# Hydrological Aspects of 2004 Floods in Bangladesh

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## ABSTRACT:

In an unusual climatic year of 2004 throughout the world, floods in Bangladesh were no exception. The country experienced a series of flood events, which were unusual in terms of timing, types and magnitudes. The flood recorded on 24 July 2004 was the 4th major event over a span of 17 years. Two major characteristics of monsoon floods of 2004 were the synchronization of peaks on the three major rivers, the Brahmaputra, the Ganges and the Meghna, with an unprecedented early timing of the arrival of flood peaks. While annually flooded areas show a decreasing trend with the growth of flood control projects in the country, the year-to-year variability of flooded area appears to be increasing in recent years. It is likely that flood control projects are protecting and reducing deeply flooded region while spreading the flood volume over a wider region. The analysis showed that peak floods of the Brahmaputra are increasing in magnitudes and variabilities. The year-to-year variation in flood flows of the Brahmaputra closely relates to that of flooded areas of the country, with more variations in recent past plausibly due to erratic rainfall in the upper basins and the influence of flood control projects within the country.

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