



Coastal erosion kept in check



THE forces of nature cannot be fathomed. Every year, the monsoon season never fails to unleash torrential rain, thunderstorms and metre-high waves which hit Terengganu and the other east coast states.

With the state's shoreline stretching 240km, the monsoon causes low-lying areas to be flooded.

Another real and present danger is coastal erosion brought about by the constant pounding of huge waves which cause large portions of sand and earth to be swallowed by the sea.

Big casuarina trees that can withstand strong coastal winds are toppled by the waves, which also destroy roads and buildings near the shore.

Realising the huge impact of coastal erosion on the livelihood of the local population, who are mostly fishermen, the state government has implemented erosion control measures through the Department of Irrigation and Drainage (DID).

One of the affected areas is Kampung Tok Jembal in Gong Badak, where gazebos have been swallowed by the sea, trees uprooted and a road destroyed during unusually high tides last year.

The DID has acted fast to stem the destruction by extending a seawall built two years ago to protect fishing boats.

Contractors not only had to extend the granite wall but also repair sections destroyed by the waves.

The task was far from a breeze as the tide and waves, sometimes as high as three metres, "gobbled" chunks of the granite wall even as the workers, aided by heavy



The Kampung Tok Jembal beach is safe from erosion, thanks to a granite seawall constructed by the Department of Irrigation and Drainage.

machinery, were driving them into the ground.

Menteri Besar Datuk Seri Ahmad Said visited the site as excavators and earthmovers worked day and night, racing against the tide to complete the seawall.

"On the whole, the erosion control project in Tok Jembal will cost about RM81 million," he said.

Despite the bad weather, the seawall has been completed on time and now visitors are back again at the Tok Jembal beach, a popular picnic spot among locals.

Fisherman Sulaiman Muda, 50, thanked the state government for building the seawall. Before it was put up, seawater used to reach the doorsteps of fishermen's houses located about 70m inland.

"The waves are more powerful

than any wall man can build. But at least now we are shielded by the wall and have ample time to move our boats further inland during high tide," he said.

Building seawalls is not cheap and the state government has allocated millions of ringgit to construct them along various affected beaches in the state.

State DID director Mat Hussin Ghani put the cost for every metre of seawall at RM5,000.

"The wall has to be very strong to withstand the waves' ferocious power."

Another area badly affected by erosion is the Teluk Lipat beach in Dungun and the state government wasted no time in allocating RM1.8 million to repair the damage.

A 1km road running parallel to

the beach was destroyed after it was inundated by seawater and lashed by strong waves.

Infrastructure Development and Public Amenities Committee chairman Datuk Zaabar Mohd Adib said RM1.5 million has been allocated to construct three breakwaters in the area.

The DID, meanwhile, has been directed to complete the design of the breakwater as soon as possible.

"Once the design has been finalised, work can immediately start."

Zaabar said sand dredged from the Sungai Dungun estuary could be used in the construction of the breakwater.

The department has also embarked on several flood mitiga-

tion projects statewide, such as the RM5.6 million pumping system to prevent flash floods in Pusu Tiga, Gong Badak, and the RM6.7 million project to deepen and widen Sungai Pertang in Hulu Terengganu.

Apart from dedicated flood mitigation projects, the Hulu Terengganu hydroelectric project will also play a role by way of river water flow control.

This will be effected by a dam, now under construction upriver of Tasik Kenyir, which will reduce the threat of floods caused by the river overflowing its banks during the monsoon season.

Natural disasters like floods cannot be totally prevented but measures taken by the state government have mitigated the threat and damage.