

VIBRANT GANGA 



Bagmati River



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

GENERAL INFORMATION

- The Bagmati River is a tributary of the Kosi River, which originates from the Shivpuri hill ranges in the North-East of Kathmandu, Nepal, at an elevation of 1500m a.s.l.
- The Bagmati River is 597 km long trans-boundary perennial river and flows through Nepal (206 km) and India (390 km).
- The River enters India near Shorwati village in Sitamari district, Bihar and joins Kosi River at Badiaghat in Khagaria district Bihar.

SALIENT FEATURES

- Of the total 14,384 km² catchment area of the Bagmati River, 55% lies in the Shiwalik foothills in Nepal. The remaining catchment are in the Indian territory is mostly alluvial plains.
- The alluvial plains of the Bagmati River lie between the interfacing zone of Gandak and Kosi megafans.
- The average annual rainfall of the basin is roughly 1250 mm, of which 1120 mm falls during the monsoon season (June-September). The foothills (upstream basin area) receives more rainfall (>2000 mm annually).
- The River valley has a warm temperate and semitropical type of climate with the warmest month in May to June and the coldest month in January to February. The average temperature of the river basin is 27°C.

BIODIVERSITY VALUE

- Presence of Gangetic dolphin and ghariyals were documented in lower stretch of the river in India.
- 67 bird species have been documented from the Bagmati River in Nepal whereas 39 water and water-associated bird species were documented in the Indian stretch of the River.





KEY PROTECTED AREA

Some of the key protected areas in the Bagmati River basin are:

Shivapuri Nagarjun National Park:

This national park is located in Nepal, north of the Bagmati River and covers an area of 159 km². The park is home to several species of wild animals including Himalayan Black bear, leopard, jungle cat, barking deer and wild boar.

Kanwar Lake Bird Sanctuary:

Kanwar Lake, located in Bihar's Begusarai district, is Asia's largest freshwater oxbow lake. The Ministry of Environment, Forests, and Climate Change (MoEFCC) designated it as Bihar's first Ramsar site in November 2020. It encompasses 2,620 hectares of the Indo-Gangetic plains in northern Bihar. The Wetland is a vital stopover in the Central Asian Flyway, with 58 migratory waterbirds stopping here to rest and recharge. It is also an important place for fish biodiversity, with over 50 species identified.

Kusheshwar Asthan Bird Sanctuary:

Kusheshwar Asthan Bird Sanctuary, stretched over 28.41 km², is a conglomeration of 14 water-logged villages in the Kusheshwar Asthan block of Darbhanga district, Bihar. A huge number of winter migrant waterbirds use this place as a stopover site. Many rare winter migrant waterbirds were documented.



INTERESTING FACTS

- The Bagmati river is one of the most popular and sacred river of Nepal. The river is the symbol of civilization of the Kathmandu Valley.
- The Bagmati River is considered holy by both Hindus and Buddhists. Bagmati River is described as a source of spiritual purity and a place for performing important religious ceremonies.
- The river is also associated with Lord Shiva, and the Pashupatinath Temple, located on the banks of the Bagmati River in Kathmandu, is one of the most important Hindu temples in the world.

DRIVERS OF RIVERSCAPE CHANGE

- The Bagmati River and its surrounding landscape have undergone significant changes over time due to various anthropogenic stressors such as channelization and encroachment by human settlements, infrastructure, and agriculture.
- The geomorphological alterations in the Bagmati River and its surrounding landscape due to rapid urbanization have led to loss in biodiversity.
- Deforestation and agricultural expansion have resulted in soil erosion, increased sedimentation, and vegetation loss along the river banks.
- Changes in precipitation patterns and temperatures regime has altered River's flow and hydrology.



NMCG

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