

Statement-II

List of 10 National Waterways on which development activities have been initiated

Sl. No.	Name of the Waterway	Length (km.)
1.	River Barak (NW-16)	48
2.	River Gandak (NW-37)	250
Waterways in Goa		
3.	Cumberjua (NW-27)	17
4.	Mandovi (NW-68)	41
5.	Zuari (NW-111)	50
6.	Alappuzha-Kottayam-Athirampuzha Canal (NW-9):	38
7.	River Rupnarayan (NW-86)	34
8.	Sunderbans Waterways (NW-97)	172
9.	River Kosi (NW-58)	236
10.	River Ghagra (NW-40)	350
TOTAL LENGTH		1236

Deteriorating air quality of Delhi

*78. SHRI M.P. VEERENDRA KUMAR: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether Government has taken note of the deterioration of air quality in the capital city of Delhi, if so, the details thereof;

(b) whether a recent study suggested that the pollution could be contained through an artificial rain, if so, the response of Government thereto;

(c) the reasons for increase of pollution in Delhi, making it the most polluted city in country; and

(d) steps taken or proposed to be taken by Government to solve the long-standing problem of severe pollution in the capital city?

THE MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. HARSH VARDHAN): (a) As per available data, there has been marginal improvement in air quality of Delhi in 2018 compared to 2017. There is an increase in the number of 'Good' to 'Moderate' days to 159 in 2018 from 152 in 2017 and 108 in 2016, and reduction in the number of 'Poor' to 'Severe' days from 246 in

2016 and 213 in 2017 to 206 in 2018. The annual average values of PM_{10} and $PM_{2.5}$ have decreased to $243 \mu\text{g}/\text{m}^3$ and $115 \mu\text{g}/\text{m}^3$ in 2018 from $266 \mu\text{g}/\text{m}^3$ and $124 \mu\text{g}/\text{m}^3$ in 2017 and $291 \mu\text{g}/\text{m}^3$ and $135 \mu\text{g}/\text{m}^3$ in 2016 respectively.

(b) It is generally observed that rainfall results in lowering of the concentration of the pollutants in the atmosphere. PAAC-EPC (Project Appraisal and Approval Committee constituted for the utilization of Environment Protection Charge fund) in its meeting on 13th November, 2018 approved, in-principle, a project of IIT Kanpur for artificial rain in Delhi region. However, this could not be taken up due to unfavourable meteorological conditions etc.

(c) Studies have been conducted to identify major air pollution sources and their contribution to ambient air pollution levels in Delhi. The sources of air pollution include vehicles, industries, dust and construction activities, biomass burning, solid waste burning etc. Details are given in the Statement (*See below*).

(d) The Government has taken various measures to control air pollution which *inter alia*, include notification of Graded Response Action Plan for different levels of air pollution in Delhi and NCR; notification of National Ambient Air Quality Standards; setting up of monitoring network for assessment of ambient air quality; introduction of cleaner/alternate fuels like gaseous fuel (CNG, LPG etc.), ethanol blending; launching of National Air Quality index; universalization of BS-IV from 2017; leapfrogging from BS-IV to BS-VI fuel standards since 1st April, 2018 in National Capital Territory of Delhi and from by 1st April, 2020 in the rest of the country; notification of Construction and Demolition Waste Management Rules; banning of burning of biomass; notifications regarding mandatory implementation of dust mitigation measures for construction and demolition activities; promotion of public transport network; streamlining the issuance of Pollution Under Control Certificate; issuance of directions under Section 18(1)(b) of Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of Environment (Protection) Act, etc. Eastern Peripheral Expressway and Western Peripheral Expressway have also become operational. The Central Government has also notified a Comprehensive Action Plan (CAP) identifying timelines and implementing agency for actions identified for prevention, control and mitigation of air pollution in Delhi and NCR.

Statement

Details of studies for air pollution sources and its contributions in Delhi

1. Comprehensive Study on Air Pollution and Green House Gases (GHGs) in Delhi Conducted by: IIT Kanpur

Year of publication: 2016

Cities covered – Delhi

Sources identified:–

Source	Average for six monitoring locations			
	% contribution (PM ₁₀)		% contribution (PM _{2.5})	
	Winter	Summer	Winter	Summer
Vehicles	19.7	6.4	25.1	8.5
Secondary Particulates	24.6	10.15	29.9	14.9
Biomass Burning	16.7	6.8	25.8	12.2
Industries	0.65	1.05	0.8	1.2
Coal and Fly Ash	12.3	37.2	4.8	25.95
Construction Material	3.1	4.1	1.5	3.0
Soil and Road Dust	14.4	26.5	4.3	27.1
Solid Waste Burning	8.75	7.75	7.75	7.2

Cleaning of Yamuna river

†79. SHRIMATI CHHAYA VERMA: Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

(a) whether the Ministry is working towards releasing treated water in Yamuna in different cities including National Capital Region (NCR) in order to reduce pollution;

(b) whether it is a fact that despite various schemes for cleaning of Yamuna, the water has been getting polluted day-by-day, rendering it unfit for drinking even by animals;

(c) the amount spent for cleaning and purifying Yamuna during last three years and the outcome thereof; and

(d) the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION (DR. SATYA PAL SINGH):

(a) and (b) The cleaning of Rivers is a continuous process and this Ministry is supplementing the efforts of the States for pollution abatement in river Yamuna, a tributary of River Ganga, by providing financial assistance to States of Haryana, Delhi and Uttar Pradesh in phased manner since 1993 under the Yamuna Action

† Original notice of the question was received in Hindi.