GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 2145
TO BE ANSWERED ON 07.08.2025

Threat to Gangetic Dolphins

2145. SHRI PRAMOD TIWARI:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether, as per the study of the Wildlife Institute of India published in the journal 'Heliyon', alarming levels of toxic chemicals have been found in the Ganga river, threatening the health and survival of the endangered Gangetic dolphins;
(b) if so, the details thereof including the sources of contamination;
(c) whether there is poor enforcement of environmental regulations in the Ganga basin;
(d) if so, the percentage of decline in dolphin population over the years; and
(e) the steps proposed to be taken to assess and regulate chemical contamination in Ganga river ecosystem?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) to (e) A recent study by the Wildlife Institute of India published in the journal 'Heliyon' highlights localized dietary exposure risks to Gangetic dolphins from certain chemicals in a 60 km stretch of the Middle Ganga. The overall findings indicate generally low average risks under established toxicity reference value metrics, warranting targeted monitoring and management rather than generalized alarm. The study underscores the need for targeted monitoring and does not support broad generalizations for the entire Ganga basin.

The main cause of pollution in river Ganga are the treated and untreated waste water from (1) Industry (Industrial Effluent) and (2) Domestic (Sewage). The Central Pollution Control Board in association with State Pollution Control Boards (SPCBs) has established a Water Quality Monitoring Network under the National Water Quality Monitoring Programme (NWMP). Under National Water Monitoring Programme (NWMP), Central Pollution Control Board (CPCB), in association with 5 State Pollution Control Boards (SPCBs), namely, Uttarakhand (UK), Uttar Pradesh (UP), Bihar, Jharkhand and West Bengal (WB), carry out manual water quality monitoring of River Ganga at 112 locations on bimonthly basis. The levels of most of the pollutants studied across locations was below detection limits (BDL). The water quality data of Ganga river is at **Annexure-I**

To enforce environmental regulations in the Ganga basin, the CPCB has undertaken several key initiatives as listed below:-

i. Industrial Monitoring: Since 2017, annual inspections of Grossly Polluting Industries (GPIs) and Common Effluent Treatment Plants (CETPs) are conducted under the Namami Gange Programme, involving joint teams from technical institutes and SPCBs. Under the PIAS project (since 2020), similar inspections cover GPIs in the Yamuna basin.
ii. Effluent Standards Compliance: Industries are mandated to install Effluent Treatment Plants (ETPs) and comply with discharge norms under the Environment (Protection) Act, 1986. CETPs treat effluents from small-scale industries, with standards enforced by SPCBs/PCCs.
iii. Regulatory Framework: SPCBs/PCCs grant and monitor compliance with consents under the Water Act, 1974, and Air Act, 1981. Industry-specific pollution standards are notified under the Environment (Protection) Rules, 1986.
iv. Sector-Specific Charters: CPCB, with partners, has developed environmental charters for key industrial sectors (e.g., paper, sugar, distillery, textile, tannery) focusing on water conservation, cleaner technologies, and waste minimization.
v. Model Consents: Model templates for Consolidated Consent & Authorization (CCA) for GPIs and STPs have been adopted by seven SPCBs/PCCs to promote uniformity and sustainability.
vi. Zero Liquid Discharge (ZLD): CPCB issued directions to SPCBs for ensuring ZLD compliance in molasses-based distilleries across several states.
vii. STP Compliance Monitoring: CPCB directed SPCBs to act against non-compliant Sewage Treatment Plants, mandate installation of OCEMS, and enable real-time monitoring.
viii. Pollution Surveillance: In addition to GPI inspections, CPCB conducts triannual monitoring of STPs and CETPs, half-yearly monitoring of drains, and fortnightly manual water quality checks at 112 locations across five states.

The Government of India has taken several steps for prevention and control of water pollution as given below:

ix. Govt. of India enacted The Water (Prevention and Control of Pollution) Act, 1974 and various provisions under The Environment (Protection) Act, 1986 for protection of water bodies and The Central & State Pollution Control Boards are implementing the provisions of both The Water (Prevention and Control of Pollution) Act, 1974 & The Environment (Protection) Act, 1986 to prevent and control pollution of aquatic resources.
x. SPCBs/PCCs have been directed under Section 18(1) (b) of The Water (Prevention & Control of Pollution) Act, 1974 to direct concerned agencies in the State/UT to develop infrastructure for sewage treatment.
xi. Government of India stipulated General discharge standards and industry specific effluent discharge standards under Environment (Protection) Rules, 1986 with an aim to prevent pollution in the water bodies.
xii. 'Indicative Guidelines for restoration of water bodies' have been issued by CPCB in 2021 as a guidance to the Stakeholders for ensuring restoration/ rejuvenation of water bodies.
xiii. CPCB vide letter dated 17.02.2023 requested all the SPCBs/PCCs to ensure necessary action to prevent, control/abate pollution of stagnant water bodies in respective States/UTs as per provisions of Section 17.1(a) of the Water (Prevention and Control of Pollution) Act, 1974.

