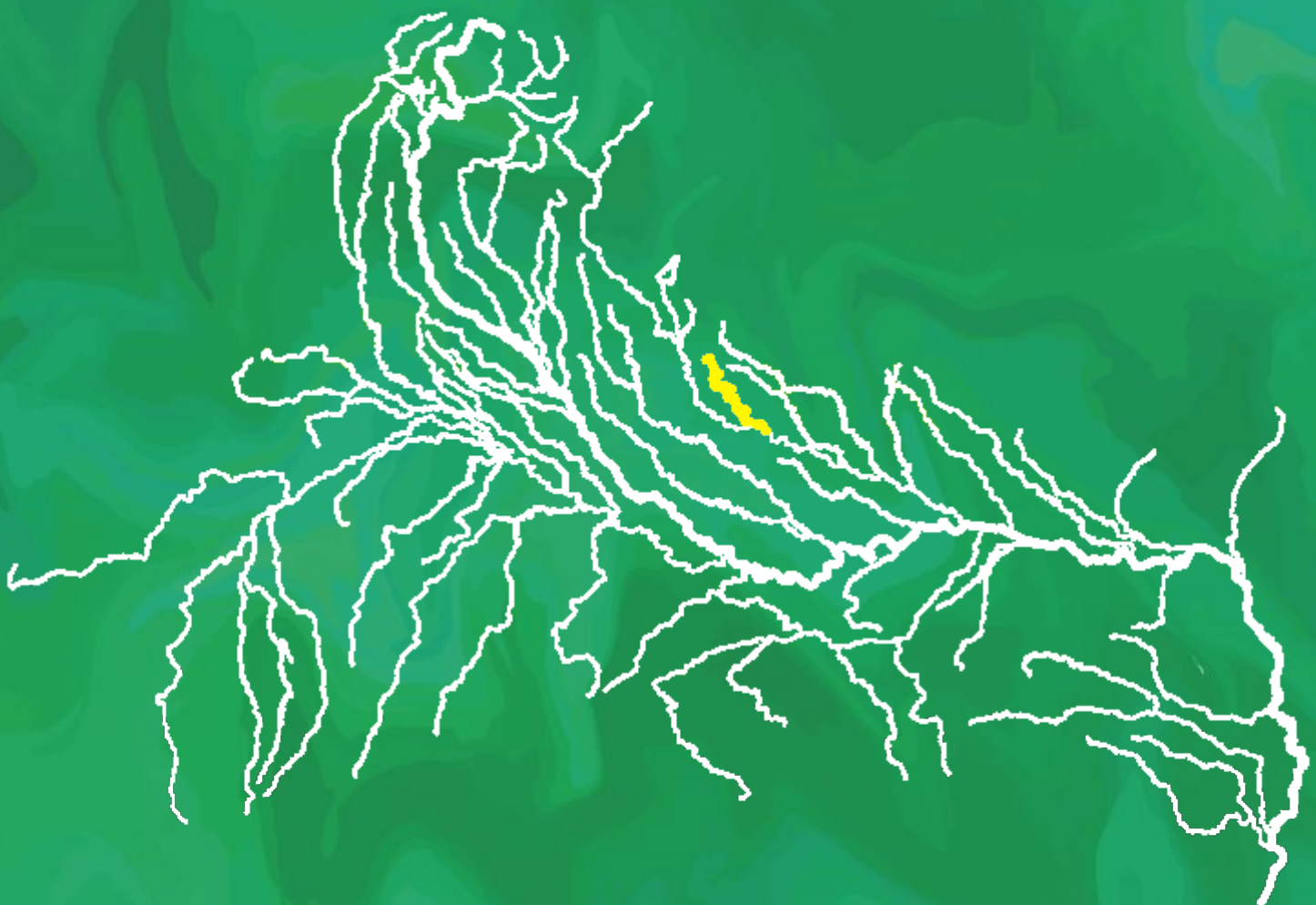
VIBRANT GANGA

नमामि गंगे

भारतीय वन्यजीव संस्थान
Wildlife Institute of India

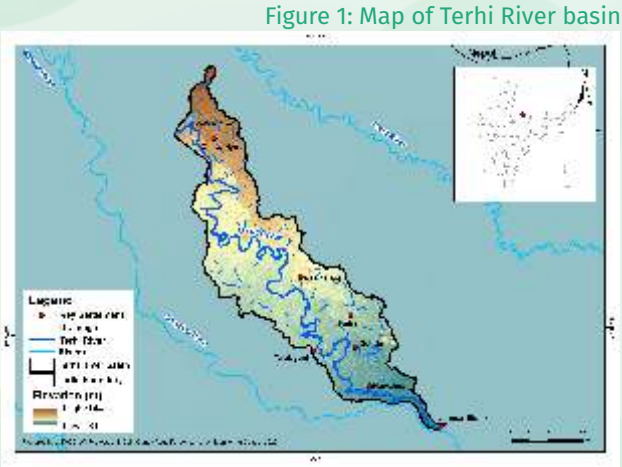


Terhi

GENERAL INFORMATION

- Terhi (Tedhi) River, a tributary of Ghaghra River, originates from an oxbow-lake Chitaura Jheel, in Bahraich district of Uttar Pradesh. It flows for 255 km in south-east direction through the districts of Bahraich, Gonda, Ayodhya and Basti in Uttar Pradesh.
- It joins left bank of the Ghaghra River downstream of Ayodhya, near Jamuar Siddik village in Basti district.
- Terhi River basin spans and area of about 1756.12 km² (Figure 1).
- The basin lies in the Gangetic Plain (Upper Gangetic Plains - 7A) biogeographic zone.
- The basin experiences a subtropical monsoon climate, characterized by hot summers, a distinct rainy season, and cold winters.
- Terhi River exhibits a dendritic drainage pattern with a highly meandering course in the low-lying alluvial plains.
- Jamwar Nala, Manda Nala and Chandaha Nala are the major tributaries of Terhi.
- The population density along the river is 830.96 persons/km^2.
- Decadal LULC transitions in the Terhi River basin (2008–09 to 2018–19) recorded an increase in areas under double/triple cropping (17.06%) and built-up area (0.30%), and a marked decrease in rabi crop (–11.76%), current fallow (–4.09%) and wasteland (–1.39%). Area under plantation (–0.01%), deciduous forest (–0.04%), deciduous/scrub forest (–0.01%) and water bodies (–0.07%) remained largely stable with marginal to no changes (Figures 2a and 2b).

Figure 1: Map of Terhi River basin



BIODIVERSITY VALUE

- Terhi River basin is dominated by non-forest areas (98.36%), followed by open forest (0.98%), very dense forest (0.48%) and moderately dense forest (0.18%) (Figure 3).
