

MID-HOLOCENE SEDIMENTOLOGICAL CHARACTERISTICS AND COASTAL LANDSCAPE OF SOUTHERN SRI LANKA: A HISTORY OF ADAPTIVE BEHAVIOUR OF PREHISTORIC POPULATIONS

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The sea-level changes that occurred during the Holocene period probably had an impact on the prehistoric communities in the southern coastal area. This study aims to reconstruct the Holocene sea-level changes and interpret middle-late Holocene paleoenvironmental evolution in the southern coastal region of Sri Lanka from Tangalle to Bundala with special emphasis on the adaptive behaviour of Mesolithic prehistoric populations. Sedimentological and archaeological investigations were carried out on sediment and soil profiles of three prehistoric sites at Pallemalala, Mini Athiliya and Bundala, as well as in an ancient lagoon at Kalamatiya, and at a coastal site in Henagahapugala. Comprehensive sedimentology and coastal morphology have been applied to unveil the nature of sedimentary sequences that were associated with the events of the Holocene marine transgressions and regressions. After the second episode of the high sea-level stand after 4,000 B.P., the southern coastal area witnessed a regression trend which is represented by prominent shallowing-upward succession of marine, lagoonal and paludal deposits. This 'regressive' trend, reflecting coastal progradation under a nearly stable sea-level extends to the termination of Mesolithic in the area. The expansion of vast, low-lying lagoonal and paludal areas was mostly induced by the lowering of sea-levels as well as Walawe and Malala Oya river systems. These changes in the landforms, which occurred during a period of variable climate conditions, have strongly influenced the mid-late Holocene Mesolithic hunter-gathers in terms of human settlement and social behaviour. A strong impact of human frequentation on depositional environments is observed in late Holocene, as the formation of coastal wetlands as lagoons and mudflats associated with river systems, might have promoted the resettlement in coastal areas and adoption of novel subsistence patterns and burial customs.

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