

Sector	Coastal Zone
Subsector	Coastal Protection
Technology name	Mangrove Management ⁱ
Scale	Small/medium
Availability	Medium to long term
Technology to be included in prioritisation	- Assessing technologies through multi criteria analysis (based on TNA team assumption through assessment criteria, and TNA Tool).
Background/notes	- Salt water intrusion, coastal erosion by strong wave as a result of increasing wind speed under changing climate, mangrove rehabilitation for buffer zone, etc.; - In areas where the likelihood of strong wind and sea level rise is quite high, we may need to introduce new building codes for climate proofing; - Planting wind breaker in some agriculture areas may also be necessary to reduce negative impacts of strong wind on seasonal crops.
Implementation assumptions	- The Royal Government of Cambodia has planned a number of programs to promote awareness raising and capacity building and livelihood improvement in mangrove management and coastal protection; - Strengthening the management and conservation of wetlands, biosphere, and coastal zones including mangrove management (NSDP Update 2009-2013); - Small scale technologies implementation through program which are applied at sub national or community level and household; - These technologies applied at household or community level are considered small/medium scale technologies.
Impact Statements (how this option impacts the country development priorities)	
Country social development priorities	- Climate change will result in sea level rise and have a number of different physical and ecological effects on coastal systems. These include inundation, flood and storm damage, loss of wetlands, erosion, and saltwater intrusion; - Cambodia has identified development priorities as part of NAPAs, NSDP Update 2009-2013, Poverty Reduction Strategy, Policies, National Communications (INC and SNC) to the UNFCCC.
Country development priorities	- The importance of the coastal protection for Cambodia's overall economy, and for the economy of a coastal provinces; - Supporting national economic development and stability.
Country environmental development priorities	- Protection and management of natural coastal resources; - Avoiding polluting coastal water resources in order to

	protect ecosystems; - Increased adaptation resilience.
Other consideration and priorities such as market potential	- Potential market for coastal protection
Capital costs over 10 years	- The costs are dependent on the extent of the mangrove forests to be managed, their accessibility and their natural state. Heavily degraded areas will require substantially more investment than well preserved forests. Capital costs would include tools, equipment and technical support to local communities.
Operational costs over 10 years	- Community based resources management involving local people can reduce significantly the operational costs, but this depends on local communities interest and on the benefits they may derive from helping managed mangrove forests.
Other costs over 10 years	N/a

ⁱ **This fact sheet has been extracted from TNA Report – Kingdom of Cambodia - Technology needs assessment and technology action plans for climate change adaptation. You can access the complete report from the TNA project website <http://tech-action.org/>**