

# NMCG-WII GANGA BIODIVERSITY CONSERVATION INITIATIVE PHASE II

**PLANNING AND MANAGEMENT FOR  
AQUATIC SPECIES CONSERVATION AND  
MAINTENANCE OF ECOSYSTEM SERVICES  
IN THE GANGA RIVER BASIN FOR A  
CLEAN GANGA**

**HALF YEARLY REPORT  
JULY - DECEMBER 2025**





# NMCG-WII GANGA BIODIVERSITY CONSERVATION INITIATIVE PHASE II

**PLANNING AND MANAGEMENT FOR  
AQUATIC SPECIES CONSERVATION AND  
MAINTENANCE OF ECOSYSTEM SERVICES  
IN THE GANGA RIVER BASIN FOR A  
CLEAN GANGA**

**HALF YEARLY REPORT  
JULY - DECEMBER 2025**

**PLANNING AND MANAGEMENT FOR AQUATIC SPECIES CONSERVATION AND MAINTENANCE OF ECOSYSTEM SERVICES IN THE GANGA RIVER BASIN FOR A CLEAN GANGA: Half Yearly Report, July – December 2025**

**Director, WII**  
Gobind Sagar Bhardwaj

**Dean, FWS, WII**  
Ruchi Badola

**Project Investigators**  
Ruchi Badola, Syed Ainul Hussain

© Ganga Aqualife Conservation Monitoring Centre,  
Wildlife Institute of India, Dehradun

This document is an output of the project Planning and Management for Aquatic Species Conservation and Maintenance of Ecosystem Services in the Ganga River Basin for a Clean Ganga sponsored by the National Mission for Clean Ganga, Ministry of Jal Shakti, Government of India, New Delhi.

Wildlife Institute of India Chandrabani, Dehradun – 248001,  
Uttarakhand, India

**Editing and Layout**  
Shivani Barthwal and Priti Kumari

**Text Compilation**

Component 1: SK Zeeshan Ali, Neeraj Mahar, Ruchika Sah,  
Ashish Panda, Ajay P. Rawat

Component 2: Sangeeta Angom and Soufil Malik

Component 3: Pariva Dobriyal, Ekta Sharma, Nidhi Singh and  
Amanat K. Gill

**Field and Laboratory Activities**

Sandhya Joshi, Hemlata Khanduri, Deepika Dogra, Sunita Rawat,  
Aftab A. Usmani, Ekta Sharma, Uttaran Bandopadhyay, P.  
Gangaiamaran, Ashish Mani, Kante Krishnaprasad, Sakshi Rana,  
Abhimanyu Singh, Hema Pant, Priyanka Munesh, K. P. Upadhyay,  
Vinita Sagar, Danish Kaleem, Alankrita Sharma, Simran Aggarwal,  
Ashmika Aggarwal, Sheetal Pal, Anshul Bhawsar, Rahul Gupta,  
Revan Y. Chaudhari, Mohit Payal, Piyush Kumar Anuj, Debdulal  
Jana, Mayur Markad, Madhvi Dhairyakar, Vikas Verma, Deepak  
Panwar, Ajay Singh, Devjyoti, Vikas Gautam, Pooja Chaudhary,  
Samridhi Gururani, Rahul Rana, Srija Das, Shivani Farswan,  
Umama Khan, Smrithy S., Khadija and Ganga Praharis.

**Photo Credit**  
NMCG Team

**Layout Assistant**  
Priya Tomar

**Citation**

WII-GACMC (2026). Planning and Management for Aquatic  
Species Conservation and Maintenance of Ecosystem Services  
in the Ganga River Basin for a Clean Ganga.  
Half Yearly Report July – December 2025. Ganga Aqualife  
Conservation Monitoring Centre, Wildlife Institute of India,  
Dehradun, Uttarakhand, India. Pp. 32



## ACKNOWLEDGEMENTS

### Ministry of Jal Shakti

C. R. Patil, *Union Minister*  
V. Somanna, *Minister of State*  
Raj Bhushan Choudhary, *Minister of State*  
V. L. Kantha Rao, *Secretary*

### National Mission for Clean Ganga (NMCG)

Rajeev Kumar Mital, *Director General*  
Nalin Kumar Srivastava, *Deputy Director General*  
Bhaskar Dasgupta, *Executive Director (Finance)*  
Brijendra Swaroop, *Executive Director (Projects)*  
Anup Kumar Srivastava, *Executive Director (Technical)*  
Sandeep Behera, *Biodiversity Consultant*

### Ministry of Environment, Forest and Climate Change

Bhupender Yadav, *Union Minister*  
Kirti Vardhan Singh, *Minister of State*  
Tanmay Kumar, *Secretary*  
Naresh Pal Gangwar, *Additional Secretary*  
Amandeep Garg, *Additional Secretary*  
Sushil Kumar Awasthi, *Director General of Forest & Special Secretary*  
Santosh Tiwari, *Additional Director General of Forest (Forest Conservation)*  
Ramesh Pandey, *Additional Director General, Wildlife*  
Vaibhav Chandra Mathur, *Inspector General, Wildlife*

### Forest and Environment Department of Uttarkhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal

### Special Gratitude

Gajendra Singh Shekhawat, *Former Union Minister of Jal Shakti*  
Pankaj Kumar, *Former Secretary, Ministry of Jal Shakti*  
Debashree Mukherjee, *Former Secretary, Ministry of Jal Shakti*  
Rajiv Ranjan Mishra, *Former Special Secretary and Director General, NMCG*  
G. Asok Kumar, *Former Special Secretary and Director General, NMCG*

### Wildlife Institute of India

Gobind Sagar Bhardwaj, *Director*  
Ruchi Badola, *Dean*



# CONT

## COMPONENT 1:

SCIENCE-BASED  
AQUATIC SPECIES  
CONSERVATION AND  
MAINTENANCE OF  
ECOSYSTEM SERVICES  
IN THE GANGA RIVER  
BASIN

River Reports  
and Brochures

01

Species  
Reports

04

Wetland  
Reports

05

Rescue and  
Rehabilitation of  
Aquatic Species

06

## COMPONENT 2:

CAPACITY BUILDING OF  
THE FOREST  
DEPARTMENT AND  
OTHER STAKEHOLDERS  
IN MANAGING AQUATIC  
AND WETLAND  
RESOURCES

18



# CONTENTS

<b>COMPONENT 3: DEVELOP COMMUNITY BASED AQUATIC SPECIES CONSERVATION AND OUTREACH PROGRAMMES FOR THE GANGA RIVER BASIN</b>	Conservation Through a Growing Ganga Prahari Network	19	Publications	28
	Bal Ganga Prahari Programme	22	In News	31
	River Conservation Through Interpretation Centre and Awareness	24		

# COMPONENT

# 1

## SCIENCE-BASED AQUATIC SPECIES CONSERVATION AND MAINTENANCE OF ECOSYSTEM SERVICES IN THE GANGA RIVER BASIN

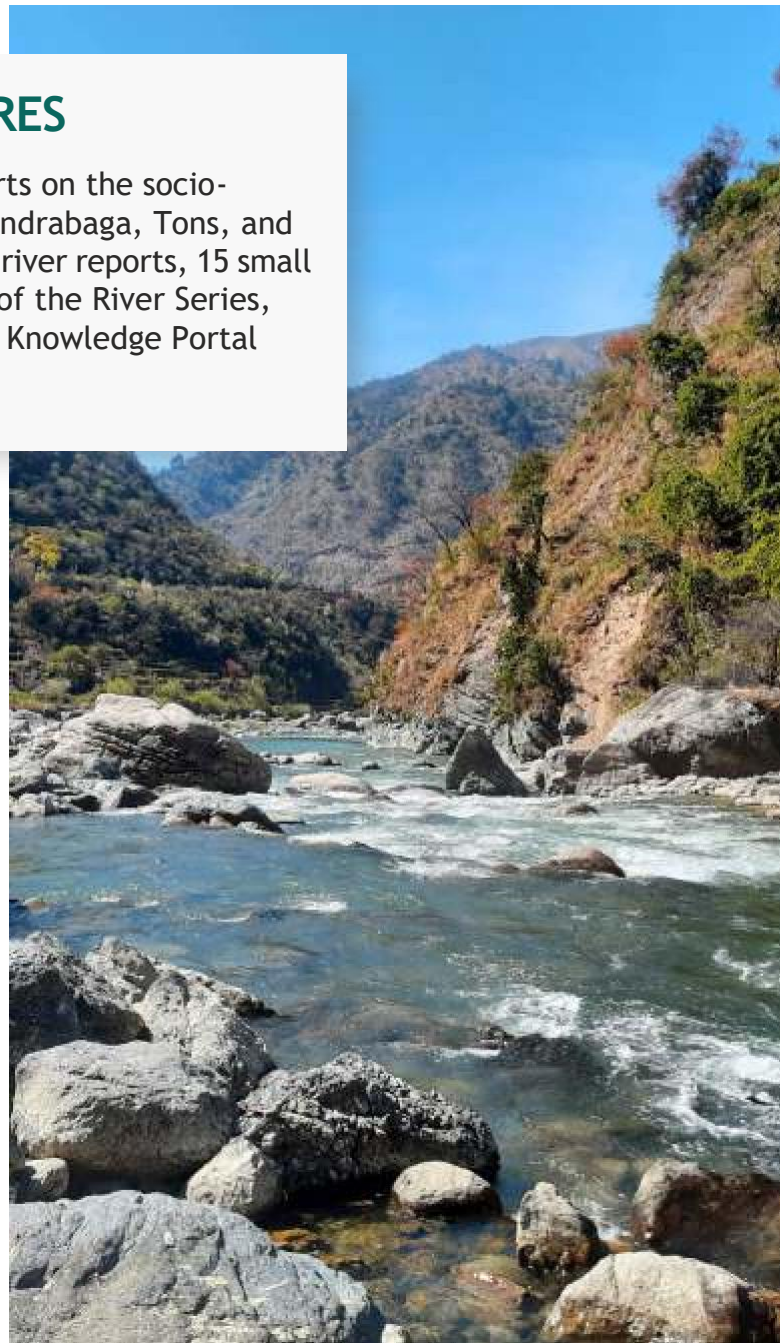
### RIVER REPORTS AND BROCHURES

Between July and December 2025, five reports on the socio-ecological status of the Yamuna, Suswa, Chandrabaga, Tons, and Song rivers were submitted. Along with these river reports, 15 small river brochures were also submitted as part of the River Series, and these have been uploaded on the Ganga Knowledge Portal (<https://gyanganga.ai/>).