The first-ever range-wide population estimation of riverine dolphins and associated species has been carried out in the country. The population survey conducted across eight states, namely, Uttar Pradesh, Bihar, Jharkhand, Rajasthan, Madhya Pradesh, West Bengal, Assam, and Punjab estimated 6,327 riverine dolphins across the Ganga, Brahmaputra, and Indus river systems. This includes 6,324 Ganges River dolphins and three Indus River dolphins. The study has set a baseline of river dolphin population in the country. The study has also identified the important dolphin hot spots, status of other aquatic fauna, threats and role of the community engagement, research and monitoring which plays an important role for ensuring the long term management of riverine dolphins in the country.

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Annexure-I

Water quality data of River Ganga for pesticides and heavy metals at 55 locations in 2024

(BDL- Below detection limit)

Name of Monitoring Locations	Gamma HCH (Lindane) (µg/L)	p,p' - DDT (µg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Mercury (µg/L)	Lead (µg/L)
RIVER MANDAKINI AT KEDARNATH	BDL	BDL	BDL	BDL	BDL	BDL
RIVER ALAKNANDA AT BADRINATH	BDL	BDL	BDL	BDL	BDL	BDL
RIVER ALAKNANDA B/C TO RIVER MANDAKINI AT RUDRA PRAYAG	BDL	BDL	BDL	BDL	BDL	BDL
RIVER MANDAKINI B/C TO RIVER ALKALNADA AT RUDRAPRAYAG,	BDL	BDL	BDL	BDL	BDL	BDL
RIVER BHAGIRATHI AT GANGOTRI,	BDL	BDL	BDL	BDL	BDL	BDL
RIVER ALAKNANDA A/C OF RIVER MANDAKINI AND RIVER ALAKNANDA AT RUDRAPRAYAG	BDL	BDL	BDL	BDL	BDL	BDL
RIVER ALAKNANDA B/C TORIVER BHAGIRATHI AT DEVPRAYAG,DIST-TEHRI GARHWAL	BDL	BDL	BDL	BDL	BDL	BDL
RIVER BHAGIRATHI B/C TO RIVER ALAKNANDA AT DEVPRAYAG,DIST-TEHRI GARHWAL	BDL	BDL	BDL	BDL	BDL	BDL
AFTER CONFLUENCE OF RIVER BHAGIRATHI AND RIVER ALAKNANDA AT DEVPRAYAG ,DIST-TEFRI GARHWAL	BDL	BDL	BDL	BDL	BDL	BDL
SWARG ASHRAM ,RISHIKESH	BDL	BDL	BDL	BDL	BDL	BDL

Name of Monitoring Locations	Gamma HCH (Lindane) (µg/L)	p,p' - DDT (µg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Mercury (µg/L)	Lead (µg/L)
NEAR VISTHAPHIT COLONY, RISHIKESH	BDL	BDL	BDL	BDL	BDL	BDL
D/S AT BAIRAAJ,RISHIKESH	BDL	BDL	BDL	BDL	BDL	BDL
U/S AT LAXMANJHULA,RISHIKESH	BDL	BDL	BDL	BDL	BDL	BDL
AFTER CONFLUENCE OF SONG NEAR SATYANARAYAN TEMPLE D/S RAIWALA, DEHRADUN	BDL	BDL	BDL	BDL	BDL	BDL
NEAR BISHANPUR KUNDI, HARIDWAR	BDL	BDL	BDL	BDL	BDL	BDL
D/S AT BALKUMARI MANDIR, AJEETPUR, HARIDWAR	BDL	BDL	BDL	BDL	BDL	BDL
HAR-KI-PAURI GHAT	BDL	BDL	BDL	BDL	BDL	BDL
UPPER GANGA CANAL D/S AT ROORKEE, HARIDWAR	BDL	BDL	BDL	BDL	BDL	BDL
U/S AT ABINDUGHAT, DUDHIYABAD, HARIDWAR	BDL	BDL	BDL	BDL	BDL	BDL
MADHYA GANGA BARRAGE, BIJNOR	BDL	BDL	BDL		BDL	BDL
PRAYAGRAJ (RASOOLABAD), U.P.	BDL	BDL	BDL	BDL		BDL
PRAYAGRAJ D/S (SANGAM), U.P.	BDL	BDL	BDL	BDL		BDL
NARORA (BULANDSAHAR), U.P.		BDL				BDL
U/S, ANOOPSHAHAR		BDL				BDL
D/S, ANOOPSHAHAR		BDL				BDL
KACHHLA GHAT, ALIGARH	BDL	BDL	0.011	BDL	BDL	BDL
U/S BRIJ GHAT ,GHARMUKTESHWAR		BDL		BDL		BDL

