

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 727/2024**

In the matter of:

News Item titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" appearing in Mongaby- India dated 20.05.2024.

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1.	Response on behalf of Central Pollution Control Board (CPCB) in compliance to Hon'ble NGT order dated 02.07.2024 in O.A. No. 727/2024; titled as "News Item titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" appearing in Mongaby- India dated 20.05.2024".	
2.	Annexure I: A copy of Hon'ble NGT order dated 02.07.2024, in O.A. No. 727/2024.	



Adv. Saurabh Balwani
(On behalf of Central Pollution Control Board)

Dated: 10.09.2024
Place: Delhi

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 727/2024**

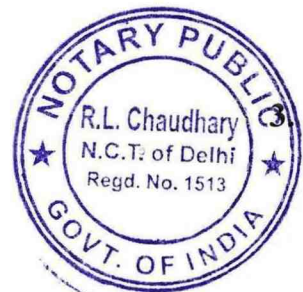
IN THE MATTER OF:

News Item titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" appearing in Mongaby- India dated 20.05.2024.

RESPONSE ON BEHALF OF CENTRAL POLLUTION CONTROL BOARD

1. That, Hon'ble NGT vide order dated 02.07.2024 and notice dated 15.07.2024 has sought the reply of Central Pollution Control Board (hereinafter referred as CPCB) in the instant Original Application. Thereby, the reply is made in succeeding paragraphs.
2. That, CPCB is a statutory Board constituted under Section 3 of The Water (Prevention and control of Pollution) Act, 1974. It performs the functions under The Water (Prevention and control of Pollution) Act, 1974, The Air (Prevention and control of Pollution) Act, 1981 and The Environment (Protection) Act, 1986.

That the Original Application is registered suo motu in reference to the news article, titled "Endangered Gangetic dolphins found in most tributaries of Ganges, prompting urgent conservation" dated 20.05.2024 published in Mongabay, India.



4. That the news article focuses on the following prominent issues:

- a. Dwindling numbers of the Gangetic dolphin in the Ganga
- b. Conservation action plan for Gangetic dolphin in tributaries and sub-tributaries of river Ganga basin
- c. Impact due to construction of dams and barrages on the river
- d. Ecological flow in the river

5. Submission of CPCB (Respondent No.3)

5.1 Conservation of Gangetic Dolphins

Ganges River dolphins, commonly known as susu, *Platanista gangetica*, are distributed throughout the Ganges–Brahmaputra–Meghna and Karnaphuli–Sangu river systems of Nepal, India, Bangladesh, and potentially Bhutan (Sinha et al. 2000). The subspecies was listed as “endangered” on the 1996 International Union for Conservation of Nature (IUCN) Red List, due to a reduction in its historical distribution range and projected declines in population size (IUCN 1996).

The Gangetic dolphin is listed in the Appendix I of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), in Appendix I and II of the Convention on Migratory Species (CMS 2020) and also comes under Schedule I of India’s Wildlife (Protection), Act, 1972.

During the late 19th century, about 10,000 Gangetic river dolphins were estimated to be thriving in the Ganga River and its tributaries (Anderson, 1878); however, Sinha and Kannan (2014) estimated their population to be 3526 individuals during the early 2000s. As per the report of Convention on Migratory Species (13th meeting of the Conference of the Parties held in Gandhinagar, India during Feb’ 2020), the estimated population size of Gangetic dolphins is between 3500 and 4000, with possibility of data gaps due to difference in sampling approaches such as direct visual counting from a boat or from the riverbank (CMS 2020).



Recently, Das et al., (2022) studied the 4635 km stretch of Ganga river basin during 2020 & 2021 and reported the estimated population size of the dolphin in Ganga basin to be 3330 individuals \pm 620 individuals.