#### Yamuna River

Submitted a report on the socio-ecological status of the Yamuna River. 537 species were recorded, including 282 plant species, 90 fishes, eight amphibians, along with reptiles, birds, and mammals; of these, 3.72% are globally threatened and 2.42% Near Threatened as per the IUCN Red List. Plant diversity was notably high, with 282 angiosperm taxa (207 genera, 63 families), dominated by Poaceae, followed by Fabaceae and Asteraceae. Herbaceous species were most common, and around 20% of the flora comprised introduced species. Species richness was highest in the middle and lower stretches, and generally declined with increasing distance from the river. However, invasive aquatic plants and degraded habitat conditions were observed in several stretches.

Faunal assessments revealed ecological stress. Fish diversity included 90 species dominated by Cypriniformes, but the presence of five invasive fish species poses threats to native assemblages. Amphibian diversity was low, with eight species recorded, while reptilian observations included significant turtle populations (569 individuals, mostly *Pangshura*) and restricted occurrences of gharial (*Gavialis gangeticus*) and mugger (*Crocodylus palustris*). Gharial encounter rates ranged from 0.09 to





0.24 sightings/km, with 40-82 individuals recorded, primarily in the lower stretch.

Avifaunal diversity was substantial, with 109 bird species recorded, including three Endangered, five Vulnerable, and seven Near Threatened species such as the Indian skimmer (*Rynchops albicollis*), black-bellied tern (*Sterna acuticauda*), and steppe eagle (*Aquila nipalensis*). Waterbird diversity was highest in the middle zone ( $H^{\prime}=3.22$ ), followed by lower and upper zones, with great cormorant as the most abundant species. Nesting assessments recorded 883 nesting events, with little tern as the dominant nesting species. Gangetic dolphin (*Platanista gangetica*), the only mammal recorded, is now largely confined to the lower Yamuna, indicating a contraction of its historical range, with encounter rates ranging from 0.02 to 0.13 sightings/km.

Ecotoxicological analysis revealed severe multi-pollutant contamination, with heavy metals and plastic additives dominating, alongside widespread endocrine-disrupting chemicals (EDCs). The Delhi-Agra pollution corridor emerged as the primary contamination hotspot, contributing the majority of detected pollutants, driven by untreated sewage, industrial discharge, and tourism pressures. Key sites such as Wazirabad-Okhla, Hindon confluence, Vrindavan, and downstream of the Taj Mahal showed repeated contamination. Overall, the study indicates declining aquatic habitat quality, increasing invasive species, and shrinking distributions of key fauna, underscoring the urgent need for habitat restoration, improved wastewater management, and long-term ecological monitoring.

## Suswa River

The report highlights the socio-ecological status of the Suswa River, a tributary of the Song River originating in the Doon Valley and draining into the Ganga. Land use analysis shows that the basin is dominated by deciduous forests (~59.7%), but increasing built-up areas and agricultural expansion reflect rising anthropogenic pressure, especially around Dehradun. The basin supports rich biodiversity, with around 491 plant taxa, 73 fish species, and diverse faunal groups, benefiting from connectivity with Rajaji National Park. However, the river is increasingly threatened by urbanization, untreated sewage, industrial discharge, sand mining, and agricultural runoff, leading to habitat degradation, pollution, and reduced ecological integrity. Despite these challenges, the river holds high conservation value as part of the Shivalik Elephant Reserve and an important wildlife corridor. The study emphasizes the urgent need for habitat restoration, improved waste management, and long-term ecological monitoring to ensure sustainable management of the river ecosystem.

## Chandrabhaga River

The report highlights the socio-ecological status of the Chandrabhaga River, a minor tributary of the Ganga in Uttarakhand. The basin (~190 km<sup>2</sup>) is largely forest-dominated (~73%), with deciduous (~56%) and evergreen (~15%) forests, though increasing built-up areas and agriculture indicate rising anthropogenic pressure. The river supports notable biodiversity, including 158 plant taxa, 62 fish species, ~40 mammal species, 165 bird species, 21 reptile species, and 10 amphibian species. However, threats such as water abstraction, sand mining, river modification, and urbanization have led to habitat degradation, especially in downstream stretches. Despite these pressures, the basin holds ecological significance due to its connectivity with forest landscapes linked to Rajaji National Park. The findings emphasize the need for ecological monitoring, habitat restoration, and integrated conservation strategies.

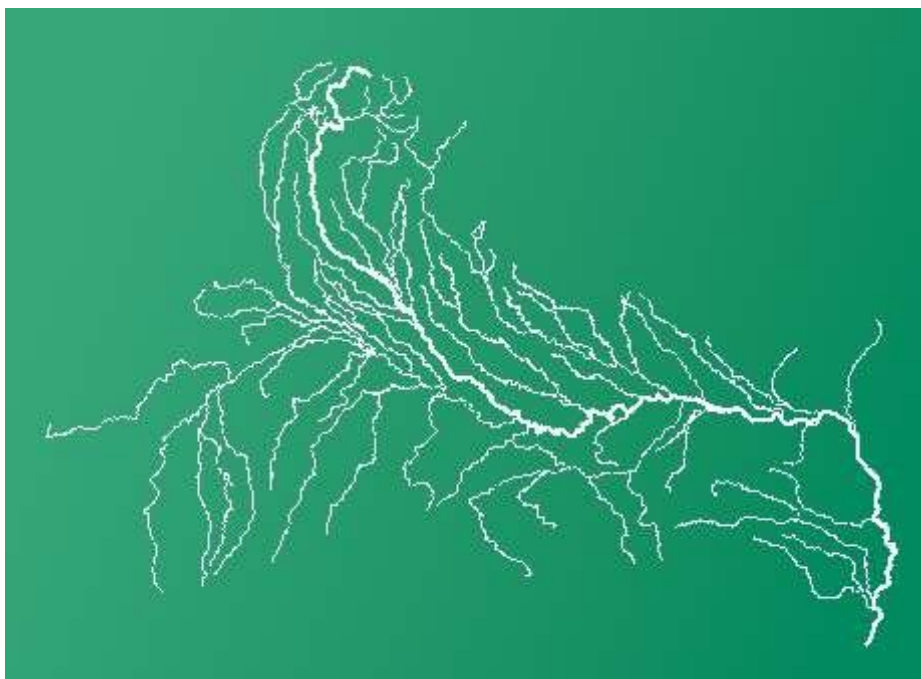
## Tons River

The report highlights the socio-ecological status of the Tons River, the largest tributary of the Yamuna in the Himalayan region. It originates from the confluence of Har ki Dun Gad and Ruinsara Gad in the Garhwal Himalaya and joins the Yamuna near Kalsi in Dehradun. Land use-land cover analysis shows dominance of evergreen forests (~45%), with overall forest cover around 44%, followed by wasteland (~24%) and grasslands (~6%). Increasing agricultural activities and built-up areas indicate growing anthropogenic pressure in the basin. The river supports rich biodiversity, including 321 plant taxa (212 genera, 73 families), ~39 mammal species, 128 bird

species, 22 herpetofaunal species (14 reptiles and 8 amphibians), and 30 fish species. Key threats include hydropower development, illegal sand mining, overexploitation of forest resources, grazing, water abstraction, and climate-induced hazards such as landslides. Despite these pressures, the Tons River basin holds high conservation significance due to its location within protected areas and its role in supporting diverse Himalayan biodiversity and maintaining ecological connectivity within the Ganga river system, emphasizing the need for conservation and sustainable management.

## Song River

The report highlights the socio-ecological status of the Song River, a tributary of the Ganga originating near Surkanda Devi Temple in the Shivalik Himalaya and flowing ~80 km through Tehri Garhwal and Dehradun. Land use-land cover analysis shows dominance of deciduous forests (~53%), with overall forest cover ~65.64%, though increasing agriculture and built-up areas indicate rising anthropogenic pressure. The basin supports notable biodiversity, including ~170 plant taxa (54 families), ~41 mammals, 218 birds, 21 reptiles, 10 amphibians, and 83 fish species. Major threats include urbanization, untreated sewage, sand and boulder mining, water abstraction, plastic pollution, and agricultural runoff. Despite these pressures, the basin holds high conservation significance due to its connectivity with forest landscapes near Rajaji National Park and its role in supporting diverse aquatic and terrestrial species, highlighting the need for habitat restoration, pollution control, and long-term ecological monitoring.



## River Brochures

Prepared and submitted brochures on small rivers Alaknanda, Barakar, Betwa, Bhagirathi, Dhauliganga, Karamansa, Ken, Kosi, Mandakini, Morhar, Nandakini, Sai, Sind, and Punpun-to NMCG. These brochures include general information, biodiversity value, interesting facts, and drivers of riverscape change.



## SPECIES REPORTS

Between July and December 2025, three reports on conservation-significant species were submitted. These reports highlight the current status of gharial, Gangetic dolphin, and island-nesting birds in the Ganga River basin.

### Status of the Island Nesting Waterbirds in the Ganga and Select Tributaries

This report highlights the ecological importance of riverine islands as key nesting habitats for terns, skimmers, plovers, lapwings, and other waterbirds in the Ganga Basin. Based on surveys conducted in 2023 and 2024 across the mainstem Ganga and five tributaries, the study recorded 13 nesting species, with the highest diversity in the Ghaghra River (11 species) and the lowest in the Gandak (1 species). In 2023, 232 nesting events, 429 eggs, 61 hatchlings, and 1,249 fledglings were documented, while 2024 showed a significant rise with 1,832 nesting events, 4,022 eggs, 214 hatchlings, and 356 fledglings across 12 species, including the endangered black-bellied tern. The report underscores the critical role of rivers like the Chambal and Son for threatened species and stresses urgent conservation needs due to pressures from sand mining, agriculture, and settlements. The report was released by Sh. V. L. Kantha Rao, Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti and DDG, NMCG during the Ganga Utsav, held on 5<sup>th</sup> November 2025 in Ayodhya, Uttar Pradesh.



