

Foreword

I was invited by *Current Science* to be guest editor of a special issue on Quaternary Period in India. The objective of this special issue is to highlight those momentous events in the last 1.6 million years of the geological history which have shaped the landforms, fashioned the landscapes, given rise to invaluable mineral deposits and evolved the unique natural heritage of the Indian subcontinent. It was during the Quaternary period that the Himalaya in the north and the Nilgiri-Cardamon Ranges in the south rose to their spectacular heights, the vast stretch of the Indo-Gangetic plain came into existence, and the productive deltas emerged at the mouths of the great rivers.

While the peculiar physiographic setting under hot-humid climate and Quaternary tectonics provided propitious conditions for the formation of thick mantles of laterites and bauxites over the extensive shield of Peninsular India, the thick piles of sediments of the alluvial and deltaic plains conceal underneath rich reserves and pools of life-giving water and indispensably essential oil and gas. And there are valuable deposits of radioactive minerals and construction material in several coastal strips and river valleys.

This was the period when Man appeared on the Indian terrain in an environment characterized by rapid tectonic upheavals, drastic topographic modifications and brisk climatic changes—from refrigeration of the Pleistocene to the semi-aridity of the Recent. Braving climatic vicissitudes, resisting the inexorable march of the desert, combating hazards of earthquakes, landslides,

floods and sea-storms, and battling against the waywardness of rivers that frequently changed their courses, the Stone-Age Man established footholds in geodynamically favourable and physiographically suitable locales practically throughout the subcontinent, making history that is ours. The flat stretches of the alluvial and deltaic plains not only served as the nurseries for the teeming millions, but also witnessed the stirring events of history that have welded the disparate racial stocks and ethnic groups into one nation.

Obviously, the Quaternary is the most fascinating period of the geological history of the Indian subcontinent.

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