

## **A NOTE ON VISIT TO NAYACHAR ISLAND**

At the behest of the Government of West Bengal, a team of geoscientists from Geological Survey of India, Eastern Region and Marine Wing, Kolkata visited the Nayachar Island in East Medinipur District, West Bengal on 12<sup>th</sup> September 2007. The team comprised Dr. Biplab Mukherji, Dy. Director General, Dr. Utpal Chakrabarti, Director, Prabir K. Mondal, Director, Raghuvir Singh, Director, J. P. Kumar, Geologist (Sr.) and P. K. Mitra, Geologist (Sr.). The island is bounded by latitudes 21° 54' 41" N-22 ° 01' 28" N and longitudes 88 ° 03' 02" E -88 ° 08' 43" E and covers parts of Survey of India toposheets no. 79 B/4 and 79 C/1. The island has an area of about 50 sq km and a maximum elevation of 1.5 m above m.s.l.

The Nayachar Island represents a NNE-SSW trending longitudinal bar within the Hoogli River near the mouth of the Haldi River. Geomorphologically, the island is composed of neo-interdistributory mangrove marsh and fluvio-tidal flat. The island is convex upward with gently sloping eastern and western flanks. The eastern flank is undergoing erosion (Fig.1) at present while the western edge is accreting (Fig.3). Lithologically, the island is composed of interbanded mud, clay and silt (Fig.2) of Holocene age. The central part of the island is slightly undulating (Fig.4). Mangrove swamp, casurina and coconut plantation cover parts of the island.

The visit ended with a discussion with officials from the Government of West Bengal on the future course of action.



**Fig.1.** View of eastern flank of the Nayachar Island showing erosion. GSI team accompanied by officials from West Bengal Government carrying out investigation.



**Fig 2.** View of the eastern flank of the Nayachar Island. Foreground shows horizontally interbanded clay and silt.



**Fig 3.** Western edge of the Nayachar Island undergoing accretion.



**Fig 4.** Undulating central part of the Nayachar Island with casurina and coconut plantation.