### Population Status and Conservation Action Plan for the Critically Endangered Gharial (*Gavialis gangeticus*) in the Ganga River Basin

This report assesses the distribution, population status, and conservation needs of the species. Extensive boat-based surveys were conducted between November 2020 and March 2023 across 7,680 km of 22 rivers in seven states within the Ganga basin.

The survey recorded 3,037 gharial individuals in 13 rivers, indicating that populations remain highly concentrated in a few strongholds. The Chambal River supports the largest population (2,097 individuals), followed by the Ghaghra and Girwa rivers, which serve as important breeding and refuge habitats. In contrast, several rivers showed extremely low or no sightings, reflecting fragmented distribution and declining habitat quality.

Major threats include habitat degradation, sand mining,

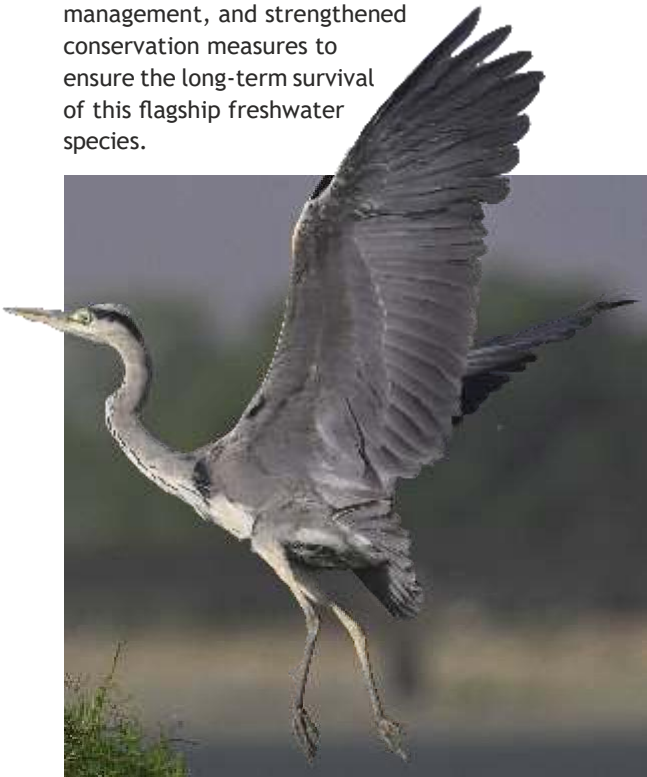
fishing-related mortality, river regulation, and human disturbances. The report recommends targeted conservation actions such as habitat protection, restoration of riverine sandbanks, monitoring of released individuals, community participation, and long-term ecological research to support recovery of this critically endangered species in the Ganga basin.

## Prioritization of River Stretches for Conservation of Gangetic Dolphin in the Ganga Basin

This report assesses the distribution, population status, and conservation priorities of the Gangetic dolphin across the Ganga basin. The study compiled historical information and recent survey data to evaluate population trends and habitat conditions. Extensive boat-based surveys were conducted between 2020 and 2023 across 22 rivers covering about 7,680 km of river stretches.

During the surveys, 2,510 dolphin sightings were recorded, with significant populations observed in the Ganga, Ghaghra, Kosi, and Gandak rivers, and dolphins occupying about 40% of the surveyed river stretches. The study also used spatial modelling to identify approximately 2,850 km of suitable habitats within the basin and classified river stretches into high, moderate, and low conservation priority zones.

Major threats include pollution, reduced water flow, sand mining, dredging, dams and barrages, fishing net entanglement, and poaching. The report highlights the need for targeted habitat protection, improved river management, and strengthened conservation measures to ensure the long-term survival of this flagship freshwater species.



## WETLAND REPORTS

### Status of Select Wetlands in the Ganga River Basin (Volume I & II)

The reports “Status of Select Wetlands in the Ganga River Basin” (Volumes I and II) provide an assessment of wetland biodiversity and pollution threats across the Ganga basin. Wetlands in this basin support rich biodiversity and provide important ecosystem services such as flood regulation, water purification, and livelihood support, but they are increasingly threatened by anthropogenic pressures.

Volume I documents the biodiversity status of 20 wetlands across Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, and West Bengal based on winter surveys conducted during 2023-2025. The study recorded 41,366 individuals of 90 water and water-associated bird species belonging to 11 orders and 21 families, including several globally threatened species. Wetlands such as Haiderpur, Surajpur, and Asan showed high species richness and abundance. Major threats identified include

encroachment, unsustainable fishing, grazing pressure, invasive species, and shrinking wetland areas.

Volume II focuses on pollution threat assessment in six priority wetlands—Kabartal, Udhw Lake, Sundarban, East Kolkata Wetlands, Haiderpur, and Gogabil. Water, sediment, and fish samples from 50 sites were analysed for 61 chemical analytes, including heavy metals, pesticides, pharmaceuticals, and plastic additives. The assessment revealed that around 67% of wetlands are in poor ecological condition, largely due to industrial discharge, agricultural runoff, and urban wastewater.

Together, the reports highlight the urgent need for integrated wetland management, pollution control, and long-term ecological monitoring to conserve biodiversity and maintain ecosystem services in the Ganga River basin.



## RESCUE AND REHABILITATION OF AQUATIC SPECIES

### Renovation activities

#### Turtle Rescue and Rehabilitation Centre, Sarnath, Uttar Pradesh

The centre has three enclosures (Enclosure I, II & III), one hatchery, and a medical care room. The infrastructure required renovation and improvements to meet the evolving needs of the centre. The centre aims



to improve the husbandry conditions for turtles and facilitate their rehabilitation before release back into the wild.

#### Enclosure renovation

All three ponds in this rescue centre are currently functional. Pond I is dedicated to Yearling turtles, Pond III is dedicated to Rescue turtles, and Pond II is for Hatchlings. In Pond I, some overhanging trees were blocking sunlight, which hindered the basking of hatchlings, especially in winter when exposure and temperature are very low. To address this, some branches were pruned.



The wire mesh covering the enclosures, which protects the in-house turtles from potential threats, was rusted and damaged in all three ponds. Damaged portions of the mesh were repaired.

### Enclosure enrichment

Enclosure enrichment is one of the most important parts of animal husbandry in captive facilities. It provides the desirable stimuli necessary for optimal psychological and physiological well-being. To enhance the well-being of the turtles, the enclosures were upgraded with some enrichments.

- Wooden logs are used for basking and are potential hiding places. Additional wooden logs have been strategically placed in the enclosures.



- Turtles also prefer rubber mats for basking, as they provide a strong grip for the animals to haul out of the water and minimize abrasion from the coarse cement surface. The old rubber mats were damaged, so new rubber mats have been added to all three enclosures. They are placed at several points in all the ponds.



- Bamboo thatch is an important shading platform preferred by captive turtles. It is also used for basking and hiding places. The old bamboo thatches were damaged. New bamboo thatches were added to replace the damaged thatches in the enclosures. The shades were mainly placed in spots identified as spaces normally used by the animals.

## Gharial Eco-Park, Deori, Madhya Pradesh

### Enclosure renovation

Renovation work is currently underway for two turtle rearing pools at the Eco-Park. The upgrades include the construction of protective partitions and the installation of overhead roofing to ensure a safer and more suitable environment for turtle hatchlings. Protective partitions have been successfully installed in two pools. The previous plastic roofing, which had become damaged over time and was obstructing natural sunlight, was completely removed. In its place, a more durable and functional iron mesh roof has been installed. This new roof provides protection from predators and falling debris while allowing adequate sunlight exposure, which is essential for basking and maintaining turtle health. Additionally, a CCTV camera was also installed for security purposes.



### Enclosure enrichment

To reduce direct human interaction and minimise environmental stress on hatchlings, green shade nets have been installed around the temporary rearing enclosures. These nets provide partial shade and visual barriers that help reduce disturbance from human activity. Some green plant also planted inside the pond to improve natural environment. These green nets and green plants contribute to temperature regulation by diffusing direct sunlight, thus creating a more stable and comfortable microhabitat for the young turtles.



## Daily management and maintenance

### Turtle Rescue and Rehabilitation Centre, Sarnath, Uttar Pradesh

At the turtle rescue and rehabilitation centre in Sarnath, daily activities are meticulously planned to ensure the welfare of the resident turtles. These activities include regular cleaning of the three ponds, involving water changes, algae removal, and sweeping to maintain a clean and conducive environment for the turtles. Each day, the turtles are fed at a specific time under the guidance of veterinary doctors. To support their overall health, the staff implements proper enclosure enrichment methods.

A crucial aspect of the centre's work involves morphometric assessments, focusing on *Batagur kachuga*, *Batagur dhongoka* (for the years 2023, 2024 and 2025), and *Nilssonina gangetica* (for the 2023 and 2025 batch). This detailed assessment, conducted between the 1st and 5th of each month, starts with careful algae removal and thorough cleaning of each turtle. Measurements taken include carapace length and width, plastron length, weight, and a photograph captured on graph paper. This systematic approach to morphometry allows the centre to monitor the physical characteristics of the turtles, thereby contributing to their overall health and well-being.



### Turtle Rescue and Rehabilitation Centre Barhi, Madhya Pradesh

At the Barhi Rescue and Rehabilitation Centre, species-specific practices are followed to provide an enriched habitat and maintain a clean environment for the turtles. The turtles receive a proper diet daily, followed by routine pond cleaning, removal of leftover food, and regular water changes to ensure optimal water quality. Since water quality is critical for housing turtles in



captivity, a minimum of 20% of the pond water is changed daily. Additionally, full pond cleanings are carried out every 10 days to maintain a healthy aquatic environment.

Morphometric assessments at the Barhi Centre focus on *Batagur kachuga* and *Batagur dhongoka* and follow the same systematic approach as in Sarnath. Conducted between the 1st and 5th of each month, these

assessments begin with algae removal and thorough cleaning of each turtle. The recorded measurements include carapace length and width, plastron length, head width, body weight, and a photograph taken on graph paper. This process helps monitor the turtles' physical development and overall well-being.