5.2 Review of studies reported in Mongabay, India

The news item published in "Mongabay India" dated 20.05.2024 titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" has referred the studies carried out by Wildlife Institute of India (WII), Dehradun in 2022 & 2023 and also by other expert institutes namely Zoological Survey of India (ZSI), Kolkata; Patna University, Patna; Wildlife Conservation Trust (WCT), Mumbai & Wildlife Trust of India (WTI), Noida, NCR. The salient findings and observations of the reported studies are as follows:

a. Salient findings:

- i. Gangetic dolphin inhabited most tributaries and sub tributaries of the Ganga river and these tributaries account for more than 15% of the total Gangetic dolphin population in the basin.
- ii. 620 km stretch along the small rivers in Ganga basin was identified as conservation priority stretch for systematic planning involving various stakeholders.
- iii. The study quoted in the news article provides evidence of smaller rivers for being a refuge for Gangetic dolphin and shown that these smaller rivers provide resilience to the larger rivers by contributing towards the functioning of ecological processes.
- iv. The study has provided data on population status of some of the small rivers namely Rapti, Babai & Bagmati which were not reported earlier.
- v. Gangetic Dolphin's population is more or less stable in the Ganga river's main channel but could be declining in tributaries such as Gandak, Kosi and Mahananda.



b. Challenges:

- i. Construction of dams and barrages on the river have impacted the river flow and water availability which is further compounded by impacts of Climate change
- ii. Pollution from agricultural runoff that contain pesticides and other chemicals
- iii. Sediment deposition due to deforestation
- iv. Increase in mechanised boat traffic
- v. Water development projects fragment dolphin habitat, jeopardising their long-term survival.

c. Suggestions:

- i. The conservation programme should include robust scientific monitoring of dolphin population, hydrology, threats and impacts of different intervention, engaging with river water use and management policy, mitigation measures for existing infrastructure development projects or avoiding projects that will cause irreversible damage.
- ii. The conservation action plan must encompass enforcement measures, habitat protection by increasing the protected areas for dolphins, maintain ecological flow in rivers, technological interventions to reduce accidental deaths of dolphins, addressing community concerns and implementing innovative approaches of stakeholder engagement.

5.3 Submission for consideration**5.3.1 Institutional framework**

Project Dolphin was launched to conserve the Ganges river Dolphins and riverine ecosystem under the purview of WII, Dehradun and funded by Ministry of Environment Forest and Climate Change (MoEFCC). In India, various prominent institutes/organizations like, ZSI, Kolkata; Central Inland Fisheries Research Institute (CIFRI), Kolkata; World Wildlife Fund (WWF), New Delhi & National



Dolphin Research Centre (NDRC), Patna etc. have the expertise and are actively involved in the scientific research on Ganges river Dolphin. These organizations shall be involved for evaluation of distribution patterns of Ganges Dolphins in small tributaries and sub tributaries in Ganga basin using robust scientific methodology and for examining ecological variation in response to hydrodynamics.

5.3.2 Suggestive action points

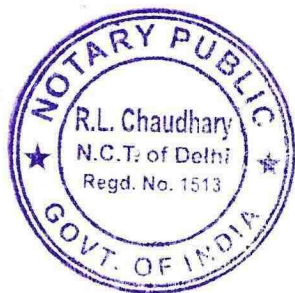
- i. Mapping of the Ganga River basin's tributaries and sub-tributaries to assess dolphin population status, distribution patterns, and trends at the metapopulation level. This will also help to evaluate the habitat suitability for Gangetic dolphins.
- ii. Develop a uniform methodology for inventorying Gangetic dolphins to ensure consistency in data collection and management across different river stretches and studies.
- iii. Impact assessment of environmental factors, such as seasonal changes in river channel geomorphology and hydrodynamic conditions etc., along with anthropogenic influences like infrastructure development and mechanized boat traffic etc. in main stem of the Ganga River as well as its tributaries & sub-tributaries.
- iv. Identify key habitats for Gangetic dolphins within the main stem of the Ganga River and its tributaries & sub-tributaries. Designate these identified areas as protected areas to safeguard dolphin populations.
- v. Ensure e-flow in main stretch of river Ganga as well as its tributaries and sub-tributaries to maintain minimum ecological flow of freshwater in river Ganga basin which is crucial for sustaining the ecosystem and managing aquatic biodiversity effectively.
- vi. That, the answering respondent craves leave of the Hon'ble Tribunal to file additional reply, in future, if required.



