

Technology Fact Sheet for Adaptation

Technology Fact Sheet: Tidal barriers (Sluice gates) ⁱ

Sector	Water/ Infrastructure development
Technology Name	Tidal barriers (Sluice gates)
Adaptation Benefits	The advantages of the proposed sluice gate are (i) it will reduce siltation process through river bed erosion, (ii) will increase operating efficiency and (iii) will be durable.
Background/ Notes, Short description of the technology option	Most of the sluice gates in the coastal area were constructed under Coastal Embankment Project (CEP) in the early 60's and 70's. Due to prolonged use and salinity effect, the condition of existing sluices including flap gates have become weak and fragile and lost their draining efficiency. Solution Construction of new sluice gates with medium- and long-term using traditional/modern technology.
Implementation assumptions, how this technology will be implemented and diffused across the subsector	<ul style="list-style-type: none"> • Construction of new sluice gates/ rehabilitation incorporating the effect of sea level rise, subsidence, and cyclonic/ tidal surge.
Impact Statements-How this option impacts the country development priority	
Country social development priorities	<ul style="list-style-type: none"> • Increased safety of people's life and crops against cyclone and tidal surge. • Will provide early cropping in greater areas
Country economic development priorities	<ul style="list-style-type: none"> • Will increase agricultural productivity, which will contribute to the country's goal of attaining food security.
Country environmental development priorities	<ul style="list-style-type: none"> • Will provide quick drainage • Will reduce siltation process by river bed erosion. • Will increase operating efficiency
Costs	
Capital costs	<ul style="list-style-type: none"> • Approximate cost of TK 100.00 lakhs per vent; (USD 125000)
Operational and Maintenance costs	Rehabilitation / repair of sluice gate = Tk 25 lakh /per vent (Approx); (USD 31250)

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/>