For captive chelonians, the ideal diet should closely resemble their natural food sources and include a variety of options. Feeding charts were prepared based



on the number and weight of the turtles, explained to the centre staff, and adjusted according to species, life history stage, and seasonal changes. The diet for *Batagur dhongoka* and *Batagur kachuga* includes a combination of seasonal vegetables, fruits, and commercial turtle feed, scheduled on alternating days. For rescued turtles (*Lissemys punctata*), the proportion of carnivorous food, primarily chicken meat has been provided.



### Gharial Eco-Park, Deori, Madhya Pradesh

At the Eco-Park, specific management practices are followed to maintain a clean environment and provide an enriched habitat for both resident and rescued turtles. The turtles are provided with a proper diet daily, followed by routine pond cleaning, removal of leftover food, and regular water changes to ensure optimal water quality. Feeding is carried out at a fixed time each day under the guidance of veterinary doctors. To support their overall health and well-being, the staff also implements appropriate enclosure enrichment practices.

Morphometric assessments at the Centre focus on *Batagur kachuga* and *Batagur dhongoka* and follow the same systematic approach used at the Sarnath Centre. These assessments are conducted between the 1<sup>st</sup> and 5<sup>th</sup> of each month and begin with algae removal and thorough cleaning of each turtle. The recorded measurements include carapace length and width, plastron length, head width, body weight, and a photograph taken on graph paper. This process helps monitor the turtles' physical development and overall well-being.



## Health care and management of the turtles

### Turtle Rescue and Rehabilitation Centre, Sarnath, Uttar Pradesh

The rescued individuals of turtles (*Lissemys punctata* and *Nilssonina gangetica*) were brought to the Sarnath turtle rescue centre. All rescued turtle individuals were injured (abrasion and puncture wounds), dehydrated and stressed. Primary treatment included cleaning effected areas with Povidone-iodine solution diluted with normal saline and antiseptic dressing with Povidone-iodine antiseptic ointment, applied topically. To reduce dehydration, they were provided suitable habitat to acclimatize with surrounding environment. The next day, they were stabilized with rehydrating fluids (DNS, NS and RL) 15 ml/kg body weight administered subcutaneously in the femoral area. Broad-spectrum antibiotic enrofloxacin @ 5 mg/kg was administered every 48 hours mixed with normal saline solution to prevent tissue necrosis along with Injection Meloxicam administered @ 0.5 mg/kg, s/c q48 hours as an analgesic and anti-inflammatory agent. Injection

Dexamethasone @0.15 mg/kg body weight i/m for traumatic shock. According to their feeding behavior carnivore diet (live/dead fish or chicken meat) is offered to them. Detailed records of treatments, observations, and changes in condition were maintained. Some animals were presented as dead on arrival (DOA). All the carcasses were necropsied further to request from the Forest Department.

Alongside this, health assessments of in-house turtles are also conducted monthly during the routine morphometric analysis. Any individual suspected of poor health is isolated and provided symptomatic treatment. In addition to these monthly check-ups, daily observations are carried out to monitor for any abnormal behaviour. Turtles displaying unusual behaviour or symptoms are immediately isolated and treated accordingly.

During winter, turtles often experience respiratory distress and hypovitaminosis, with symptoms including conjunctivitis, inflamed eyelids, nasal discharge, and nasal blockage. Affected individuals are treated symptomatically until recovery.



## Turtle Rescue and Rehabilitation Centre, Barhi, Madhya Pradesh

At the Barhi Rescue and Rehabilitation Centre, juvenile turtles of *Batagur dhongoka* (three-striped roofed turtle), *Batagur kachuga* (red-crowned roofed turtle), and *Lissemys punctata* (Indian flapshell turtle) were routinely examined for any abnormalities. Their health and body condition scores were assessed, with healthy individuals released into the pond, while sick turtles were isolated for monitoring and treatment.

To ensure their overall well-being, the turtles were provided with suitable habitats and balanced diets. Their growth was monitored through monthly morphometric analysis, which included body weight measurements. Juvenile turtles require a protein- and calcium-rich diet for proper shell development and overall growth. At the centre, they were fed commercial pellets, seasonal vegetables, a mixed diet, occasional live or dead fish, and dried super worms to meet their nutritional requirements.

To encourage natural behaviour and reduce stress, environmental enrichment was introduced, including sieved sand as a substrate, and wooden and bamboo platforms for basking, and exploration. The turtle's behaviour, eating habits, and general health were closely monitored, and detailed records of treatments, observations, and any changes in condition were maintained.



## Temperature maintenance

### Turtle Rescue and Rehabilitation Centre, Sarnath, Uttar Pradesh

Optimal temperature maintenance in captivity posed a challenge. During winter, temperatures in the Sarnath area dropped as low as 4-10°C, while in summer, they soared to highs of 40-48°C. To combat the winter chill, we insulated the entire enclosures with thick transparent plastic sheets and installed heating lights to maintain an ambient temperature of around 29-30°C. In summer, we employed

bamboo thatch, aquatic macrophytes, and shrubs to shield the turtles from excessive heat. Additionally, we partially covered the enclosure roofs with green netting to mitigate direct sunlight. Twice daily, we changed the water in each pond with submersible pump water and utilized water filters to maintaining hygiene.



## Turtle Rescue and Rehabilitation Centre, Barhi, Madhya Pradesh

Optimal temperature maintenance in captivity posed a challenge. During winter, temperatures in the Barhi area dropped as low as 4-10°C, while in summer, they soared to highs of 40-48°C. To combat the winter chill, we insulated the enclosures with thick transparent plastic sheets and installed heating lights to maintain an ambient temperature of around 29-30°C. In summer, we employed bamboo thatch, aquatic macrophytes, and shrubs to shield the turtles from excessive heat. Additionally, we partially covered the enclosure roofs with green netting to mitigate direct sunlight. Twice daily, we changed the water in each pond with submersible pump water and utilized water filters to cool it down.

## Egg incubation and post-hatching care at Sarnath Turtle Rescue and Rehabilitation Centre.

Rescued eggs from nests facing threats were brought to the centre for incubation and rearing of hatchlings. The three turtle species that were the focus of these efforts were *Batagur kachuga*, *Batagur dhongoka* and *Nilssonia gangetica*. Ensuring the successful hatching and rearing of the hatchlings afterwards was the main goal to support the conservation and population recovery of these species.

### Methodology

- **Egg Collection and Incubation:** The eggs of *Batagur dhongoka*, and *Batagur kachuga* were collected from nests facing predation, anthropogenic threats and confiscation cases in collaboration with local communities and forest departments. These eggs were carefully transported to the Rescue and Rehabilitation Centre for incubation.
- **Incubation Conditions:** The eggs were placed in incubators set to replicate the natural incubation conditions required by each species. Factors such as temperature, humidity, and incubation duration were monitored and adjusted accordingly.
- **Hatchling Management:** Upon hatching, the newly emerged hatchlings were closely monitored and provided with appropriate care to ensure their survival and well-being. This included monitoring their behaviour, feeding patterns, and health status.
- **Post-Hatchling Care:** After hatching, the post-hatchlings were placed in suitable enclosures with optimal environmental conditions, including temperature, humidity, lighting, and access to



water and basking areas. Their diet was carefully planned and adjusted to meet their specific nutritional requirements.



## Findings

- **Successful Egg Hatching:** The egg rescue efforts resulted in the successful hatching of over 832 animals, including *Batagur dhongoka*, *Batagur kachuga* and *Nilssonina gangetica* hatchlings.
- **Hatchling Health and Survival:** Through close monitoring and appropriate care, the hatchlings exhibited healthy growth and survival rates, contributing to the population recovery of these endangered turtle species.
- **Nutritional Requirements:** The post-hatchling diets were carefully planned and adjusted to meet the specific nutritional needs of each species. Regular monitoring ensured optimal growth and development.
- **Environmental Factors:** The enclosures provided suitable environmental conditions, including temperature, humidity, lighting, and access to water and basking areas, promoting the overall well-being and natural behaviour of the post-hatchlings.

The successful egg rescue, hatchling management, and post-hatchling care efforts at the Rescue and Rehabilitation Centre in Sarnath have contributed

## PIT microchip tagging of the turtles at Barhi Turtle Rescue and Rehabilitation Centre

For identification and long-term tracking of individuals, PIT (Passive Integrated Transponder) microchip was implanted in rescued (*Lissemys punctata*) and in-house (*Batagur dhongoka*, *Batagur kachuga* and *Nilssonina gangetica*) turtles at the Barhi turtle rescue centre. Health assessment of all the individuals was carried out before tagging to ensure optimal health conditions of the animals. The functionality of the chip to be tagged has been checked before tagging. All the microchips were implanted subcutaneously into the left hind limb, parallel with the femur bone and transverse to the calipee. After



significantly to the conservation and population recovery of *Batagur dhongoka*, *Batagur kachuga* and *Nilssonina gangetica*. Through careful incubation, appropriate care, and optimal environmental conditions, 832 hatchlings have been nurtured to support their growth, survival, and eventual release into the wild. Continued monitoring, research, and public awareness initiatives will contribute to the long-term conservation of these endangered turtle species.



injection, the wound was treated with an antiseptic solution. Animals were observed after the PIT tag was injected, to ensure that it is not pushed out immediately, bleeding and any sign of injury.

The tags have been scanned once more post-tagging to ensure the position and functioning of the microchips. All the individual animals' data (body weight, morphometry, time of tagging, handling time, vital signs and clinical signs of the individual) along with the microchip number have been recorded for future reference. All the animals have been observed for 2-3 hours post tagging, and after ensuring the health of the animal, they were released back to their respective ponds. The animals were observed for a few more days post-tagging to ensure proper wound healing at the insertion site.



## Rescue of turtles

### Rescue of turtles at Sarnath Turtle Rescue and Rehabilitation Centre

Sarnath is an important rescue and rehabilitation centre for turtles along Ganga River. Turtle rescued from poaching and illegal trade are brought to the centre, additionally, rescued turtles are also handed over to this centre for rehabilitation. The rescue events that have occurred in the last six months are as follows:

- On 25th July 2025, the Government Railway Police (GRP) and Forest Department successfully rescued 99 *Lissemys punctata* from Mughalsarai railway station and transferred them to the Sarnath Rescue Centre



- On 18th August 2025, the Government Railway Police (GRP) and Forest Department successfully rescued 2 *Nilssonia gangetica* from Mughalsarai railway station and transferred them to the Sarnath Turtle Rescue and Rehabilitation Centre.



