Preliminary Geo-archaeological study of *Lunuhunugala* rock shelter at Aranayaka - Sri Lanka

D.C. Ranaweera[1*], M.H. Kodikara Arachchi[2] and P.L. Dharmapriya[2]

[1]Department of Archaeology, Faculty of Arts, University of Peradeniya, Sri Lanka,
[2]Department of Geology, Faculty of Arts, University of Peradeniya, Sri Lanka
[*]kkdcr@yahoo.com

Preliminary Geo-archaeological studies in and around *Lunuhunugala* rock shelter at Aranayaka, Kegalle district, Sri Lanka, imply a possible habitation site. Field investigations were carried out for the understanding of the importance of speleological, prehistoric and palaeo-environmental values of this site. The area falls into the wet zone of Sri Lanka, located in the Western valley of the Maha Oya stream. It is at an elevation of 723m AMSL on the foothills of *Getaberikanda* Mountain (7°09'06" N, 80°26'40" E). Speleological studies suggest that the formation of the rock shelter is strongly influenced by the mineralogy and structure of the rock. The rock shelter is formed in a geologically weak zone, evident from the intruded quartz veins which cross-cut the foliation of the rock along weak planes. Exfoliation caused by differential expansion among curved rock layers has caused them to weaken and eventually peel off. This is mainly due to the recurring effect of heating during day time and cooling at night. Also, differential weathering of rock layers with different chemistry has involved in forming cavity like features on the rock face.

Many rock shelters in the wet-zone highlands of Sri Lanka have yielded some of the earliest evidence for the existence of *Homo sapiens* in South Asia during Pleistocene and Holocene. *Lunuhunugala* preserves evidence for the presence of some tool industry and food culture of prehistoric man in the wet zone highlands, most probably over the same period of time. A material culture, marked by possible stone tools made by quartz fragments together with possible faunal and floral remains, provide evidence for suitable habitats in this site. The environment of *Lunuhunugala* may have retained as a forest, supplementing the inhabitants' food culture and technology, serving as a human habitation site. The prehistoric inhabitants foraged for a broad spectrum of plant and mainly arboreal animal resources derived from a landscape that retained an equatorial rainforest cover through this period. Finally, the *Lunuhunugala* rock shelter demonstrates the Late Pleistocene pathway, the prehistoric societies, and their dynamic ecological context also contributing to a number of debates on the human ecology of prehistoric foragers and the cultural diversity in the wet zone of the Island.