

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION No. 2846
TO BE ANSWERED ON 21.03.2022

CAUSES OF POLLUTION AND SMOG

2846. SHRI P.C. MOHAN:
SHRIMATI KESHARI DEVI PATEL:
SHRI KANAKMAL KATARA:
SHRI GAJENDRA SINGH PATEL:

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

- (a) whether the Government has done or commissioned any study to identify the reasons for the perennial problem of air pollution and smog in different cities of the country, if so, the details thereof;
- (b) the details of level (in percentage) contributed by each pollutant category on overall pollution;
- (c) the details of actions being taken by the Government for dealing with this issue along with the reasons for the failure of policy interventions in the past;
- (d) the details of the measures taken by the Government to improve the quality of air in the country, State-wise;
- (e) the details of locations in Madhya Pradesh where Air Quality Indicators are being established;
- (f) whether any scheme is under consideration to check air pollution in Khargone Parliamentary Constituency;
- (g) the details of the stringent measures being taken against the institutions causing pollution; and
- (h) the steps taken by the Government keeping in view the abnormal changes in the weather?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) & (b):

Under National Clean Air Programme (NCAP), source apportionment studies are undertaken which provide data regarding local air polluting sources. So far, Source apportionment studies have been completed in 37 Non-Attainment Cities (NACs) and initiated in 51 NACs.

Major sources of Particulate Matter (PM) are road dust, industries, transport, and biomass burning. As per recent study of TERI-ARAI, in PM_{2.5} concentrations, the average share of the transport sector varies from 17-28% in Delhi; industries contribute to 22-30%, while fuel (mainly biomass) burning (in residences and agricultural fields) contributes to 14-15% whereas Dust (soil, road, and construction) has a share of 17-38%. Whereas, in PM₁₀ concentration, the average share of transport sector is 15-24% in Delhi; industries contribute to 22-27%; while fuel (mainly biomass) burning (in residences and agricultural fields) contributes to 13-15% whereas Dust (soil, road, and construction) has a share in PM₁₀ concentrations (25-42%).

(c) & (d)

Government has launched National Clean Air Programme (NCAP) in 2019 as a national level strategy to reduce air pollution levels across the country. Several steps are undertaken in the NCAP which inter alia include the following:

City Specific Clean Air Micro Action Plans have been prepared and rolled out for implementation in 132 non-attainment and million-plus cities. These action plans focus on city specific short/ medium/ long term actions to control air pollution from sources such as vehicular emission, road dust, burning of biomass/ crop/ garbage/ Municipal Solid Waste, landfills, construction activities, industrial emission, etc.

Under NCAP, Centre level Steering Committee, Monitoring Committee and Implementation Committee has been constituted and periodic review of the implementation progress is conducted. Also a State Level Steering Committee and Monitoring Committee Chaired by Chief Secretary and Principal Secretary, Environment Department respectively for periodic review and monitoring of the State level implementation under NCAP. City/ District level Implementation Committee chaired by Municipal Commissioner/ District Magistrate has also been constituted to periodically review the status of progress of implementation of actions under NCAP.

Rs. 418.60 crore have been sanctioned to non-attainment cities in different States as per **Annexure I** under NCAP for initiating actions such as expansion of monitoring network, construction and demolition waste management facilities, non-motorised transport infrastructure, green buffers, mechanical street sweepers, composting units etc.

In addition, as per the Fifteenth Finance Commission (XV-FC) recommendations ₹4400 crores have been released in the Budget of FY 2020-21 to tackle the problem of air pollution for 42 urban centres with a million-plus population. Further, an amount of ₹12,139 crores have been allocated for improvement of air quality for the award period FY 2021-22 to FY 2025-2026.

PRANA-Portal for Regulation of Air-pollution in Non-Attainment cities a portal for monitoring implementation of NCAP has been launched.

Besides the above, Government has taken several other steps for mitigation of air pollution which include introduction of BS-VI norms for fuel and vehicles since April, 2020; promotion of E-vehicles; expansion of network of metro rails for public transport; promotion of cleaner fuel such as PNG; stringent emission norms for industries including coal based Thermal Power Plants (TPPs); zig-zag technology for brick kilns; Extended Producer Responsibility (EPR) for plastic and e-waste management; real time

monitoring of major industrial sectors, etc. Sector wise measures are enclosed at **Annexure II**.

Further, the Government has enacted The Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021 for constituting the Commission for Air Quality Management (CAQM) in National Capital Region and Adjoining Areas for better co-ordination, research, identification, and resolution of problems related to air quality in the National Capital Region (NCR) and adjoining areas.