- On 12th December 2025, the Government Railway Police (GRP) and Forest Department successfully rescued 37 *Lissemys punctata* from Mughalsarai railway station and transferred them to the Sarnath Turtle Rescue and Rehabilitation Centre.



- On 18th December 2025, the Government Railway Police (GRP) and Forest Department successfully rescued 80 *Lissemys punctata* from Mughalsarai railway station and transferred them to the Sarnath Turtle Rescue and Rehabilitation Centre.



## Turtles released from Sarnath Turtle Rescue and Rehabilitation Centre

On 25th November 2025, a total of 711 turtles were released from the Sarnath Turtle Rescue Centre into the Ganga River near Mahewa Pipa Bridge (25° 10'50.1"N, 82° 14'57.6"E). The released turtles included 434 *Batagur dhongoka*, 122 *Batagur kachuga*, 56 *Nilssonina gangetica*, and 99 rescued *Lissemys punctata*. The release site is located within the Turtle Wildlife Sanctuary, Uttar Pradesh, which extends from Prayagraj to Bhadohi.

Prior to release, a pre-release health assessment was conducted to evaluate the fitness of the turtles. This assessment included morphometric measurements, body

weight recording, monitoring of feed intake to assess growth patterns, and regular behavioural observations. Based on the clinical examinations and overall health assessments, all turtles were found to be clinically fit for release into the wild.

On the morning of the release, turtles were carefully transported to the release site. Before loading, all transport crates were thoroughly washed and disinfected, and wet jute bags were placed at the base to provide cushioning and maintain moisture. Turtles were separated according to species and placed in crates, with 4-6 individuals per crate depending on their size. During transportation, the vehicle speed was maintained at 20-30 km/h to minimise stress and ensure their safety.

Upon arrival at the site, the crates were unloaded and carried to the riverside by the team members from the Wildlife Institute of India. The turtles were re-examined to check for any injuries or stress during transportation.

The release program was conducted jointly by the WII-NMCG Project team and officials of the Uttar Pradesh Forest Department.

The release began with *Batagur dhongoka*, followed by *Batagur kachuga*, *Nilssonina gangetica*, and *Lissemys punctata*. The turtles were placed on the riverbank and allowed to move naturally into the river. The details of the released animals are provided below.



# COMPONENT

# 2

## CAPACITY BUILDING OF FOREST DEPARTMENT PERSONNEL AND OTHER STAKEHOLDERS

Under this component, four trainings were conducted for college students, professors and forest department from July to December 2025. Through these trainings and workshops, capacity building was strengthened, awareness was raised and skills were developed to engage the stakeholders in the conservation of the Ganga River Basin. In these trainings, total 348 participants were trained from Madhya Pradesh and Uttar Pradesh (Table 1).



Indira Gandhi National Tribal University, Anuppur, Madhya Pradesh

Table 1. Trainings conducted between July and December 2025

Training/Workshop	Institution	State	Number of Participants
Conservation of macro fauna of riverine ecosystem	Indira Gandhi National Tribal University, Anuppur	Madhya Pradesh	112
Freshwater biodiversity conservation of the Ganga River basin	Indira Gandhi National Tribal University, Anuppur	Madhya Pradesh	41
Rashtriya Jal Khata Abhiyan: Water Conservation	Dayanand Inter College, Lucknow	Uttar Pradesh	150
Turtle Biology, Handling, and Conservation at Turtle Rescue and Rehabilitation Centre, Barhi, Madhya Pradesh	Madhya Pradesh Forest Department	Madhya Pradesh	45
<b>Total</b>			<b>348</b>

## COMPONENT

# 3

## COMMUNITY-BASED AQUATIC SPECIES CONSERVATION AND OUTREACH IN THE GANGA RIVER BASIN

### CONSERVATION THROUGH A GROWING GANGA PRAHARI NETWORK

As of December 2025, a total of 7,142 Ganga Praharis have been registered, including 4,837 females and 2,305 males. Of these, 243 Ganga Praharis (209 females and 34 males) were registered during the period July-December 2025. These members were recruited from various regions along the Ganga River and its tributaries, including Ajay, Gomti, Son and Yamuna.

#### Community engagement across the Ganga River basin

A cumulative total of 574 activities were conducted, including awareness and sensitization activities (n=108), cleanliness drives (n=67), consultative meetings (n=214), field visits/river walks (n=4), focus group discussions (n=30), livelihood development activities (n=75), orientation, training and sensitization workshops (n=15), plantation drives (n=27), socio-economic surveys (n=4), special occasions and days celebrations (n=18), and other activities (n=12) (Table 2).

These initiatives collectively engaged 17,304 participants and were carried out across multiple districts of eight states, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Delhi, Haryana, Himachal Pradesh, and Madhya Pradesh across the Ganga River basin by the Wildlife Institute of India (WII). Participants largely comprised diverse stakeholder groups, including local communities, Ganga Praharis, State Forest Departments, district administration, Fisheries Department, livelihood development organizations, Krishi Vigyan Kendras, NGOs, and other line agencies.

**Table 2.** Conservation activities conducted with stakeholders between July and December 2025

Type of activities	No. of activities	No. of participants
Awareness and sensitization activities	108	5,527
Cleanliness drives	67	2,703
Consultative meetings	214	2,770
Field visits / river walks	4	46
Focus group discussion	30	286
Livelihood development activities	75	2,703
Plantation drive	27	1,373
Orientation and training/sensitization workshops	15	396
Socio-economic survey	4	45
Celebration of special occasions	18	1,125
Others	12	330
<b>Total</b>	<b>574</b>	<b>17,304</b>

## Enhancing skills for livelihood development

A total of 8 livelihood trainings were conducted across eight districts in four states i.e., Bihar (West Champaran, Bhagalpur, and Siwan), Jharkhand (Sahibganj), Uttar Pradesh (Gorakhpur, Prayagraj, and Ayodhya), and Uttarakhand (Nainital) in the Ganga River basin, serving as focused platforms for skill development and livelihood enhancement.

During these trainings, 251 participants were trained in green livelihood practices, including natural farming and

sewing and stitching (Table 3). The programme included one training on natural farming, through which 25 participants (14 males and 11 females) were trained, and seven trainings on sewing and stitching, in which 226 participants were trained, all of whom were women, indicating strong female participation in livelihood-oriented capacity building. The active involvement of Ganga Praharis in these initiatives has helped generate sustainable livelihood opportunities, promoting self-reliant practices and socio-economic empowerment while supporting the broader objectives of Ganga conservation and the Arth Ganga initiative.

**Table 3.** Livelihood skill development trainings

Trainings	No. of trainings	No. of trainees	Male	Female
Natural Farming	1	25	14	11
Sewing & Stitching	7	226	0	226
<b>Total</b>	<b>8</b>	<b>251</b>	<b>14</b>	<b>237</b>

## Ganga Praharis taking lead in conservation actions

Between July and December 2025, trained Ganga Praharis conducted a total of 223 conservation-related activities, engaging 7,853 participants across their respective operational sites. These initiatives included community awareness programmes, cleanliness drives, ecological monitoring, plantation activities, rescue and rehabilitation of species in distress, and the celebration of special environmental occasions and days, along with participation in activities organized by other organizations (Table 4).



**Table 4.** Conservation activities initiated by Ganga Praharis

Type of activities	No. of activities	No. of participants
Awareness activities	117	3,681
Cleanliness drives	25	632
Ecological monitoring	5	12
Participation in activities organized by other organizations	7	796
Plantation	7	111
Rescue & rehabilitation	24	295
Celebration of special occasions	36	2,307
Others	2	19
<b>Total</b>	<b>223</b>	<b>7,853</b>

## Strengthening conservation efforts through institutionalization: Society registration

To ensure the sustainability of livelihood development and conservation efforts, Ganga Prahari groups are being institutionalized by formally registering under the Societies Registration Act, 1860. During the period July to December 2025, one Ganga Prahari group from Gorakhpur district, Uttar Pradesh, was registered under the name "Rapti Ganga Prahari Biodiversity Welfare Society." This initiative aims to strengthen community-led conservation efforts while promoting sustainable livelihood opportunities and biodiversity conservation along the Ganga and its tributaries.

## Assessing linkages between river and local socio-economic systems

Socio-economic surveys were conducted among river-dependent communities in Aurangabad (Bihar) and Sant Kabir Nagar (Uttar Pradesh) to understand the contribution of river resources to the local socio-cultural setup and livelihoods.

## Mainstreaming conservation in village level planning

Memorandum of Agreement were signed with three village panchayats across West Bengal (n = 1), Bihar (n=1), and Uttar Pradesh (n=1) to promote biodiversity-sensitive village-level development. Additionally, three village-level microplans were prepared in Bihar (n=1), West Bengal (n=1), and Uttar Pradesh (n=1) to identify key conservation and development challenges and outline potential strategies for addressing them.

## Participatory mapping of ecosystem services to assess the grassroots level perceived dependence on river resources

Participatory mapping of ecosystem services was carried out to assess the grassroots level perceived dependence on the ecosystem services provided by rivers such as the biotic and abiotic resources, cultural and religious services, and dependence of agriculture, livestock and other village-level economic constituents upon the riverine resources. Focus group discussions and ground truthing were conducted in two villages in Haridwar district in Uttarakhand; seven villages in the districts of Aurangabad, Bhojpur, Patna, Rohtas and Saran in Bihar; five villages in Bokaro, Deogarh and Ramgarh in Jharkhand; 12 villages in Bankura, Birbhum, Hooghly, Howrah, Paschim Bardhaman, Paschim



Medinipur and Purba Bardhaman in West Bengal; and four villages in Shahdol, Sidhi and Umaria in Madhya Pradesh. Overall, 30 villages were surveyed in five Ganga Basin states across 19 districts, along the Ganga (n=2), Son (n=9), Ajay (n=6), Damodar (n=7), Rupnarayan (n=4), Ganga-Ghaghra confluence (n=1), and Ganga-Son confluence (n=1) (Table 5). Participants were asked about the ecosystem services they receive from the riverine ecosystems in the vicinity of their village, identify the areas they receive these ecosystem services from on a Google Earth map of their village, the change in the supply of these ecosystem services over the years, and the consequent change in livelihood. Participants were also asked about any disservices provided by the river.



