

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 2244
TO BE ANSWERED ON 05.08.2024

Environmental Degradation and Pollution in Punjab

2244. DR. DHARAMVIRA GANDHI:

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

- (a) the measures taken to address environmental degradation and pollution in Punjab State particularly in the cities of Patiala, Ludhiana and Amritsar which are amongst the most polluted cities in the said State;
- (b) the steps being implemented to promote sustainable agricultural practices, fund allocated and the results achieved in the said State;
- (c) whether a new initiatives planned to enhance environmental conservation including afforestation projects and waste management programmes along with fund allocation and results achieved in the said State; and
- (d) the details of funds allocated for environmental conservation projects in the said State under schemes like the National Clean Air Programme (NCAP) and Green India Mission?

ANSWER

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

(a). To reduce the air pollution in the country, government has launched National Clean Air Programme (NCAP) in 2019. Taking into account the available international experiences and national studies, the tentative national level target under NCAP is 20%–30% reduction of particulate matter concentration by 2024. Target has been revised to achieve reduction in PM10 level up to 40% or achievement of national ambient air quality standards (60 µg/m³) by 2025-26.

Central Pollution Control Board (CPCB) has identified 131 million plus and non-attainment cities (cities exceeding National Ambient Air Quality Standards (NAAQS), consecutively for five years). City Specific Clean Air Action Plans have been prepared and rolled out for implementation in all these 131 non-attainment/million plus cities including 9 cities of Punjab state (Patiala, Ludhiana, Amritsar, Jalandhar, Khanna, Gobindgarh, Dera Bassi, Pathankot/Dera Baba and Naya-Nangal) to improve the air quality.

These city specific clean air action plans target city specific air polluting sources like Soil & Road Dust, Vehicles, Domestic Fuel, MSW Burning, Construction Material and Industries with

short-term priority action as well as those to be implemented in a medium to longer time frame along with the responsible agencies.

As per annual report submitted by Punjab State Pollution Control Board for the year 2022-23, the status of Solid Waste Management in the state of Punjab is as follow:

- The total Solid waste generated in the state 4374.6 TPD, out of which 4367.2 TPD collected, 1795.8 TPD treated and 2571.4 TPD landfilled.
- Total 8350 no. of processing sites have been set up in the state till the end of year 2022, for processing of wet waste.
- Channelization of the recyclable waste is done through 266 Material Recovery facilities (MRFs).
- There are 130 number of existing dumpsites, out of which 3 are reclaimed and 35 dumpsites have been converted to Sanitary landfill sites.
- The department of local govt. has adopted decentralized approach for Solid Waste Management in the state through source segregation, door to door collection, transportation of segregated waste to processing site/composting pits, processing of wet waste at composting pits/biomethanation, transportation of dry waste to MRF facility for further segregation of recyclable waste and channelization & final disposal of inert in sanitary landfill facility.

The details of Solid waste management in the city **Amritsar and Ludhiana** are as below:

Amritsar:

- The Amritsar city generates 520 tons of solid waste per day (TPD) out of which, 252 TPD is processed, and 5 TPD is disposed in secured landfill site.
- The waste processing facilities include 67 composting pits and 1 proposed waste-to-energy plant.
- The city has 3 dumpsites, with bio mining operations started at 2 sites.

Ludhiana:

- The Ludhiana city generates 1100 TPD, out of which 165 TPD is processed and 5 TPD is disposed in secured landfill site.
- The waste processing facilities consists of 1 composting pit.
- The city has 2 dumpsites, with bio mining operations started at 1 site.

Besides the above, CPCB has framed guidelines for promoting setting up of paddy straw based pelletization and Torrefaction plants which is expected to help in addressing the issue of open burning of paddy straw in agriculture fields in Northern Region, including the state of Punjab. In case of pelletisation plant, Rs. 28 lakhs per TPH, or 40% of the capital cost considered for plant and machinery of a 01TPH plant, whichever is lower, is provided as one-time financial assistance with a maximum total financial support of Rs. 1.4 crore per proposal. In case of torrefaction plants, Rs. 56 lakhs per TPH, or 40% of the capital cost considered for plant and machinery of a 1TPH plant, whichever is lower, is provided as one-time financial assistance with a maximum total financial support of Rs. 2.8 crore per proposal. So far, 13 plants (Amritsar-02, Patiala-01) have been sanctioned by CPCB in the state of Punjab under the guidelines. Total pellet production capacity of these 13 plants is 52.5 TPH corresponding to annual expected paddy straw utilization of 2.48 lakh tonne and pellet production of 1.89 lakh tonne. Further, steps taken by Government to improve the air quality are enclosed as **Annexure-I**.