- vii. That in the light of the above submissions, it is respectfully submitted that this Answering Respondent, i.e., CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble Court in the instant OA.

References:

1. Anderson, J. (1878). Anatomical and Zoological Researches: Comprising an Account of Zoological Results of the Two Expeditions to Western Yunnan in 1868 and 1875; and a Monograph of the Two Cetacean Genera, *Platanista* and *Orcella*. London: Bernard Quaritch.
2. CMS (2020). Proposal for a concerted action for the Ganges River Dolphin (*Platanista gangetica gangetica*) already listed on Appendix I and II of the Convention, UNEP/CMS/COP13/Doc.28.2.6/Rev.2, Convention on Migratory Species, UNEP.
3. Das, G. C., Sharma, S. P., Ali, S. Z., Gawan, S., Usmani, A. A., Sarkar, A., Katdare, S., Rawat, S., Gangaimaran, P., Panda, A.K., Agnihotri, U., Ramachandran, A., Guha, S., Barthwal, S., Johnson, J.A., Badola, R. & Hussain, S. A. (2022). Prioritising river stretches using multi-modelling habitat suitability of Gangetic dolphin (*Platanista gangetica*) as a flagship species for aquatic biodiversity conservation in the Ganga River Basin, India. *Ecological Indicators*, 145, 109680.
4. IUCN. 1996. 1996 IUCN Red List of threatened animals. IUCN, Gland, Switzerland and Cambridge, UK. 448.
5. Sinha, R.K. (2000). Status of the Ganges River dolphin (*Platanista gangetica*) in the vicinity of Farakka Barrage, India. In *Biology and conservation of freshwater cetaceans in Asia*, ed. by R.R. Reeves, B.D. Smith, T. Kasuya, Vol. 23, 42–48. Occasional Gland, Switzerland: Paper of the IUCN Species Survival Commission.
6. Sinha, R.K., & Kannan, K. (2014). Ganges river dolphin: An overview of biology, ecology, and conservation status in India. *Ambio*, 43(8), 1029–1046.



Ajit Kumar Vidyarthi

(A.K, Vidyarthi)

Scientist 'F'

Central Pollution Control Board

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 727/2024

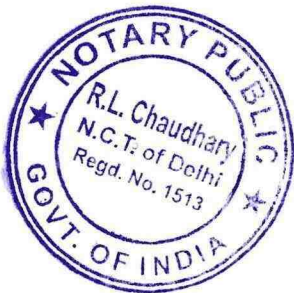
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News Item titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" appearing in Mongaby- India dated 20.05.2024.

AFFIDAVIT

I, A.K. Vidyarthi, working as Scientist 'F' in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi, do hereby solemnly affirm, declare on oath and state as under:-

1. That I, the deponent herein is authorized representative to represent the Respondent CPCB in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent and authorized to verify, sign and swear this affidavit on behalf of the Respondent CPCB.
2. That the accompanying reply may be read part and parcel of the present affidavit.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.



Amit Kumar Vidyarthi

DEPONENT

ए. के. विद्यार्थी / A. K. Vidyarthi
वैज्ञानिक 'एफ' / Scientist 'F'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Env. Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

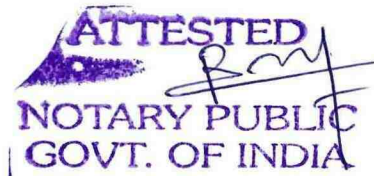
VERIFICATION

110 SEP 2024

Verified at New Delhi on this day of _____ 2024 that the contents of the above reply are correct and true on the basis of the records of the case as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

Ajit Kumar Vidyarthi

DEPONENT



110 SEP 2024

ए. के. विद्यार्थी / A. K. Vidyarthi
 वैज्ञानिक 'एफ' / Scientist 'F'
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 .Mo Env. Forest & Climate Change, Govt. of India
 परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
 Parivesh Bhawan, East Arjun Nagar, Delhi-110032

Item No. 08

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 727/2024

News Item titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" appearing in Mongaby- India dated 20.05.2024

Date of hearing: 04.07.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

ORDER

1. This original application is registered *suo-motu* on the basis of the news item titled "Endangered Gangetic dolphins found in most tributaries of Ganges prompting urgent conservation" appearing in Mongaby- India dated 20.05.2024.