(e) to (h)

There are 16 Continuous Ambient Air Quality Monitoring (CAAQMS) and 42 Manual monitoring stations in Madhya Pradesh State covering 11 cities / towns. City wise list of monitoring stations is enclosed at **Annexure III**. The list of cities being provided funds under NCAP and XV-FC grant is as per **Annexure IV**. It may be seen that Khargone Parliamentary Constituency is not included in the list of cities under NCAP and XV-FC grant.

Central Pollution Control Board (CPCB) and SPCB are empowered under Section 5 of the Environment (Protection) Act, 1986 for taking all necessary action for improvement of condition of environment. Regular inspections of industries are undertaken by SPCBs/PCCs. Show-cause notice is issued to industries violating emissions norms. Stringent emissions norms are in place for Coal based Thermal Power Plants (TPPs). Installation of online continuous emission monitoring devices in 17 red category highly polluting industries has been mandated. Directions under Section 31A of The Air (Prevention and Control of Pollution) Act, 1981 have been issued to 24 States for ground implementation of approved city action plan for 132 non-attainment / million plus cities. In Delhi-NCR, direction has been issued by CAQM for closing down air polluting industries/projects/activities.

Annexure-I**State wise details of funds released under NCAP program**

S.No.	State	Amount in Cr. (Rs.)
1	Andhra Pradesh	23.64
2	Assam	12.36
3	Bihar	17.20
4	Chandigarh	13.28
5	Chhattisgarh	13.06
6	Delhi	11.24
7	Gujarat	12.00
8	Himachal Pradesh	10.30
9	Jammu & Kashmir	8.12
10	Jharkhand	6.00
11	Karnataka	7.82
12	Madhya Pradesh	22.12
13	Maharashtra	63.15
14	Meghalaya	3.00
15	Nagaland	6.12
16	Odisha	15.87
17	Punjab	27.52
18	Rajasthan	21.92
19	Tamil Nadu	3.06
20	Telangana	13.76
21	Uttar Pradesh	76.94
22	Uttarakhand	11.12
23	West Bengal	19.00
	Total	418.60

Measures taken by the Government for Air Quality Management

Vehicular Emission

- Leapfrogging from BS-IV to BS-VI norms for fuel and vehicles since April, 2020.
- Network of metro rails for public transport are enhanced and more cities are covered.
- Development of Expressway and Highways are also reducing the fuel consumption and pollution.
- Eastern Peripheral Expressway & Western Peripheral Expressway have been operationalised to divert non destined traffic from Delhi.
- Ban on 10-year-old diesel vehicles and 15-year-old petrol vehicles in Delhi NCR.
- Environment protection charges (EPC) have been imposed on diesel vehicles with engine capacity of 2000cc and above in Delhi NCR.
- Introduction of cleaner/alternate fuels like CNG, LPG, ethanol blending in petrol.
- Faster Adoption and Manufacturing of Electric Vehicles (FAME) -2 Scheme has been rolled out.
- Permit requirement for electric vehicles has been exempted.
- Promotion of public transport and improvements in roads and building of more bridges to ease congestion on roads.

Industrial Emission

- Stringent emission norms for Coal based Thermal Power Plants (TPPs).
- Ban on use of pet coke and furnace oil in NCR with restricted use of pet coke in cement plants, lime kilns and calcium carbide manufacturing units.
- Shifting of industrial units to PNG.
- Installation of online continuous emission monitoring devices in highly polluting industries.
- Shifting of brick kilns to zig-zag technology for reduction of pollution

Air Pollution due to dust and burning of waste

- Notifications of 6 waste management rules covering solid waste, plastic waste, e-waste, bio-medical waste, C&D waste and hazardous waste.
- Setting up infrastructure such as waste processing plants.
- Extended Producer Responsibility (EPR) for plastic and e-waste management.

- Ban on burning of biomass/garbage.

Crop Residue/ParaliManagement

- Under Central Sector Scheme on 'Promotion of Agricultural Mechanization for in-situ management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi', agricultural machines and equipment for in-situ crop residue management are promoted with 50% subsidy to the individual farmers and 80% subsidy for establishment of Custom Hiring Centres.
- Sustainable Alternative Towards Affordable Transportation (SATAT) has been launched as an initiative to set up Compressed Bio-Gas (CBG) production plants and make CBG available in the market for use in automotive fuels.