Name of Monitoring Locations	Gamma HCH (Lindane) (µg/L)	p,p' - DDT (µg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Mercury (µg/L)	Lead (µg/L)
D/S GARHMUKTESHWAR, U.P		BDL		BDL		BDL
TIGRI GANGA GHAT, VILLAGE-TIGARI, AMROHA	BDL	BDL	BDL		BDL	BDL
A/C PANDU RIVER AT MADEVESHWAR BABA TAMPLE DEOMAI AHT.	BDL	BDL	BDL	BDL		BDL
B/CB TAMSA RIVER AT PRACHIN SHIVALAYA DUMDUMA GHAT	BDL	BDL	BDL	BDL		BDL
VARANASI U/S NEAR VISHWASUNDARI BRIDGE B/C DRAINS(NAGWA NALA, SAMNE GHAT NALA,NAKHHI NALA)	BDL	0.080	0.0015	BDL		BDL
VARANASI D/S , A/C RIVER VARUNA , U.P	BDL	BDL	0.00	BDL	BDL	BDL
RIVER GANGAB B/C GOMTI RIVER AT BALUA GHAT BRIDGE, VARANASI	BDL	BDL	BDL	BDL	BDL	BDL
A/C GOMTI RIVER, BHUSAULA	BDL	BDL	BDL	BDL	BDL	BDL
KADAGHAT, KAUSHAMABI	BDL	BDL	BDL	BDL		BDL
TARIGHAT (GHAZIPUR), U.P	BDL	BDL	BDL	BDL	BDL	BDL
A/C TAMSA RIVER, SIRSA, SON BARSA	BDL	BDL	BDL	BDL		BDL
ULUBERIA , HOWRAH,WEST BENGAL	BDL	BDL	BDL	BDL	BDL	BDL
DAKSHMINESHWAR, KOLKATA, WEST BENGAL	BDL	BDL	BDL	BDL	BDL	BDL
PALTA WEST BENGAL	BDL	BDL	0.02	BDL	BDL	BDL
BAHARAMPORE, MURSHIDABAD, WEST BENGAL	BDL	BDL	BDL	BDL	BDL	0.0057

Name of Monitoring Locations	Gamma HCH (Lindane) (µg/L)	p,p' - DDT (µg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Mercury (µg/L)	Lead (µg/L)
PATIKALI NEAR DURGA CHAK WEST BENGAL	BDL	BDL	BDL	BDL	BDL	BDL
DIAMOND HARBOUR, 24 PARGANAS (S)WEST BENGAL	BDL	BDL	BDL	BDL	BDL	BDL
GARDEN REACH, KOLKATA, WEST BENGAL	BDL	BDL	BDL	BDL	BDL	BDL
HOWRAH-SHIVPUR WEST BENGAL	BDL	BDL	BDL	BDL	BDL	BDL
SERAMPORE, HOOGHLY,WEST BENGAL	BDL	BDL	0.01	BDL	BDL	BDL
RIVER TRIBENI ON GANGA, NEAR BURNING GHAT, HOOGHLY	BDL	BDL	0.012	BDL	BDL	BDL
RIVER NABADIP ON GANGA, GHOSHPARA NEAR MONIPURGHAT,NADIA	BDL	BDL	0.009	BDL	BDL	BDL
FARAKKA, MUSHIDABAD	BDL	BDL	BDL	BDL	BDL	BDL
BEHRAMPORE(KHAGRA), MURSHIDABAD	BDL	BDL	BDL	BDL	BDL	BDL
BEHRAMPORE, (GORA BAZAR),MURSHIDABAD	BDL	BDL	BDL	BDL	BDL	BDL
PALTA, SHITALTALA,W.B.	BDL	BDL	BDL	BDL	BDL	0.0027