SEDIMENTARY SIGNATURES ON THE EASTERN COAST OF SRI LANKA: PRELIMINARY FINDINGS

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Undisturbed sediment compiles are invaluable samples in the reconstruction of ancient depositional environments. Basically coastal sedimentation is significant as it preserves the eustatic and isostatic records as well as seasonal climate records. Present study concerns on sedimentology of recent sediments of a part of the eastern coastal lagoon area of Sri Lanka to interpret the depositional history. Spatial extent of sediments was studied by field mapping. Gradation analysis and morphology of sediments were used to identify the depositional history of sediments. The results revealed that the spatial extent of the recent sediment deposition is about 4km wide band from the present coast line including the lagoon environment that overlaid the weathered residual soil. Top sediments (up to 1m) are characterized by different layers with several depositional histories and did not indicate any remarkable clayey layer even though the locations are near to a river input and within the flood level. It can be said the inorganic input is prominent than the organic input in the eastern coastal sedimentation. The results need to be proved by other geochemical and age dating proxies.

Keywords: Sedimentology, Batticaloa, Spatial extent