Annexure-III

Status of ambient air quality monitoring stations in Madhya Pradesh

S. No.	City / town	Real time station under CAAQMS	Manual station under NAMP
1.	Amlai		2
2.	Bhopal	1	8
3.	Chindwara		2
4.	Damoh	1	
5.	Dewas	1	3
6.	Gwalior	2	3
7.	Indore	1	3
8.	Jabalpur	1	2
9.	Katni	1	2
10.	Maihar	1	
11.	Mandideep	1	
12.	Nagda		3
13.	Pithampur	1	2
14.	Ratlam	1	
15.	Rewa		1
16.	Sagar	1	2
17.	Satna	1	2
18.	Singrauli	1	3
19.	Ujjain	1	4
	19	16	42

List of 132 Non-Attainment and Million Plus Cities

State	S.No.	City
Andhra Pradesh (13)	1.	Guntur
	2.	Kurnool
	3.	Nellore
	4.	Vijayawada
	5.	Vishakhapatnam
	6.	Anantapur
	7.	Chittoor
	8.	Eluru
	9.	Kadapa
	10.	Ongole
	11.	Rajahmundry
	12.	Srikakulam
	13.	Vizianagaram
Assam (05)	14.	Guwahati
	15.	Nagaon
	16.	Nalbari
	17.	Sibsagar
	18.	Silchar
Bihar (03)	19.	Patna
	20.	Gaya
	21.	Muzaffarpur
Chandigarh (01)	22.	Chandigarh
Chhattisgarh (03)	23.	Bhilai
	24.	Korba
	25.	Raipur
Delhi (01)	26.	Delhi
Gujarat (03)	27.	Surat
	28.	Ahmedabad
	29.	Vadodara
Himachal Pradesh (7)	30.	Baddi
	31.	Damtal
	32.	Kala Amb
	33.	Nalagarh
	34.	Paonta Sahib
	35.	Parwanoo
	36.	Sunder Nagar
Jammu & Kashmir (2)	37.	Jammu
	38.	Srinagar
Jharkhand (01)	39.	Dhanbad
Karnataka (04)	40.	Bangalore

State	S.No.	City
	41.	Devanagere
	42.	Gulburga
	43.	Hubli-Dharwad
Madhya Pradesh (06)	44.	Bhopal
	45.	Dewas
	46.	Indore
	47.	Sagar
	48.	Ujjain
	49.	Gwalior
Maharashtra (18)	50.	Akola
	51.	Amravati
	52.	Aurangabad
	53.	Badlapur
	54.	Chandrapur
	55.	Jalgaon
	56.	Jalna
	57.	Kolhapur
	58.	Latur
	59.	Mumbai
	60.	Nagpur
	61.	Nashik
	62.	Navi Mumbai
	63.	Pune
	64.	Sangli
	65.	Solapur
	66.	Ulhasnagar
	67.	Thane
Meghalaya (01)	68.	Byrnihat
Nagaland (02)	69.	Dimapur
	70.	Kohima
Orissa (07)	71.	Angul
	72.	Balasore
	73.	Bhubaneswar
	74.	Cuttack
	75.	Rourkela
	76.	Talcher
	77.	Kalinga Nagar

State	S.No.	City
Punjab (09)	78.	DeraBassi
	79.	Gobindgarh
	80.	Jalandhar
	81.	Khanna
	82.	Ludhiana
	83.	NayaNangal
	84.	Pathankot/Dera Baba
	85.	Patiala
	86.	Amritsar
Rajasthan (05)	87.	Alwar
	88.	Jaipur
	89.	Jodhpur
	90.	Kota
	91.	Udaipur
Tamilnadu(03)	92.	Thoothukudi
	93.	Trichy
	94.	Madurai
Telangana (04)	95.	Hyderabad
	96.	Nalgonda
	97.	Patancheruvu
	98.	Sangareddy
Uttar Pradesh (16)	99.	Agra
	100.	Allahabad
	101.	Anpara
	102.	Bareily
	103.	Firozabad
	104.	Gajraula
	105.	Ghaziabad
	106.	Jhansi
	107.	Kanpur
	108.	Khurja
	109.	Lucknow
	110.	Moradabad
	111.	Noida
	112.	Raebareli
	113.	Varanasi
	114.	Gorakhpur

State	S.No.	City
Uttarakhand(03)	115.	Kashipur
	116.	Rishikesh
	117.	Dehradun
West Bengal (07)	118.	Kolkata
	119.	Asansol
	120.	Barrackpore
	121.	Durgapur
	122.	Haldia
	123.	Howrah
	124.	Raniganj
Million plus cities which are not non-attainment but funded under XV-Financial commission		
Gujarat (1)	125.	Rajkot
Haryana (1)	126.	Faridabad
Jharkhand (2)	127.	Jamshedpur
	128.	Ranchi
Madhya Pradesh (1)	129.	Jabalpur
Uttar Pradesh (1)	130.	Meerut
Maharashtra (1)	131.	Vasai-Virar
Tamilnadu (1)	132.	Chennai