



River Bhogdoi

Why in News

The **rampant coal mining** in Nagaland, coupled with **waste discharge from tea estates** and **encroachment** are **contaminating waters of River Bhogdoi in Assam**.

- In **2019**, the **Ministry of Environment, Forest and Climate Change** declared **Bhogdoi** as **one of the most polluted rivers in Assam** and **351st** among the polluted rivers in the country.

Key Points

▪ About:

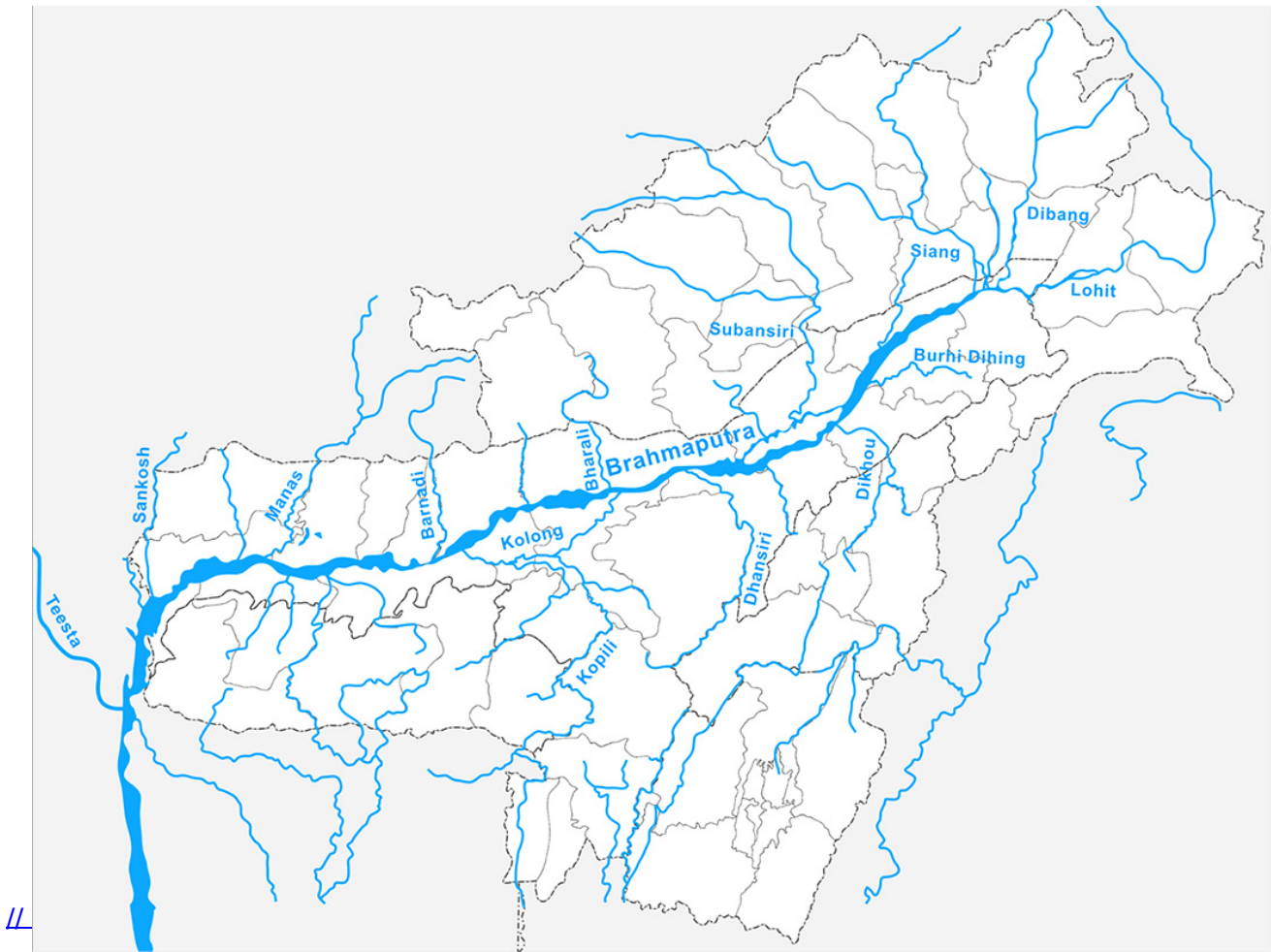
- It **originates from Mokokchung in Nagaland** where it is **also known as Tsujenyong nullah** and is the **south bank tributary of the [River Brahmaputra](#)**.
- It is an **inter-state river (flowing between Assam and Nagaland)** and **joins Dhansiri river** near its confluence with Brahmaputra.

▪ Issues:

- **Coal mining** in Nagaland introduced **high levels of manganese** in the river.
- **Chemical waste from the tea gardens** is turning the river poisonous and polluted.
- The drains carry **industrial and residential wastes**. The river has become **heavily silted, reducing its carrying capacity**.
- The high **[BOD \(Biological Oxygen Demand\)](#)** indicates low water quality and less oxygen for aquatic life.
- The **massive encroachments** along the river bank have been not only making the river narrower but also increasing the filth and garbage.
- **Disposing human excreta and cremating dead bodies along the river bank** are gradually contaminating the soil and water of the region. This is increasing the **threat of water-borne diseases**.

▪ Brahmaputra River:

- Brahmaputra River **originates** under the name of Siang or Dihang, **from the Chemayungdung glacier of the Kailash range** near the Mansarovar lake (Tibet). It **enters India west of Sadiya town in Arunachal Pradesh**.
- **Tributaries:** [Dihing River](#), [Dibang River](#), Lohit River, Dhansiri River, Kolong River, Kameng River, Manas River, Beki River, Raidak River, Jaldhaka River, Teesta River, Subansiri River.



Biochemical Oxygen Demand (BOD)

- **Water pollution by organic wastes is measured in terms of BOD.**
- BOD is the amount of Dissolved Oxygen (DO) needed by bacteria in decomposing the organic wastes present in water. It is expressed in milligrams of oxygen per litre of water.
- The **higher value of BOD indicates low DO content** of water.
- Since BOD is limited to biodegradable materials, it is not a reliable method of measuring water pollution.

Chemical Oxygen Demand (COD)

- COD measures the **amount of oxygen in parts per million required to oxidise organic** (biodegradable and non-biodegradable) and oxidizable inorganic compounds in the water sample.

Source: DTE