(b):

Ministry of Agriculture & Farmers' Welfare (MoA&FW) in 2018 launched a scheme for "Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh & NCT of Delhi". Under this scheme, subsidy is provided for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in NCT of Delhi and the States of Punjab, Haryana and Uttar Pradesh. In 2022, the Scheme has been merged with Sub-Mission on Agricultural Mechanization (SMAM) and SMAM has been merged with Rashtriya Krishi Vikas Yojana (RKVY). During 2018-2024, total fund released to Delhi and other states under the said scheme is Rs. 3398.56 crores using which, over 2.7 lakh crop residue machineries have been delivered to individual farmers and CHCs, and over 39,000 CHCs have been established.

(c):

As per annual report for the year 2022-23 submitted by Punjab Pollution Control Board, the action plan prepared by 163 Municipalities are mentioned below:

- The state through directorate of Environment & Climate Change (DECC) notified the Comprehensive action plan on waste management, including municipal solid waste in April 2019. Timelines to comply with the solid waste management rules, 2016 by all the ULBs of the state have been fixed in this action plan.
- The department of local government, Punjab has formulated Punjab State Solid waste management policy 2018 and the Punjab Solid Waste Management and cleanliness and sanitation bye laws 2020 adopting decentralized solid waste management approach. Also SOP for Solid waste management has been prepared by department of local government to ensure compliance of SWM rules, 2016.
- The policy envisages that the state shall work for attaining and sustaining the scientific solid waste management by adopting the systematic decentralized approach focusing on 6Rs principles i.e. refuse, reduce, reuse, recycle, redesign and research

(d):

An amount of Rs 1615.47 Cr has been released from FY 2019-20 to FY 2023-24 under NCAP, out of which Rs. 102.70 Cr. released to non-attainment and million plus cities of Punjab. City-wise fund released details under NCAP to Punjab State are enclosed in **Annexure II**.

As per the recommendations of the 15th Finance Commission (XVFC), Rs. 9595.66 Cr crore have been released from FY 20-21 to till 01.07.24 as grants to tackle the burgeoning problem of air pollution for 42 cities/ urban agglomerates (UAs) having million plus population, out of which Rs. 159 Cr has been released to million plus cities of Punjab. Details enclosed as **Annexure III**.

Steps taken for management of air quality

1.0 National Clean Air Programme:

- National Clean Air Programme (NCAP) has been launched by Ministry of Environment, Forest and Climate Change (MoEFCC) in January 2019 with an aim to improve air quality in 131 cities (non-attainment cities and Million Plus Cities) in 24 States by engaging all stakeholders.
- NCAP envisages reduction by 20-30% in PM concentration over baseline in year 2017 by 2024. Target has been revised to achieve reduction in PM10 level up to 40% or achievement of national standards ($60 \mu\text{g}/\text{m}^3$) by 2025-26.
- City Action Plans (CAPs) have been prepared by all 131 cities and being implemented by Urban Local Bodies.
- The city specific clean air action plans target city specific air polluting sources like Soil & Road Dust, Vehicles, Domestic Fuel, MSW Burning, Construction Material and Industries.
- Performance based financial support is being provided to these 131 cities for implementation of activities of City Action Plan.
- Further, funding for implementation of CAPs is being mobilised through convergence of resources from various schemes of Central Government such as Swachh Bharat Mission SBM (Urban), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart City Mission, Sustainable Alternative towards Affordable Transportation (SATAT), Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME-II), Nagar Van Yojna, etc. and resources from State/UT Governments and its agencies such as Municipal Corporation, Urban Development authorities and Industrial development authorities etc.
- Public Grievance Redressal Portal (PGRP)/helpline have been developed by all 131 cities to address public complaints of air pollution in timely manner.
- Emergency Response System (ERS/ GRAP) have been developed by all 131 cities for taking action in air emergencies
- Out of 131 identified cities, decrease in PM10 concentration has been observed in 95 cities during FY 2023-24 as compared to levels during FY 2017-18. Also, there are 16 cities (Gulburga, Nalgonda, Damtal, Ongole, Chittur, Nellore, Kurnool, Dera Baba Nanak, Naya Nangal, Silchar, Parwanoo, Sunder Nagar, Sivasagar, Kadapa, Trichy, Tuticorin) that are meeting National Ambient Air Quality Standards (NAAQS) of annual average PM10 concentration i.e. $60 \mu\text{g}/\text{m}^3$.