**Table 5.** Details of villages surveyed to assess the grassroots level perceived dependence on river resources using participatory mapping approach

State/Union Territory	Districts	No. of villages	Rivers
Uttarakhand	Haridwar	2	Ganga
Bihar	Aurangabad, Bhojpur, Patna, Rohtas, Saran	7	Ganga, Son,
Jharkhand	Bokaro, Deogarh, Ramgarh	5	Ajay, Damodar
West Bengal	Bankura, Birbhum, Hooghly, Howrah, Paschim Bardhaman, Paschim Medinipur, Purba Bardhaman	12	Ajay, Damodar, Rupnarayan
Madhya Pradesh	Shahdol, Sidhi, Umaria	4	Son

## BAL GANGA PRAHARI PROGRAMME

The Bal Ganga Prahari (BGP) Programme remained active in enhancing environmental consciousness among school children through a series of sensitization workshops and thematic campaigns. These activities were conducted in both rural and urban schools between July and December 2025. Under the programme, various activities were organized to sensitize and raise awareness among Bal Ganga Praharis regarding the conservation of rivers and their biodiversity. More than 6,000 Bal Ganga Praharis and school teachers were reached through 61 different activities, including plantation drives, cleanliness drives, awareness rallies, sensitization programmes, yoga sessions, and awareness on turtle biology and its importance. These activities were conducted across 11 states of the Ganga River basin (Table 6).



**Table 6.** Activities conducted under Bal Ganga Prahari programme

Activities	No. of activities	State	No. of participants
Mobile Van exhibition: Ganga through the Ages: A Literary Bioscope	1	Uttarakhand	200
Plantation Drive	5	Haryana and West Bengal	991
Cleanliness Drive	12	Uttarakhand, Himachal Pradesh, Haryana, Delhi, Bihar, Jharkhand, West Bengal	1,484
Awareness activities and sensitization programmes	36	Uttarakhand, Haryana, Delhi, Bihar, West Bengal, Rajasthan, Madhya Pradesh, Chhattisgarh	3,711
Yoga	1	Uttarakhand	50
Awareness Rally	1	Uttarakhand	50
Awareness on turtle biology and its importance	5	Uttar Pradesh	631
<b>Total</b>	<b>61</b>		<b>7,117</b>

### Bal Ganga Prahari Corners (Ganga Aqualife Knowledge Centres)

During July to December 2025, five Bal Ganga Prahari Corners were established in educational institutions to strengthen awareness and education on river biodiversity (Table 7). These centres serve as localized hubs for interactive learning, sensitization, and student engagement on topics related to freshwater ecosystems and conservation.



**Table 7.** Bal Ganga Prahari corner established in the Ganga River Basin

Date/Month	Bal Ganga Prahari Corner	District	State
July 2025	PM SHRI Atal Utkrisht Government Girls Inter College, Khatari	Nainital	Uttarakhand
28 <sup>th</sup> August 2025	Maa Sharda Kanya Vidyapeeth	Anuppur	Madhya Pradesh
29 <sup>th</sup> August 2025	Swami Atmanand Government Excellence English School	Gaurela-Pendra-Marwahi	Chhattisgarh
September 2025	Government Senior Secondary School, Malpur	Begusarai	Bihar
November 2025	Learning Tree Special School	Dehradun	Uttarakhand

## RIVER CONSERVATION THROUGH INTERPRETATION CENTRE AND AWARENESS

### Jalmala Samvaad

Established 31 additional *Jalmala Samvaad*, low cost interpretation corners. A total of 18091 students and 552 teachers were sensitized through these low cost interpretation corners (Table 8).



**Table 8.** Location of newly established *Jalmala Samvaad*

District	State	Total students in school	Total teachers	River
Ayodhya	Uttar Pradesh	900	35	Ghaghra
Bahraich	Uttar Pradesh	950	19	Ghaghra
Tanda	Uttar Pradesh	205	6	Ghaghra
Balliya	Uttar Pradesh	400	12	Ghaghra
Sonbhadra	Uttar Pradesh	1,216	20	Son
Chhapra	Bihar	700	22	Ghaghra
Begusarai	Bihar	2,225	98	Ganga
Hazaribagh	Jharkhand	262	10	Damodar
Bokaro	Jharkhand	960	43	Damodar
Dhanbad	Jharkhand	1,400	26	Damodar
Jamtara	Jharkhand	550	14	Ajay
Deogarh	Jharkhand	540	23	Ajay
Pendra-Gaurela	Chhatisgarh	523	18	Son
Shahdol	Madhya Pradesh	350	18	Son
Sidhi	Madhya Pradesh	283	16	Son
Singrauli	Madhya Pradesh	699	27	Son
Purulia	West Bengal	1,400	18	Rupnarayan
Asansol	West Bengal	1,120	23	Ajay
Durgapur	West Bengal	415	28	Ajay
Bardhaman	West Bengal	1,573	34	Damodar
Bankura	West Bengal	1,420	42	Rupnarayan
<b>Total</b>		<b>18,091</b>	<b>552</b>	

## School awareness workshop

A total of 1,440 school students and 61 teachers were sensitized through school awareness workshops and game-based activities along the Rivers Ganga, Ghaghra, Son, Ajay, Damodar and Rupnarayan (Table 9).



**Table 9.** Activities conducted with school students and number of participants

District	No. of students	No. of teachers	River
Varanasi	55	2	Ganga
Ayodhya	67	2	Ghaghra
Bahraich	70	4	Ghaghra
Tanda	70	5	Ghaghra
Balliya	74	2	Ghaghra
Chapra	82	2	Ghaghra
Pendra-Gourella	86	4	Son
Shahdol	64	5	Son
Sidhi	100	4	Son
Singrauli	64	2	Son
Sonbhadra	53	2	Son
Jamtara	93	5	Ajay
Asansol	61	3	Ajay
Durgapur	49	2	Ajay
Deogarh	98	4	Ajay
Hazaribagh	81	3	Damodar
Dhanbad	98	4	Damodar
Bardhman	54	2	Damodar
Purulia	56	2	Rupnarayan
Bankura	65	2	Rupnarayan
<b>Total</b>	<b>1,440</b>	<b>61</b>	



## Awareness workshop, outreach and educational tour

A total of 2540 students, teachers, forest department officials and community members, along the Ganga, Son and Rupnarayan Rivers, were sensitized through awareness workshops, outreach programmes and educational tours (Table 10).



**Table 10.** Awareness workshops, outreach programmes and educational tours conducted across Ganga River Basin

Programme	District(s)	Participants	No. of participants
Ek Ped Maa ke Naam	Varanasi	Forest department officials and local community	470
Swachta Pakwada	Varanasi, Kanpur	Students, teachers and local community	241
Educational Tour	Varanasi, Kanpur	Students and teachers	874
Rashtriya Jalkhata Abhiyan	Varanasi, Kanpur, Begusarai, Purulia, Begusarai	Students and teachers	955
<b>Total</b>			<b>2,540</b>

## Special days celebrations

From July to December 2025, a series of special days were commemorated across the Ganga River Basin. A total of 3,382 school students, teachers, teacher trainees, tourists, forest department officials and local community members across Uttarakhand, Uttar Pradesh and West Bengal were sensitized through awareness programmes held on significant occasions (Table 11).



**Table 11.** Special days celebrated across the Ganga River basin

Date	Day celebrated	Location	No. of participants
7 <sup>th</sup> July	Van Mahotsav	South 24 Parganas	1,200
28 <sup>th</sup> July	World Nature Conservation Day	Nadia, West Bengal	1,200
29 <sup>th</sup> July	Global Tiger Day	South 24 Parganas, West Bengal	270
12 <sup>th</sup> August	World Elephant Day	South 24 Parganas, West Bengal	507
15 <sup>th</sup> Aug	Independence Day	Varanasi, Uttar Pradesh	42
2 <sup>nd</sup> October	Gandhi Jayanti	Varanasi, Uttar Pradesh	20
4 <sup>th</sup> October	Wildlife Week	Kanpur, Uttar Pradesh	60
21 <sup>st</sup> November	World Fisheries Day	Dehradun, Uttarakhand	83
<b>Total</b>			<b>3,382</b>

## Visitor footfall insights

The interpretation centres established in the Ganga basin attract a large number of visitors. During July to December 2025, on an average about 243 visitors per day visited the centres. Amongst the three centres, Anubhuti at Kanpur Zoological Park, Uttar Pradesh had the highest footfall (Table 12).

**Table 12.** Visitor footfall at Interpretation centres between July and December 2025

Interpretation Centre	District	No. of visitors
Ganga Darpan	Varanasi	4,904
Anubhuti	Kanpur	34,135
Ganga Avlokan	Haridwar	5,725
<b>Total</b>		<b>44,764</b>



# PUBLICATIONS

## Research Articles

Mapping hotspots and unveiling drivers of mortality in the endangered Gangetic Dolphin (*Platanista gangetica*) to mitigate human-mediated conservation conflicts in the Ganga River Basin, India  
<https://doi.org/10.1016/j.ecoinf.2025.103239>

GIS and AHP-based methods for river risk zone (RRZ) assessment: a case study of the Himalayan rivers in Doon Valley, Uttarakhand, India. *Environmental Science and Pollution Research* (2025). <https://doi.org/10.1007/s11356-025-36136-6>

Land Use Land Cover Assessment of a Protected Area Complex in Western Terai Arc Landscape of India  
<https://Indianforester.co.in/index.php/Indianforester/article/view/170900>

Delineation and Mapping of Riverine Wetlands in the Middle Ganga River using Geospatial Technology  
<https://Indianforester.co.in/index.php/Indianforester/article/view/170762>

## Technical Reports

WII-GACMC (2025). Status of select wetlands in the Ganga River Basin: A glance. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehra Dun, India. Vol. 1. Pp. 124.

WII-GACMC (2025). Status of select wetlands in the Ganga River Basin: Pollution Threats and Hotspot Assessment. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehra Dun, India. Pp. 63.

WII-GACMC (2025). Status of the Island Nesting Waterbirds in the Ganga and select tributaries. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehradun, India. Pp 42.