- The upper basin supports Tropical Moist Deciduous Forests, represented by the Moist Siwalik Sal Forests and Moist Terai Sal Forests, dominated by *Shorea robusta*, *Terminalia tomentosa*, *Syzygium cumini*, and *Madhuca longifolia*, with riparian belts of *Saccharum spontaneum*, *Phragmites karka*, and *Typha angustifolia*. The middle reaches across Gonda, the landscape shifts to riverine sub-types, particularly Khair–Sissoo Riverine Forests, characterised by *Dalbergia sissoo*, *Terminalia arjuna*, *Syzygium cumini*, and *Barringtonia acutangula*, accompanied by tall floodplain grasses. The lower reaches supports Littoral and Swamp Forests, notably Tropical Freshwater Swamp Forests, including sub-types such as *Barringtonia* Swamp Forests and *Syzygium cumini* Swamp Low Forests, along with extensive floodplain grasslands dominated by *Saccharum spontaneum*, *Chrysopogon aciculatus*, *Echinochloa crus-galli*, and *Cyperus* spp.
- Parvati Arga Bird Sanctuary in the basin is a Ramsar Site, and comprises of oxbow lakes.
- Six mammal species have been reported from Tikri Forest in Gonda district.
- 140 avifauna species have been reported from Parvati Arga Bird Sanctuary, including Endangered Egyptian vulture (*Neophron percnopterus*), and Vulnerable common pochard (*Aythya ferina*) and sarus crane (*Grus antigone*).
- 11 reptile species have been recorded from Gonda, including Vulnerable Indian flapshell turtle (*Lissemys punctata*) have been recorded from the river.
- Three amphibians including *Rana tigrina*, *Duttaphrynus melanostictus*, and *Euphlyctis cyanophyctis* have been recorded from Gonda.
- From Chitaura Jheel, 38 fish species (14 families and 7 orders) have been reported, including Vulnerable *Wallago attu* and Near Threatened *Chitala chitala*.

