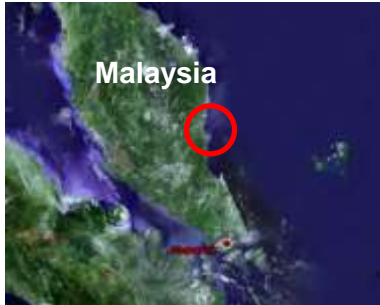


**Pahang River Estuary Protection Project, Malaysia  
Harbour Construction and Coastal Protection**

**Map:**



**Background:**

Pahang River is the largest river in Peninsular Malaysia (~30,000 km<sup>2</sup>) and flows into the South China Sea. The estuary of Pahang River is located approximately 8 km from Pekan town, the Royal Town of Pahang State. The estuary is approximately 2 km wide at its mouth.

Safe passage into Pahang River has long been hindered by the formation of sand shoals and sand bars at the river entrance. Dredging and other improvement works have been undertaken in recent years in an attempt to improve navigability and increase protection, however without durable effects.

Villages along Pahang River have been subject to periodic flooding with durations of up to two months in a year. The most severe floods occurred in 1967, 1971, 1999 and 2001. The dual threat of flooding and coastal erosion has, therefore, become a major concern to the local residents.

**Project partners:**

MRCB Environment S/B  
ViSKon Ltd.  
Asia Water & Environment S/B  
Angkasa Consulting Services S/B

**Beneficiary:**

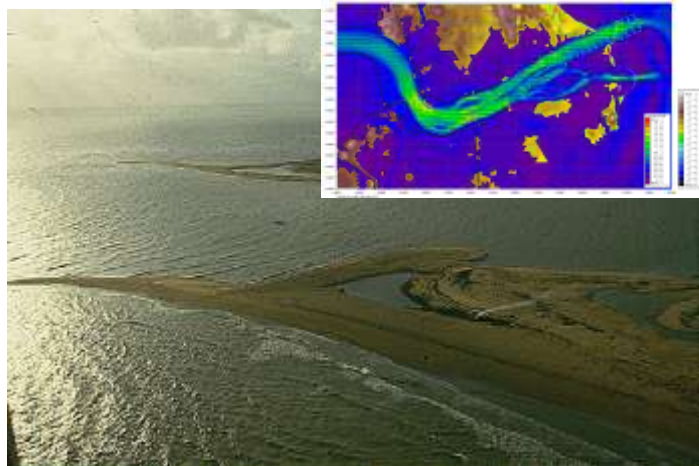
Pahang State

**Client:**

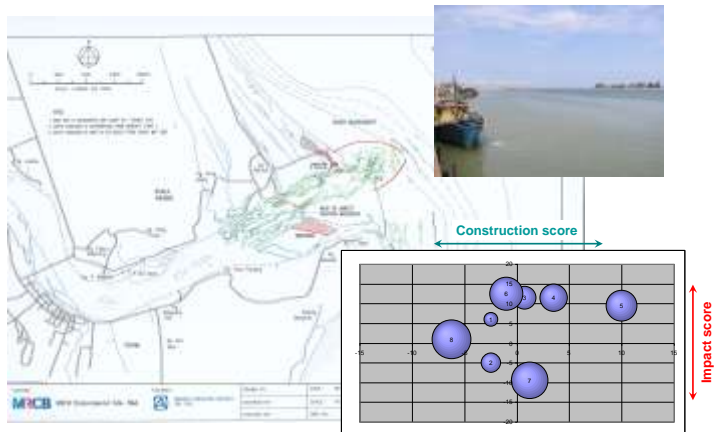
Government of Malaysia, Dept. of Irrigation and Drainage

The long-term objective of the project is to rehabilitate the Pahang River estuary and protect the river mouth from siltation and wave action in order to ensure optimal navigation, and to protect the infrastructure and villages in the river mouth from flooding. Functional requirements are:

- To overcome the siltation problems at the Pahang River mouth in order to enable safe navigation of fishing vessels at all times
- To provide adequate navigation channels, berthing and mooring areas
- To provide shelter against waves at all times



The objective of the present design phase is to establish three principally different conceptual designs (including the 'no action/regular dredging' alternative) to show how the river mouth rehabilitation and protection shall be carried out in the best way, considering the physical, environmental, social and economic aspects in an integrated way.



Breakwaters, dredging and PEM-system will be part of the solution and shall be designed with respect to:

- Minimisation of the coastal and environmental impact
- Provision of navigation and safety
- Reduction of sedimentation and wave disturbance
- Flood protection of the Royal city of Pekan

