

Assam Floods-Crisis

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A fresh wave of floods has ravaged Assam, killing 73 and affecting nearly 40 lakh people across the state, 85% of the Kaziranga National Park and Tiger Reserve (KNPTR) remains submerged. Yet, the annual deluge is considered essential for the survival of the **UNESCO World Heritage Site**.

Impact on Kaziranga National Park

Assam is traditionally flood prone, and the 1,055 sq km KNPTR, **sandwiched between the Brahmaputra river and the Karbi Anglong Hills** is no exception. Among experts there is a consensus that floods are necessary for Kaziranga by virtue of its ecosystem. It is a **riverine ecosystem**, not a solid landmass-based ecosystem and hence it won't survive without water. The entire area of Kaziranga, formed by alluvial deposits from the Brahmaputra and its tributaries, is centred around the river.

The **regenerative nature of floods helps replenish Kaziranga's water bodies** and maintain its landscape, a mix of wetlands, grasslands and semi-evergreen deciduous forests. The floodwaters also function as a **breeding ground for fish** and help get rid of unwanted plants such as water hyacinth which collect in huge masses. In a herbivore-dominated area like Kaziranga, it is important to maintain its grassland status. If it were not for the annual floods, the area would become a woodland.

However earlier, a big flood would come once in ten years. Now, they happen every other year. **Massive deforestation** in catchment areas or **release of waters by dams upstream** may be contributory factors. Climate change models also predict that floods will become increasingly devastating with each year.

Cause of Floods

Assam with its vast network of rivers is prone to natural disasters like flood and erosion which has a negative impact on overall development of the state. The **Brahmaputra and Barak River with more than 50 tributaries feeding them**, causes the flood devastation in the monsoon period each year.

The flood and erosion problem of Assam is singularly different from other states so far as **extent and duration of flooding and magnitude of erosion** is concerned and is probably the most acute and unique in the country. The flood prone area of the state is 31.05 lakh hectares against the total area of state 78.523 lakh hectares i.e. about. **39.58% of the total land area of Assam**. This is about 9.40% of the total flood prone area of the country. The flood prone area of the country as a whole stands at about 10.2% of the total area of the country, signifying that the **flood prone area of Assam is four times the national mark** of the flood prone area of the country. The flood problem of the state is further aggravated due to **flash floods by the rivers flowing down from neighbouring states** like Arunachal Pradesh and Meghalaya. Another major problem being faced by the state of Assam is **bank erosion** by the river Brahmaputra, Barak and its tributaries. The width of river Brahmaputra has increased up to 15 Km at some places due to bank erosion and new areas are being affected by erosion every year.