Figure 2a: LULC map of Terhi River basin (2008-09)

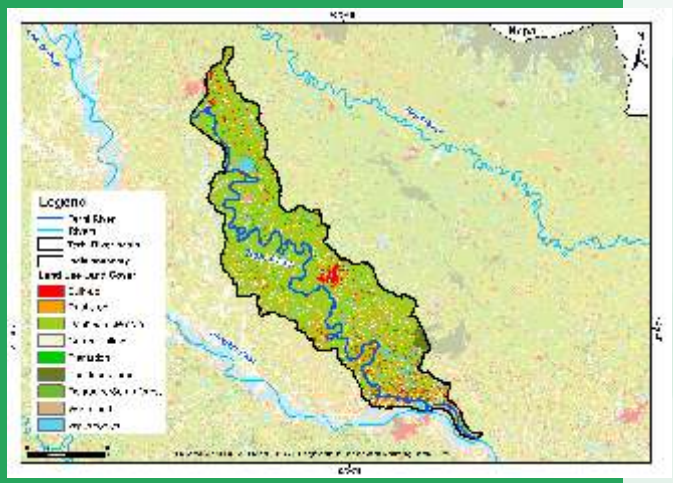


Figure 2b: LULC map of Terhi River basin (2018-19)

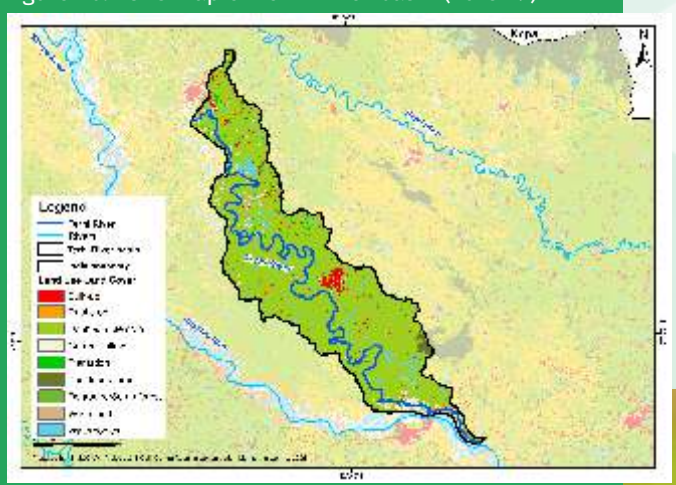


Figure 3: Forest cover of Terhi River basin (2019)

CONSERVATION SIGNIFICANCE

ENDANGERED

Avifauna

Egyptian vulture *Neophron percnopterus* (Linnaeus, 1758)

VULNERABLE

Avifauna

Common pochard *Aythya ferina* (Linnaeus, 1758)

Sarus crane *Grus antigone* (Linnaeus, 1758)

Reptiles

Indian flapshell turtle *Lissemys punctata* (Lacépède, 1788)

Fish

Wallago attu (Bloch and Schneider, 1801)

KEY PROTECTED AREAS

Parvati Arga Bird Sanctuary

Indian flapshell turtle (*Lissemys punctata*) | ©*Urvashi*

DRIVERS OF RIVERSCAPE CHANGE

- Unregulated encroachment and construction along the riverbanks in Gonda district, leading to alteration of the natural floodplain and disruption of the river's morphological processes.
- Unregulated extraction of sand and sediments from the riverbed and adjacent floodplain areas has modified channel morphology and sediment distribution in several reaches of the river.
- The expansion of settlements in Bahraich and Gonda, along with the discharge of untreated domestic sewage and solid waste, has contributed to localised degradation of water quality in the Terhi River.
- Intensive agriculture dominates the Terhi River basin, with extensive conversion of floodplains for cultivation and associated reduction of natural riparian vegetation.

INTERESTING FACTS

- Terhi River forms a key geomorphic transition zone between the Terai belt of Bahraich and the *Uparhar* (upland areas) plains of Gonda, indicating that the river once occupied a broader course and played a long-term role in shaping the landscape of the Oudh region.
- The mahal known as Kharonsa, lay within Gonda and occupied the tract between the Terhi River and Kuwana River, stretching eastward to the boundary of Utraula; it once contained a brick-fort headquarters where local zamindars, likely of the Bisen Rajput line, maintained cavalry and infantry, at a time when much of the area remained forested and sparsely cultivated.
- Chitaura holds cultural significance, as regional historical traditions associate it with the 1034 CE Battle of Bahraich in which Raja Suheldev of Shravasti is believed to have defeated Ghaznavid commander Ghazi Salar Masud, a narrative preserved in the 17th-century *Mirat-i-Masudi* and local oral histories that recount his alliance of regional chiefs and tactical use of concealed caltrops to disable the invading cavalry.
- Raja Datt Singh, a prominent Rajput ruler of the northern plains between the Ghaghra River and the Terai, emerged as a key regional power when he launched a retaliatory campaign against the Pathans of Bahraich and later advanced his operations southward across the Terhi River; supported by the Pathans of Utraula, his campaigns underscore the Terhi corridor's importance as an early political and military boundary.

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