2.0 Measures for control of vehicular emissions:

- Leapfrogging from BS-IV to BS-VI fuel standards since 1st April, 2018 in NCT of Delhi and from 1st April, 2020 for the rest of the country.
- Introduction of BS VI compliant vehicles across the country since April, 2020.
- Department of Heavy Industry is providing subsidy on e-vehicles under Faster Adoption and Manufacture of (Hybrid &) Electric Vehicles in India (FAME -II India) scheme.
- 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.
- Installation of Vapour Recovery System (VRS) in new and existing petrol pumps selling gasoline >100kl per month in million plus cities and those selling >300kl per month in cities with population between 1 lakh to 1 million to control vehicular refuelling emissions.

3.0 Measures for control of industrial emission:

- For strengthening monitoring mechanism and effective compliance through self-regulatory mechanism, CPCB directed all 17 categories of highly polluting industries to install OCEMS. There are 4,315 units under 17 categories of industries, out of which 3,734 units have installed OCEMS and closure directions are still in-force for 581 units.
- The Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India notifies industry specific discharge standards under Schedule-I: 'Standards for Emission or Discharge of Environmental Pollutants from various Industries' of Environment Protection Act, 1986. So far, industry specific environmental standards, for 79 industrial sectors (including emission standards for 56 sectors) have been notified. Industrial sectors, for which specific standards are not available, general standards as notified under Schedule-VI of Environment Protection Rules, 1986 shall be applicable.
- Ban on use of imported pet coke in the country since July 26, 2018, with exception for use in permitted processes.
- CPCB has come out with System and Procedure for Emission Compliance Testing of Retro-fit Emission Control Devices (RECD) for Diesel Power Generating Set Engines up to Gross Mechanical Power 800 kW.

4.0 Measures for control of emissions from Stubble Burning

- MoA&FW in 2018 launched scheme for providing subsidy for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in NCT of Delhi and the States of Punjab, Haryana and Uttar Pradesh. Under the said scheme, financial assistance is provided to the farmers for purchase of crop residue management machinery and establishment of custom hiring centres. 50% subsidy on the cost of crop residue management machinery is provided to the individual farmers and 80% subsidy is provided for establishment of Custom Hiring Centres (CHCs) of crop residue management machinery. During 2018-2024, total fund released to Delhi and other states under the said scheme is Rs. 3398.56 crores using which, over 2.7 lakh crop residue machineries have been delivered to individual farmers and CHCs, and over 39,000 CHCs have been established. Further, MoA&FW in 2023 revised guidelines under the scheme to support establishment of crop residue/paddy straw supply chain, by providing financial assistance on the capital cost of machinery and equipment required for Establishment of crop residue/paddy straw supply chain.
- Directions issued by CAQM to State governments of Punjab, Haryana and Uttar Pradesh to strictly and effectively implement revised action plan to eliminate and control stubble burning.
- CPCB has framed guidelines for providing one-time financial assistance for setting up of paddy straw based pelletization and torrefaction plants which may help in addressing the supply chain issues and the issue of open burning of paddy straw in agriculture fields in Northern Region. A corpus of Rs. 50 crores have been earmarked for utilisation through the guidelines. Under this scheme, funds have been released to 07 plants (Mansa- 03, Patiala- 01, Hoshiarpur- 01, Amritsar- 01, Sirsa- 01), which are also operational with cumulative capacity of 33 TPH.

