

'Floods will only get worse'

Research body: Rising sea levels to lead to inundated coasts in future

By PATRICK LEE

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PETALING JAYA: If you thought that the devastating floods which struck the east coast of the peninsula recently was bad, things will get worse in the coming decades, said a research organisation.

The National Hydraulic Research Institute (Nahrim) said many of our coastlines were being affected by rising sea levels, with numerous parts of the country expected to be underwater by the end of the century.

Data by Nahrim showed that sea levels have been rising by between 0.2mm and 4.4mm every year since 2010 due to climate change.

Nahrim director-general Datuk Ahmad Jamalluddin Shaaban said this may lead to inundated coasts and affect more than eight million people, at today's count.

"The areas that will experience the highest sea level rise are the Kedah and Kelantan coasts, Sungai Sarawak Estuary and the east coast of Sabah, by between 0.4 and 1.1m," he told *The Star*.

He said that Malaysia was very susceptible to rising sea levels and that this would be especially critical at its low-lying areas, such as river mouths.

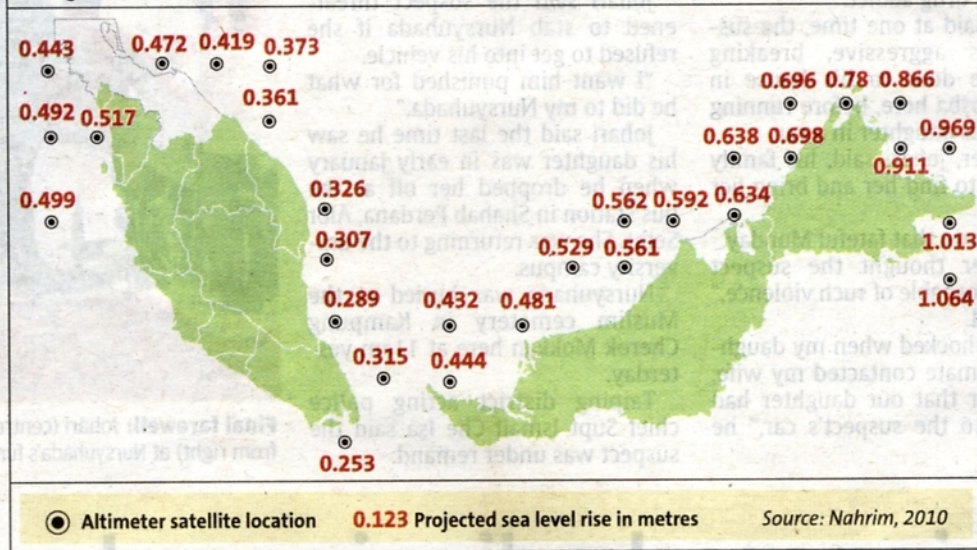
Tawau would be the hardest-hit nationwide, with its sea levels projected to be 1.064m higher by the year 2100 than they were today.

Kudat, Lahad Datu, Tawau, Sandakan and Kota Kinabalu were seeing sea levels rising by 3mm, 3.5mm, 3.6mm, 4.1mm and 4.4mm each year, respectively.

Ahmad said higher sea levels could lead to changes in wave speed and height, which may increase the rate of coastal erosion.

"Worst still, the sediment type along

Projected sea level rise for Malaysia coastlines by year 2100



Malaysian coastlines comprises sand, clay and silt which are easily eroded by strong currents and waves," he said.

Existing coastal structures, he said, may be swamped by waves especially during heavy rain at high tide.

Ahmad said that some 31% of Malaysians in the peninsula lived within the coastal zone, an area ranging 5km inland from the sea's edge.

Some 55% of the area, he said, was also occupied by important industries, including agriculture, construction and fisheries.

Ports were also going to be affected by the rise in sea levels.

Harbours in Penang, Perak, Selangor and most of those in Sabah were projected to have

sea levels higher than 50cm by 2100, compared to 2010.

Aside from the loss of land and destruction of coastal structures, Ahmad also expected communities to suffer relocation and lives lost as the changes increasingly take place.

Worse still, Ahmad said Malaysians could not avoid this phenomenon as the rise in sea levels was a global issue and inevitable.

"Adapting to climate change and employing disaster risk management are very important to minimise our vulnerability," he said.

Ahmad said Nahrim was working with various government agencies to prepare the country for the phenomenon.

He said millions of ringgit was spent each year to build coastal protection systems.