Headline Date MediaTitle Section Journalist Frequency Circ / Read Protecting coastal swamps 23 Sep 2011 The Sun National N/A Daily 270,506 / 171,000

LanguageEnPage No15Article Size380ColorFuADValue6,7PRValue20,7

English 15 380 cm² Full Color 6,758 20,274



Protecting coastal swamps

Coastal swamp forests are an important ecosystem. Besides being a barrier against tsunamis, they also act as a carbon sink and may hold the key to mitigating the effects of global warming and climate change.

THE coastal swamp forest in Matang (Hutan Paya Laut or HPL Matang), Perak has been acknowledged as the best maintained coastal swamp forest in Malaysia, if not the world.

Work on maintaining the 101,877ha forest started 107 years ago and it has become a role model in the management of other swamp forests in the country.

Eighty per cent of the forest is still used in the production of mangrove woods including *Bakau minyak* and *Bakau kurap* on a sustainable yield basis.

At HPL Matang, the graded and systematic felling and cultivation of trees is conducted through a 30year cycle, with 40,000ha of forest set aside for ecological studies.

According to the latest study on swamp forests in Malaysia, HPL Matang has been highlighted as a land ecosystem which absorbs the highest carbon levels generated in the country. This also indicates the importance of integrated forest management as the key to prosperous human life.

Forestry Research Institute Malaysia (FRIM) director-general Datuk Dr Abdul Latif Mohmod (*pix*) said the swamp forest ecosystem plays an important role in mitigating the effects of global warming and climate change.

Carbon sequestration studies carried out in several swamp forests including those in Kedah and Johor point out that HPL Matang has the highest carbon absorption rate – up to six tonnes of carbon per hectare in a year.

"This proves that the importance of swamp

forests is not only as a barrier against tsunami but also as a crucial ecosystem that can absorb carbon," Abdul Latif said recently on the sidelines of the National Seminar On R&D Projects On Coastal Mangroves In Malaysia.

Coastal mangroves play an important role in stabilising the ecosystem along coastal areas.

Abdul Latif said swamp forests are wetlands rich in biodiversity and function as an economic resource for the production of charcoal,

firewood, pulp and construction

Headline Date MediaTitle Section Journalist Frequency Circ / Read Protecting coastal swamps 23 Sep 2011 The Sun National N/A Daily 270,506 / 171,000

Language English Page No 15 380 cm² Article Size Color **Full Color ADValue** 6,758 **PRValue** 20,274

material, apart from being a habitat the peninsula. for the breeding of marine life.

"Over the past 20 years, the nation's swamp forests have reportedly experienced a drastic decrease in size due to unsustainable land reclamation work for development and agriculture," he said, attributing this to population growth.

In Malaysia, swamp forests have increasingly come under threat as as result of reclamation work for

shrimps and arowana fish breed projects. This has compromised the potential ecosystem, apart from producing more carbon emission and jeopardising food resources for the future.

'The study reveals that coastal swamp forests must be maintained for the sake of future generations," Abdul Latif said.

He added that the study, conducted by the FRIM Geoformation Programme, found that erosion had caused almost 20% of the damage to coastal swamp forests on the west coast of

The seminar, attended by more than 110 researchers, academicians and representatives from government agencies, discussed 14 working papers related to the research carried out on coastal areas.

Abdul Latif pointed out that FRIM was also involved in studying the feasibility of various innovative and conventional cultivation techniques for high risk areas, apart from researching the suitability of soil, tree diseases and production of saplings.

"In high risk areas, researchers and local residents planted 10,104 trees along the coast from 2007 to 2010, using the innovative technique."

The locations selected for this included Kampung Sungai Haji Dorani and Pulau Carey

in Selangor, Kuala Gula in Perak, Kuala Sanglang in Perlis and Kuala Muda in Penang.

The study shows that planting mangrove saplings using the Comp-Mat and Comp-Pillow techniques is effective in the high risk muddy coast, provided planting is supported by wavebreaking structures known as geotubes.

"Without the innovative technique and geotube support, tree planting will not be successful due to factors such as big waves, soft soil and erosion," Abdul Latif said.

He noted that a survey of 578 respondents had found that 76% were keen on being involved in planting trees along the coast. This shows an increased public awareness of the importance of coastal swamp forests as protection against strong wind and erosion. - Bernama





A study conducted under FRIM's Geoformation Programme found that erosion had caused almost 20% of the damage to costal swamp forests on the west coast of the peninsu