

## Neotectonics: Case Histories from India

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The imperceptibly slow and secular as well as episodic crustal movements that have been taking place since the beginning of the Quaternary period some two million years ago, referred to as neotectonic activities have left their imprint in the context of India. Historical instances of sunken or buried archaeological sites are abundant: Harappa, Lothal, Nagarjunakonda and Arikamedu are some of these examples. Changes in the courses of rivers like mythical Saraswati, deflection of the Satluj, diversion of the Yamuna, the westward shift of the Indus upto 160 km and the wayward behaviour of the Kosi, Brahmaputra and Tista are interesting examples of geomorphic nature and changes. Structural dislocation and deformation have been noticed in the Himalayan region, particularly in the Kumaon region, Meghalaya, Narmada valley and Mussorie hills. While the extra peninsular India experienced many severe earthquakes, from Quetta in the west to Assam in the east before Independence, the earthquakes of 1967 in Koyna, of Latur in 1993 and of Jabalpur last year have confirmed the vulnerability of peninsular part to seismicity. These confirm the neotectonic activity in India. The buried cities of Dwaraka and Arikamedu on the west and east coasts respectively further confirm this activity.