5.0 Air Quality Monitoring and Network

- National Air Quality Index (AQI) was launched in 2015. Information is being disseminated to public through daily air quality bulletins.

- Ambient Air Quality Network: The country has a network of 1504 ambient air quality monitoring stations (541 continuous and 963 manual) covering 519 cities in 28 states and 7 UTs.
- A centralized air quality monitoring portal is operated by Central Pollution Control Board wherein, tracking of various information such as hourly PM concentrations, Live Air Quality Data of Monitoring stations and Live Air Quality Index is being carried out.
- Daily AQI Bulletin is published on CPCB website giving AQI information for cities across India.

6.0 C&D Waste

- CPCB published guidelines (available on
 1. Environmental Management of Construction & Demolition (C & D) Wastes' in March, 2017
 2. 'Guidelines on DUST Mitigation Measures in Handling Construction Material & C&D Wastes' in November 2017.
 3. Disposal of legacy waste by bio-mining and bio-remediation to address open burning and landfill fires
- CPCB has issued direction to all SPCBs/ PCCs for deployment of Anti-Smog Gun and implementation of adequate dust mitigation measures at construction projects/ sites having area more than 20,000 sq. meters. CPCB has issued guidelines/ mechanism for use of anti-smog guns in Construction and Demolition projects.
- Online monitoring mechanism (through web portal) introduced for monitoring compliance of dust mitigation measures for construction sites.

7.0 Regular Stakeholder Consultation, Public & Media Outreach

- CPCB has developed a mobile app i.e. SAMEER, where Real-time Ambient air quality data of various parameters including AQI is also given. Sameer app also facilitates the public in lodging of air pollution related complaints in NCR region and such complaints are assigned to various local agencies.
- Dedicated media corner, Twitter and Facebook accounts have also been created for public outreach.
- Complaint redressal on SAMEER app and social media platforms is monitored and redressal status is shared with respective agencies.
- Daily AQI status is shared on social media platforms. Various campaigns as well as informative posts related to air pollution, firecrackers, vehicular pollution, stubble burning, sustainable lifestyle, etc. are also posted regularly on social media platforms.
- CPCB issues a daily report comprising of AQI of Delhi and NCR towns, comparative AQI status, year-wise trends of PM concentration, hotspots for the day, AFE counts, contribution of stubble burning and meteorological forecast. This report is prepared based on the inputs available from various sources such as IMD, SAFAR, IARI, etc., and disseminated through CPCB website.

Annexure-II

City Wise Fund Sanctioned under NCAP to Punjab State for FY 19-20, 20-21, 21-22, 22-23 & 23-24 (till 01.07.24)

State	S.No.	City	Fund Sanctioned/Received/ Released during the Year (in Cr.)						
			FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	Total	Grand Total
			1	2	3	4	5	6=1+2+3+4+5	
Punjab	1	*Ludhiana	6.00					6.00	102.70
	2	*Amritsar	6.00					6.00	
	3	Jalandhar	0.12	4.00		10.53	30.79	45.44	
	4	Khanna	0.06	1.90		1.40	3.64	7.00	
	5	Gobindgarh	0.06	3.00		1.84	0.74	5.64	
	6	Naya Nangal	0.06	1.00		1.01	1.30	3.37	
	7	Pathankot/Dera Baba	0.06	0.76		1.91	4.00	6.73	
	8	Patiala	0.06	4.00		4.49	12.63	21.18	
	9	Dera Bassi	0.06	0.38		0.45	0.45	1.34	
Total			12.48	15.04		21.63	53.55	102.7	102.70

Annexure-III

**City-wise fund sanctioned under XVFC to Punjab State from FY 2020-21 to FY 2023-24
(till 01.07.24)**

State	SN o	City	Fund Released (In Cr)						Total
			Financial Year						
			FY 20- 21	FY 21- 22	FY 22- 23	FY 23- 24	Grand Total		
			1	2	3	4	5=1+2+3 +4		
Punjab	1	Amritsar (UA)	38.00	14.25	15.00	-	67.25	159.00	
	2	Ludhiana UA	52.00	19.50	20.25	-	91.75		
		Total	90.00	33.75	35.25	-	159		

* UA= Urban Agglomeration
