

Tioman Island Rehabilitation Project, Malaysia Integrated Coastal and Environmental Rehabilitation

Map:



Background:

Pulau Tioman is a hilly and rocky island with numerous headlands and small pockets of sandy beaches. The area is 131 km² and measures 11 km at its widest point and about 20 km in the north south direction. The village of Tekek, the main city on the island, is located on the western coast in a bay, which is the longest stretch of sandy beach in Tioman. Four small rivers discharge from the hills, through the urban areas into the coastal area.

The beaches along Teluk Tekek have been eroding severely during the last two decades. High waves during the monsoon have caused shoreline erosion and damage to the near-shore properties.

Wastewater and solid waste from the coastal communities presents a significant threat to the beach environment. Rivers are polluted to different degrees and some are posing health risk to the river and coastal ecological environment.

Project partners:

MRCB Environment S/B
Asia Water & Environment S/B
ViSKon Ltd.
UCEWP (Acad. Tech. Sc. Ukraine)
Carl Bro A/S

Beneficiary:

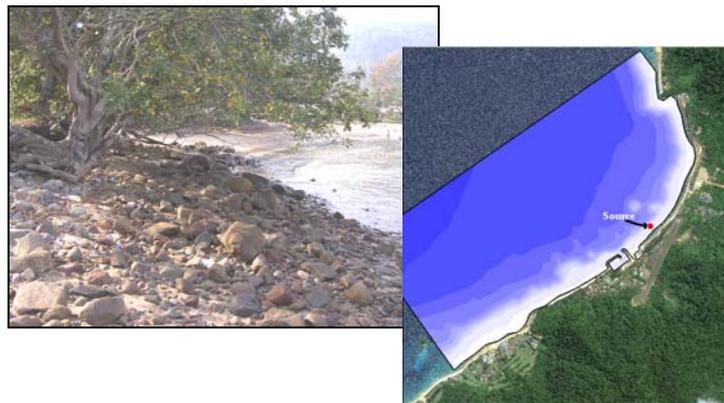
Tioman Development Authority (TDA) and Pahang State Government

Client:

Government of Malaysia, Dept. of Irrigation and Drainage

The main objective of the project is to physically and environmentally restore the beach at Teluk Tekek. The specific objectives of the project are as follows:

- Restore the beach to a state where it can be used as a high-standard recreational beach with good sand quality.
- Ensure the long-term protection and stability of the coast and river mouths.
- Reduce the effluents of pollutants (wastewater and solid waste) from the adjacent town and chalets along the beach.
- Provide a long-term environmental management protecting the coral reefs and the land environment (water, nature)



The scope of work has been organized in 5 project outputs:

1. Beach nourishment and restoration for the four zones at Tekek Bay. Construction of ancillary structures such as groins, PEM-system and submerged sills to ensure the long term stability of the protection works
2. Design and implement feasible mitigation measures for urban/coastal stormwater drainage/flood protection works
3. Design and implement environmental protection facilities to manage wastewater and solid waste from Tekek Town
4. Establish and implement an Environmental Management Plan (EMP)

Being an integrated implementation project, each of the project outputs will be implemented in three phases:

1. Planning, conceptual and detailed design phase
2. Construction/installation phase
3. Monitoring and maintenance phase