WII-GACMC (2025). Yamuna River: Socio-Ecological status and trends. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehra Dun, India. Pp. 261. Draft Report

WII-GACMC (2025). Socio-Ecological Profile of Suswa River. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehradun, Uttarakhand, India. Pp. 56

WII-GACMC (2025). Status of Song River. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehra Dun, India. Pp. 52

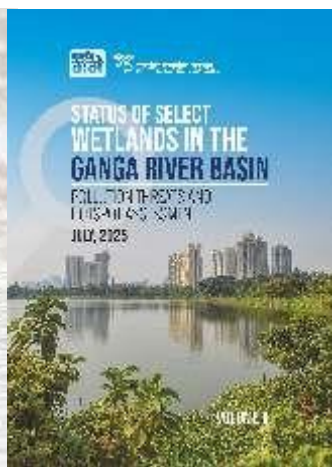
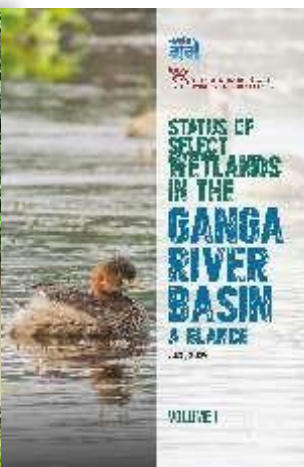
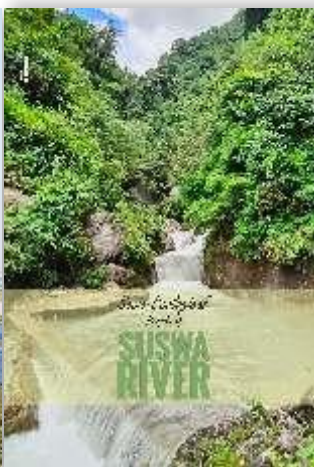
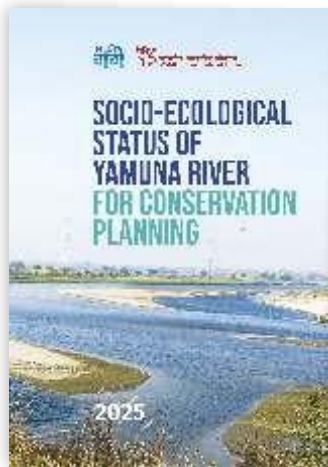
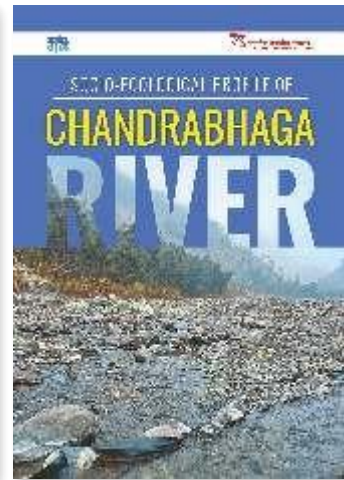
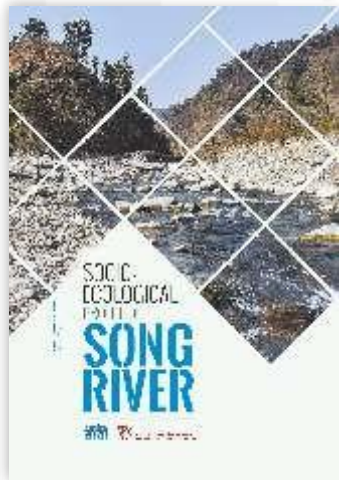
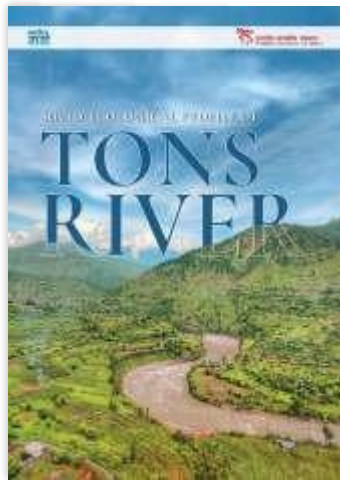
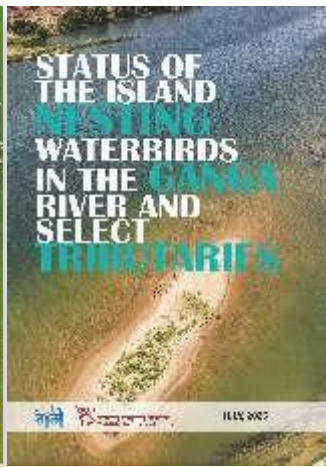
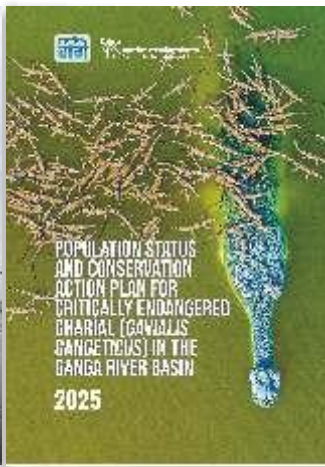
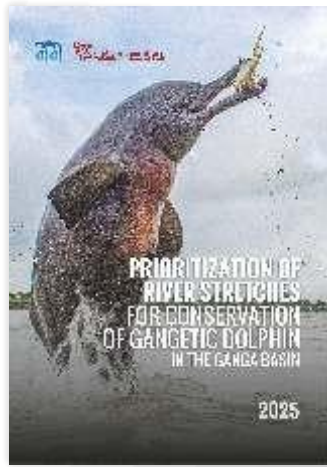
WII-GACMC (2025). Prioritization of River Stretches for Conservation using Flagship Species: Gangetic Dolphin. Ganga Aqualife Conservation Monitoring Centre, National Centre for River Research, Wildlife Institute of India, Dehra Dun. Uttarakhand, India. Pp. 83

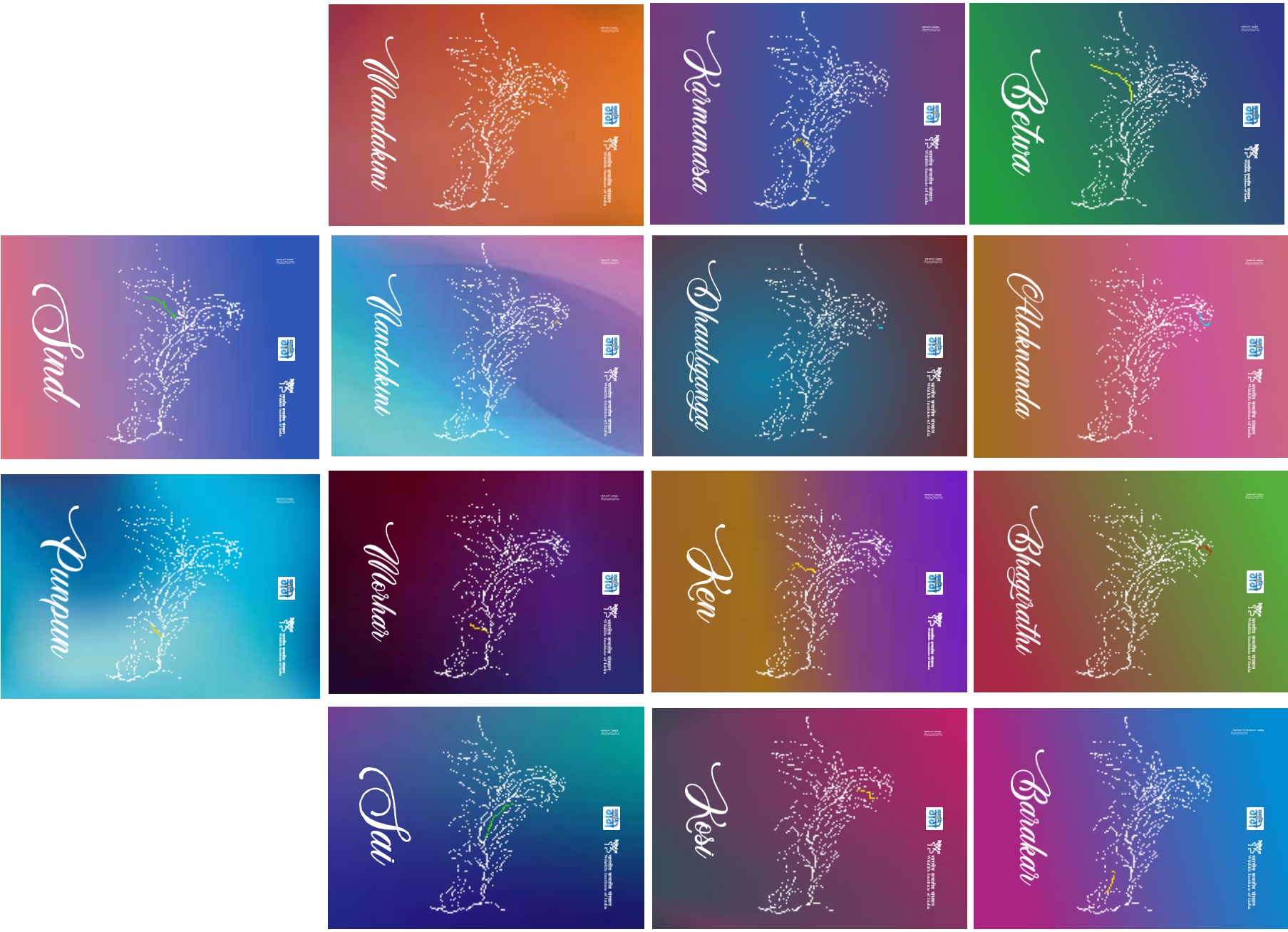
WII-GACMC (2025). Population Status and Conservation Action Plan for Critically endangered Gharial (*Gavialis gangeticus*) in the Ganga River Basin. Ganga Aqualife Conservation Monitoring Centre, National Centre for River Research, Wildlife Institute of India, Dehra Dun, Uttarakhand, India. Pp. 80

WII-GACMC (2025). Socio-Ecological Profile of Chandrabhaga River. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehra Dun, India. Pp. 36

WII-GACMC (2025). Socio-ecological profile of Tons River. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehra Dun, India. Pp. 44

WII-GACMC (2025). Planning and Management for Aquatic Species Conservation and Maintenance of Ecosystem Services in the Ganga River Basin for a Clean Ganga: Final Report, West Bengal 2020 to 2025. Ganga Aqualife Conservation Monitoring Centre, Wildlife Institute of India, Dehradun, Uttarakhand, India. Pp 195.





