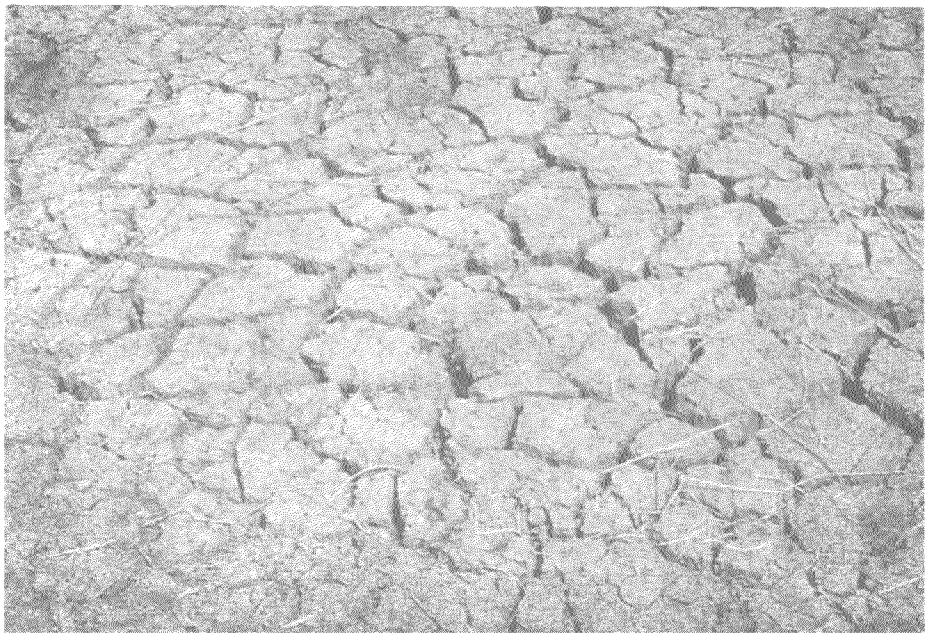


Drought condition of Bangladesh in dry season

2.4 TORNADOES

Tornadoes are quite common in the central part of the country. On April 14, 1969, a tornado with an extremely high wind speed swept through an area east of Dhaka (Demra) causing widespread damage: 922 people were killed and an economic loss of 40-50 million Taka (about US$1 million) was incurred. On April 26, 1989, another tornado with extremely high wind speed hit an area west of Dhaka (Saturia, Manikganj) and caused severe damage.

2.5 RIVERBANK EROSION

The deltaic plain of Bangladesh is young and undergoes change almost continuously. The major rivers are officially classified as either unstable (Meghna) or very unstable (Ganges and Brahmaputra). Both the Ganges and Brahmaputra show high rate of lateral migration and had changed courses significantly within the past 200 years. In Bangladesh, every monsoon period brings changes in the courses of the main channels of the Ganges and the Brahmaputra. Approximately 1 million people are affected each year by such river migration(9).

