

Technology Fact Sheet

Rehabilitation and development of mangroveⁱ

1) Technology status

A special, valuable ecosystem in terms of biodiversity and important to environment protection and socio-economic development, mangroves are facing overexploitation to the point of destruction due to establishment of agricultural areas, residential areas and shrimp farms long the coastline or the river, leading to shrink in mangrove areas. Invasion into mangrove swamps for rice cropland also decreases the amount of sediment deposits on tidal zones, leading to coastal erosion around mangrove areas. Mangrove rehabilitation is being piloted in some provinces such as Hai Phong or Ca Mau and shows some results in protecting sea dykes and bringing economic benefits to local people. Currently there are 606,000 hectares of saline and lands, including 155,290 of mangrove swamps 226,000 hectares of shrimp farms with dykes and ditches in brackish water. In 15 years' time, there will another 50,000 hectares of mangrove swamps.

In terms of technology, rehabilitation of mangrove habitats is simpler than reforestation on land, with a lot of options.

2) Social – economic – environmental benefits

Economic: benefits from plants and aquaculture products.

Social: more jobs and increased income.

Environmental: Mangrove swamps are considered a low-cost, efficient “green dyke” to prevent wave or storm. Apart from adaptation potential, mangroves can help to mitigate GHG emissions due to its carbon storage. Building mangrove swamps along the coast can protect sea dikes, increase sedimentation rates, farm shrimps. Rehabilitating mangroves can occur on degraded shrimp farming areas, etc.

3) Application potential

Widely used, high potential in forestry and can be further developed.

4) Barriers

High capital costs in some areas. Protecting mangrove swamps is also one of the biggest challenges of forestry.

ⁱ This fact sheet has been extracted from TNA Report - Mitigation for Vietnam. You can access the complete report from the TNA project website <http://tech-action.org/>