# IN NEWS

**विशेष**

दीवार घड़ी, नाइट लैंप, टेबल जैसे लगभग 250 तरह के उत्पाद तैयार किया जा रहा

लैंप, टेबल, कुर्सी, स्टडी टेबल जैसे लगभग 250 तरह के उत्पाद तैयार हैं। उनका मानना है कि कम और कम समय में तैयार होने के सामान बांस उत्पादन ले किसानों व कारीगरों के प्रदान साबित हो सकता है। यदि फर्नीचर और घरेलू जरूरतों माने पर अपनाया जाए, तो यह रोजगार और स्वरोजगार के जरूर पैदा करेगा। शिक्षक

**विशेष**

पुर, वरीय संवाददाता। 5 के घरेलू सामान की बजाय रूप से तैयार बांस की

लैंप, टेबल, कुर्सी, स्टडी टेबल जैसे लगभग 250 तरह के उत्पाद तैयार हैं। उनका मानना है कि कम और कम समय में तैयार होने के सामान बांस उत्पादन ले किसानों व कारीगरों के प्रदान साबित हो सकता है। यदि फर्नीचर और घरेलू जरूरतों माने पर अपनाया जाए, तो यह रोजगार और स्वरोजगार के जरूर पैदा करेगा। शिक्षक



शिक्षक ज्ञान चंद्र ज्ञानी द्वारा

**समय से पहले विदेशी 'मेहमानों' की दस्तक, गंगा किनारे आशियाना**

जल गुणवत्ता और पारिस्थितिकी बहुत अच्छी है।

जल गुणवत्ता और पारिस्थितिकी बहुत अच्छी है।

# साहिबगंज : गंगा नदी में वन्यप्राणी संस्थान

भारतकी ओर से किया गया वैज्ञानिक सर्वेक्षण

# यहां के जंगलों में काफी तादाद में हैं लकड़बग्घा

## गणना में खुलासा

अभिजीत राय

साहिबगंज। जिले के जंगलों में अब भी कई दुर्लभ जानवर उपलब्ध हैं। एक खुलासा अखिल भारतीय बाघ गणना 2026 के दौरान हुआ है। राष्ट्रीय बाघ संरक्षण प्राधिकरण की ओर से राज्य वन विभाग, एनजीओ व भारतीय वन्य जीव संस्थान के साथ साझेदारी से यह गणना की गई। दरअसल, राष्ट्रीय स्तर पर प्रायद्वीप क्षेत्र में बाघों की गणना होती है। इसबार यह गणना आगामी 22 दिसम्बर तक चलेगी। आरंभिक दो दिन कांठर (गिड़) व अन्य पक्षियों की गणना होती है। बाघ गणना के दौरान यहां के जंगलों में लकड़बग्घा (हाइना), गोलहन, जैकल, सूअर (वाइल्ड बोर) व अन्य जानवरों की गणना की गई।



बाघ गणना के दौरान साहिबगंज जिले के जंगलों में मिले लकड़बग्घा के फोटो



लकड़बग्घा, फोटो फ्रेम

बाघ गणना 2026 के दौरान साहिबगंज जिले के जंगलों में लकड़बग्घा, गोलहन जैकल, जंगली सुअर सरीखे कई जानवर होने के संकेत मिले हैं। जंगलों में मिले इनके मल (स्केट) व पैर के निशानों की जांच के लिए पलामू टाइगर रिजर्व भेजा गया है।

# साहिबगंज में पुराना पेड़ काटने से कई पक्षियों की मौत

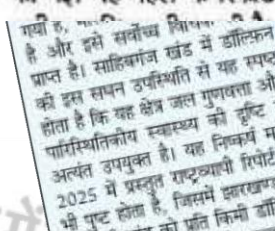
जंगली व सारल धारी।

जंगली व सारल धारी।



साहिबगंज में गंगा नदी किनारे पक्षियों की मौत

गंगा नदी के झारखंड के साहिबगंज खंड में डॉल्फिन की उपस्थिति दर देश में सबसे अधिक दर्ज हुई है। 89 किलोमीटर लंबे इस हिस्से में प्रति किलोमीटर औसतन 2.88 डॉल्फिन पाई गईं। यह आंकड़ा जून 2025 के पहले सप्ताह में वन्यप्राणी संस्थान भारत द्वारा किए गए वैज्ञानिक सर्वे से सामने आया है। गंगा डॉल्फिन भारत की राष्ट्रीय जलीय जीव है। इसे वन्यप्राणी संरक्षण अधिनियम 1972 की अनुसूची-1 में रखा गया है। इसे सर्वोच्च कानूनी संरक्षण प्राप्त है। साहिबगंज में डॉल्फिन की इतनी संख्या यह दिखाती है कि यहां की जल गुणवत्ता और पारिस्थितिकी बहुत अच्छी है। मार्च 2025 में आई राष्ट्रीय रिपोर्ट में भी झारखंड के इस गंगा खंड को प्रति किलोमीटर डॉल्फिन की संख्या के हिसाब से देश का सबसे समृद्ध क्षेत्र बताया गया था। रिपोर्ट में कहा गया है कि डॉल्फिन की अधिक उपस्थिति के कारण यह इलाका संरक्षण के लिए उपयुक्त है। इससे डॉल्फिन के प्रजनन, आवास और दीर्घकालिक सुरक्षा को मजबूती मिलेगी। वन प्रमंडल पदाधिकारी प्रबल गर्ग ने बताया कि साहिबगंज के 89 में यह सर्वे हुआ। इसमें प्रति किलोमीटर 2.88 डॉल्फिन की गई। यह पहले के रिकॉर्ड से बेहतर है। यह डॉल्फिन



गंगा नदी खंड को प्रति किलोमीटर डॉल्फिन



गंगा नदी खंड को प्रति किलोमीटर डॉल्फिन

मंजूरी: 1863 है

डॉल्फिन अभयारण्य



डॉल्फिन अभयारण्य में डॉल्फिन





# हिन्दुस्तान

## साहिबगंज में डॉल्फिन संवृत्ति को मंजूरी

### दुमका और गिरिडीह में खोले जाएंगे चिड़ियाघर



झारखंड राज्य वन्यजीव बोर्ड की बैठक में दुमका और गिरिडीह में चिड़ियाघर खोलने के प्रस्ताव को मंजूरी दी गई। दुमका के हिजला पश्चिमी वन क्षेत्र में 116.35 हेक्टेयर वन भूमि में जबकि गिरिडीह जिले के विभिन्न मीजा में कुल 396.22 हेक्टेयर भूमि में चिड़ियाघर निर्माण के प्रस्ताव को मंजूरी दी गई।

अधिसूचना जारी करेगा। बता दें कि गंगा जिन-जिन राज्यों से गुजरती है, उसमें सर्वाधिक डॉल्फिन साहिबगंज में ही हैं।

भारतीय वन्यजीव संस्थान (देहरादून) की रिपोर्ट के मुताबिक यहाँ गंगा में इस समय करीब 256 डॉल्फिन उपलब्ध हैं।



**विदेशी मेहमान**  
प्रियतम कुंआर, समीर कुंआर, रामकुंआर, राजीव कुंआर, मनीष कुंआर, संजीव टाकुर, राजवीर सिंह, कुणाल कुंआर व बंटी शर्मा समेत अन्य सदस्य हैं। प्रशिक्षण पाने के बाद चंदन कुंआर ने बांस शिल्पकला के माध्यम से अपने जीविका भी इससे धरती रहे हैं। कई दर्जनों महिलाओं को भी पिछले स...

# डॉल्फिन की संख्या बढ़ी

से सामने आया आकड़ा, संरक्षण के लिए जिला

## साहिबगंज में देश की सर्वाधिक डॉल्फिन न उपस्थिति दर दर्ज - प्रति किलोमीटर औसतन 2.88 डॉल्फिन

कृष्ण कांत कुमार जिला ब्यूरो @ झारखंड उजाला

साहिबगंज। जिले के गंगा नदी के 89 किलोमीटर लंबे खंड में डॉल्फिन न की उपस्थिति दर प्रति किलोमीटर 2.88 दर्ज की गई है, जो अब तक भारत में किसी भी खंड में दर्ज सर्वाधिक दर है। यह आँकड़ा जून 2025 के प्रथम



प्रति किमी डॉल्फिन न की दृष्टि से देश का सबसे समृद्ध क्षेत्र बताया गया था। रिपोर्ट में बताया गया है कि डॉल्फिन न की उच्च उपस्थिति दर को देखते हुए यह खंड संरक्षण की दृष्टि से एक उपयुक्त स्थल के रूप में सामने आता है। इससे डॉल्फिन न के प्रजनन, आवास और दीर्घकालिक संरक्षण को सहज



# हिन्दुस्तान

## हेक्टेयर क्षेत्र में प्रस्ताव

देश में सबसे अधिक डॉल्फिन साहिबगंज में हैं।

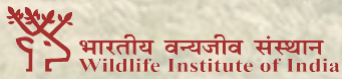
## बिजली संकट को लेकर



बिजली संकट को लेकर लोग ने हड़ताल कर दी।



## NOTE



### NMCG

National Mission for Clean Ganga,  
Department of Water Resources,  
River Development & Ganga Rejuvenation,  
Ministry of Jal Shakti, Major Dhyan Chand  
Stadium, India Gate, New Delhi - 110001

### WII

Wildlife Institute of India  
Chandrabani, Dehradun-248001, Uttarakhand  
t.: +91135 2640114-15,+91135 2646100,  
f.: +91135 2640117  
[wii.gov.in/nmcg/national-mission-for-clean-ganga](http://wii.gov.in/nmcg/national-mission-for-clean-ganga)

### GACMC/NCRR

Ganga Aqualife Conservation Monitoring Centre/  
National Centre for River Research  
Wildlife Institute of India, Dehradun  
[nmcg@wii.gov.in](mailto:nmcg@wii.gov.in)