

D-60: Some mysteries of the earth and the challenges of the growing imbalances between the land and the sea in Sri Lanka

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The Earth has a history of mysterious events. Some have occurred during the distant past, others can be seen even today. To what degree these are caused by natural or human activities are topics of controversy among scholars. Certain events in Sri Lanka too bear testimony of this, when we consider:- as to how the peninsulas came to be formed, or the collapse of the sandstone reefs, the promontories, and coast erosion now taking place.

Based on evidence gathered in the ruined cities of the Raja Rata old maps, air photographs, topographical maps of the coastal region, and most of all from field observations by the author during the past four decades (some of which are already on record), the object of this presentation is to prove that there has been from the distant past, to the present, a growing imbalance between the land and sea in this part of the earth including Sri Lanka.

The cause is attributed to a rise in the sea level. This view is confirmed by experiments conducted by the author on hydraulic models. The studies have also shown that the geographical location of the island in the Indian Ocean is such that the dynamic component of the energy does the most damage by coast erosion and causing rise in the flood levels inland. This in turn results in environmental changes amounting to a depletion in the island's resources.

The most meaningful approach to these problems and the needs of the country is therefore to harness the energy of the sea as far as possible. Field and laboratory studies already done by the author prove that this is possible. Favourable sites for such schemes have been identified.