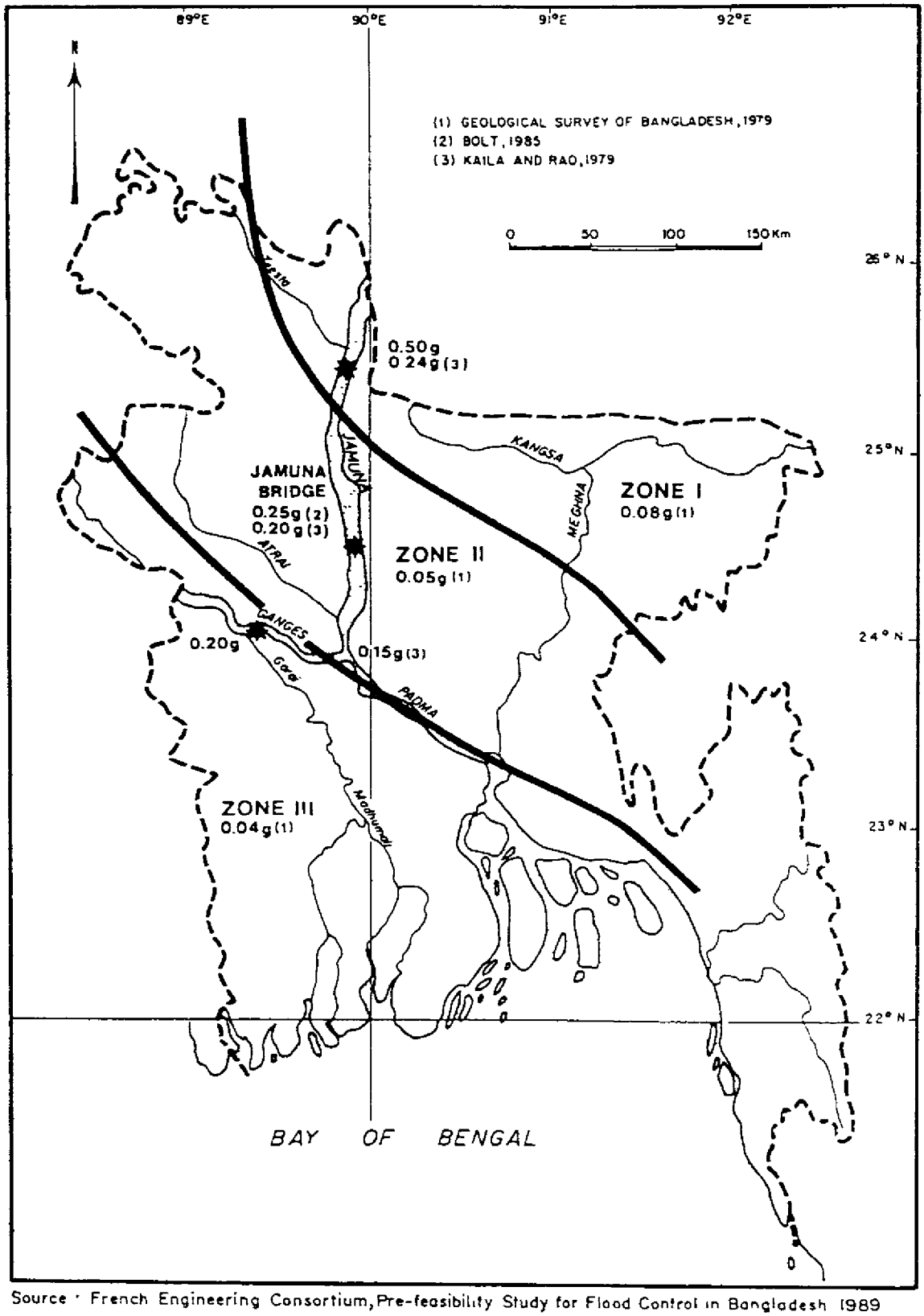
Riverbank erosion in Bangladesh

2.6 EARTHQUAKES

Bangladesh has been divided into three seismic zones (Geological Survey of Bangladesh, 1979):

- Zone I: most active zone with a basic seismic coefficient of 0.08, northern and northeastern parts
- Zone II: moderately active zone with a basic seismic coefficient of 0.05, includes the two largest cities, Dhaka and Chittagong
- Zone III: negligible shocks are observed, with a basic seismic coefficient of 0.04, southwestern part[9].

The great earthquake of 1897, with a Richter magnitude of 8.7 and epicenter at Shillong plateau of India, caused widespread damage throughout Bangladesh (including Dhaka). Three major earthquakes, i.e., Bengal earthquake of 1885, Srimangal earthquake of 1918 and Assam earthquake of 1950 (of magnitude 8.5) caused severe damage. A total of six earthquakes of magnitude greater than 7 (on the Richter scale) had affected Bangladesh during the last 140 years[9].



Source · French Engineering Consortium, Pre-feasibility Study for Flood Control in Bangladesh 1989

Seismic zones of Bangladesh (Source: Brammer et al., 1990)