2. The matter relates to the dwindling numbers of the Gangetic dolphin in the Ganga River. As per the article, these Gangetic dolphin (*Platanista gangetica*), endemic to the Ganga river, play a crucial role in stabilising the ecosystem, regulating the energy flow of the river and maintaining the fish and crustacean populations. They have also been listed as endangered by the International Union for Conservation of Nature (IUCN). The article states that the dolphin population has dwindled in recent years, especially in the upstream stretches of the river, with estimates pegging the numbers between 2500 and 5000 individuals.

3. The news item further highlights that as per research conducted by the Wildlife Institute of India and National Mission for Clean Ganga, the Gangetic dolphin inhabits most tributaries and sub-tributaries of the river with smaller rivers being a refuge for aquatic macro fauna such as the Gangetic dolphin, and that the smaller rivers provide resilience to the larger rivers by contributing towards the functioning of ecological processes lesser-known rivers harbor more than 15% of the Gangetic dolphins and contribute to habitat diversity, identifying a total of 620 kilometers as priority conservation areas. This underscores the importance of conserving these rivers to safeguard biodiversity.

4. The news item further states that conservation of the Gangetic dolphin faces significant challenges. The construction of dams and barrages on the river has impacted the river flow and water availability, which is further compounded by the impacts of climate change. A proposed river-interlinking scheme has also drawn criticism for its potential impact on the species habitat. Additionally, increasing pollution from agricultural run-offs that contain pesticides and other chemicals, directed and unintentional killings, increasing sediment deposition in the river due to loss of forests in their catchment areas, and the rise in mechanised boat traffic further, have also affected the species. Finally, the survival of dolphins critically depends on the health of rivers. Water development projects fragment dolphin habitats, jeopardising their long-term survival.

5. The above matter indicates violation of the Environment Protection Act, 1986 and the Water (Prevention and Control of Pollution) Act, 1974. Gangetic river dolphin is listed in the Schedule -1 Of Wildlife (Protection) Act, 1972 and requires highest degree of protection. Gangetic river dolphin has been designated as the National aquatic animal of India.

6. The news item raises substantial issue relating to compliance of the environmental norms and implementation of the provisions of scheduled enactment.

7. Power of the Tribunal to take up the matter *suo-motu* has been recognized by the Hon'ble Supreme Court in the matter of "*Municipal Corporation of Greater Mumbai vs. Ankita Sinha & Ors.*" reported in 2021 SCC Online SC 897.

8. Hence, we implead the following as respondents in the matter:

i. Wildlife Institute of India, Through its Director

Post Box #18, Chandrabani, Dehradun, Uttarakhand- 248001

ii. National Mission for Clean Ganga, Through its Deputy Director

First floor, Major Dhayan Chand national Stadium

India Gate, New Delhi- 110002

iii. Central Pollution Control Board, Through its Member Secretary

Indira Paryavaran Bhawan Jorbagh Road, New Delhi – 110 003

9. Let notice be issued to the above respondents for filing their response at least one week before the next date of hearing.

10. Project dolphin has been launched to protect and enhance the population of dolphins addressing the concern over conservation and empowering stakeholders, such as the river-dependent population, reducing river pollution and allowing for sustainable fishery and other river-based livelihood option through scientific conservation methods.

11. The respondents are also required to respond and disclose the steps taken for effective implementation of the said project.

12. List on 24.09.2024.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

July 04, 2024
O.A. No. 727/2024
HB