

Fluvial Environmental Changes of the Ayeyarwady Delta: Case Study for Nyaungdon Borecore Area

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The Ayeyarwady River is one of the largest rivers in Myanmar and drains an area of 85,534 km². The study area is mainly located in the central part of deltaic of the Ayeyarwady River belonging to Nyaungdon Township, Ayeyarwady Region. The main purpose of this study is to clarify geomorphologic land classification mapping and fluvial features of the Ayeyarwady River Delta derived from aerial photos, Landsat +ETM7 Global Digital Elevation Model Version 2 with GIS and RS linkage and to check long term natural environmental restoration of the lower Ayeyarwady River at Nyaungdon drilling point in Ayeyarwady Region. The volume of sediment deposited rate and discharge rate should be accumulated rapidly before Holocene period because we could clarify with the results of ¹⁴C dating of the organic materials including each layer and all core drilling samples, concept of paleo-geography and geomorphologic evolution, landform development of the study area.

Keywords: Ayeyarwady River Delta, Geomorphologic land classification map, sedimentary facies, drilling bore core, discharge, radiocarbon age