



Strengthening the Resilience of Coastal Communities, Ecosystems, and Economies and to Sea-Level Rise and Coastal Erosion

Coastal ecosystems are among the most productive, yet highly threatened systems in the world. Nearly 40% of the people in the world live within 100 kilometers of the coast, concentrated near some of the most vulnerable ecosystems, such as mangroves or coral reefs. In the past two decades coastal ecosystems, communities and economies have been increasingly affected by sea-level rise. Coastal erosion is recognized as one of the major impacts of sea-level rise, and considering that many large cities in the Indian Ocean and Asia Pacific are located in low-lying coastal deltas, sea-level rise is estimated to affect major parts of the region's population.

Strengthening the resilience of coastal ecosystems, communities, local and national economies to the adverse impacts of sea-level rise and coastal erosion is a new project that will develop practical knowledge in climate change adaptation by assessing the needs and gaps of the participating countries, and prioritizing and implementing interventions for strengthening the resilience of coastal ecosystems and communities to coastal erosion.

Project objectives:

Objective 1 - To assess situation, identify gaps and prioritize needs in legislation, policies, capacities, institutional structures, and finances for addressing coastal erosion in Pakistan and Thailand.

Objective 2 - Based on the information generated, to design and implement pilot interventions in Pakistan and Thailand, and to document and disseminate lessons and best practices on coastal erosion control.



The project's expected results are:

1. Situation assessed, gaps and needs in legislation, policies, capacities, institutional structures, and finances for addressing coastal erosion in Pakistan and Thailand are identified and prioritized.
2. Based on the information generated, pilot interventions are designed and implemented in Pakistan and Thailand, and lessons and best practices on coastal erosion control are documented and disseminated.

The project is implemented by **UNEP COBSEA (Coordinating Body on the Seas of East Asia)** in collaboration with key **National Partners**:

- Climate Change Division, Pakistan
- Department of Marine and Coastal Resources, Ministry of Natural Resources and Environment, Thailand

Project budget: USD 200,000

Duration: January 2013-December 2014

Pakistan's coast line is 990 km long, characterized by a variety of habitats: thick mangroves forests, riverine forests, irrigated plains, fresh water and brackish wetlands, islands, bays, creeks, mudflats, salt marshes, estuaries, lagoons, and beaches. The coastline of Pakistan is largely sparsely populated predominately fishing communities, except the Karachi city which is the major hub of commercial and industrial activities. There is an increasing trend in the frequency of cyclonic disturbances along Pakistan coast. The strong future potential for commercial activity and infrastructure development is expected to further increase the vulnerability of Pakistan's coast line. Marginalized groups e.g. women, poor fisher folks, and indigenous peoples are most vulnerable to coastal disaster risks. The project will provide support to national and local authorities responsible for addressing coastal erosion by enhancing the understanding of coastal vulnerability and erosion due to sea-level rise. Lessons from earlier work in the region will be used while implementing the pilot interventions.

Thailand has total coastal length of approximately 3,148 km. The Gulf of Thailand comprises of approximately 2,055 km of coastal length from 17 provinces (including Bangkok). It claims an Exclusive Economic Zone (EEZ) of approximately 300,000 km² - about 60 percent of its land. Its coastal areas include 2,130 km² of coral reefs and 2,080 km² of mangroves. Marine fisheries and aquaculture, as well as coastal tourism and marine transportation, are the main economic activities along the coast. These coastal areas are important to the country in terms of economy and human settlement as they provide employment and income to the local community, and also play a role in rapid development to support the growth in tourism and manufacturing industries. However recent years has seen the loss of coastal areas from coastal erosion forcing relocation of communities and historical structures, and affecting the ways of life and well being of the local communities living in coastal zones with erosion problems. The project is envisaged as a continuation of on-going COBSEA work on coastal erosion in Thailand, and will focus on testing and adapting the agreed pilot interventions in selected hotspot areas.

The project is one of the **Regional Initiatives funded by the Mangroves for the Future (MFF)**. In addition to addressing coastal erosion, these initiatives are aiming to consolidate and share existing knowledge and best practice in coastal resource management, and conduct research on emerging issues, such as: mangrove conservation; responsible diving; community resilience; and governance in small island communities.

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