Community level • Construction/ rehabilitation of Cyclone shelters • Capacity building
Impact Statements-How this option impacts the country development priority	
Country social development priorities	• Will reduce number of displaced and distress people
Country economic development priorities	• Will increase agricultural productivity, which will contribute to the country's goal of attaining food security. • Will reduce economic loss caused by weather

	extreme events
Country environmental development priorities	• Will reduce environmental pollution and loss of bio-logical resources
Costs	
Capital costs	The program will cost approximately • Tk 50/- lakh for research, • Tk 25/- lakh for development of up-graded warning system, • Tk 500/- lakh/ no. for construction of new cyclone shelter, • Tk 50 lakh/ no. for rehabilitation of cyclone shelter, • Tk 1/- lakh/ km for planning and implementation of Eco-friendly landscape & aforestation, • Tk 25/- lakh/ community for provision of renewable energy (solar system) and • Tk 0.5/- lakh/ household for provision of rainwater harvesting & sanitation. Total: Taka 651.5 lakh; (USD 814375)
Operational and Maintenance costs	For capacity building, approximate cost of training, workshop for providing life jacket/ buoy, etc. would be Tk 05/- lakh/ community. (USD 6250)

ⁱ This fact sheet has been extracted from TNA Report – Technology Needs Assessment and Technology Action Plans For Climate Change Adaptation– Bangladesh. You can access the complete report from the TNA project website <http://tech-action.org/>