

increase in frequency/intensity of weather events. As per the information received from the Ministry of Home Affairs, 2405 lives have been reported to be lost during the FY 2018-19 in the country due to cyclonic storm/flash flood/landslides/cloudburst, etc. India experienced 431 major natural disasters during the period 1980-2010, resulting in loss of human lives, property and resources. However, any direct attribution to climate change has not been indicated.

(c) and (d) The Government is implementing National Action Plan on Climate Change (NAPCC) which comprises of missions in specific areas of solar energy, energy efficiency, water, agriculture, Himalayan eco-system, sustainable habitat, green India and strategic knowledge on climate change. The NAPCC provides the overarching framework for all climate actions. Thirty three States /Union Territories have prepared their State Action Plan on Climate Change (SAPCC) in lines with NAPCC taking into account State's specific issues relating to climate change. These SAPCCs *inter-alia* outline sector specific and cross sectoral priority actions including adaptation. The Government is also implementing the scheme, „National Adaptation Fund for Climate Change% to support adaptation measures of States/UTs in areas that are particularly vulnerable to the adverse impacts of climate Change.

The National Disaster Management Authority (NDMA) has issued several disaster specific guidelines for managing extreme weather-related disasters such as cyclones, floods and heat wave. National Disaster Management Plan (NDMP) has been formulated to assist all stakeholders including State Governments in disaster risk management of various hazards including hazards related to climate change.

The National Cyclone Risk Mitigation Project (NRCMP) is under implementation in eight coastal states to mitigate the sufferings of the coastal community. Cyclone shelters and early warning system created under this project proved to be of great help during cyclones „Phailin“ in 2013, „Hud-Hud“ in 2014, „Titli“ in 2018 and recent cyclone „Fani“.

Measures to control air pollution

†1631. SHRI R.K. SINHA: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether Government is contemplating taking measures to prevent deteriorating condition of air pollution so that it could be controlled immediately and if so, the details thereof; and

†Original notice of the question was received in Hindi.

(b) whether Government proposes to bring a legislation containing the provision of stringent punishment against the people causing air pollution, if so by when and if, not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI BABUL SUPRIYO): (a) The Central Government has taken a number of regulatory and other measures for prevention, control and abatement of air pollution in the country.

Action Plans for Improvement of Air Quality in Delhi NCR:

- (i) Graded Response Action Plan (GRAP) was notified on January 12, 2017, for prevention, control and abatement of air pollution in Delhi and NCR. It identifies graded measures and implementing agencies for response to four AQI categories, namely, Moderate to Poor, Very Poor, Severe and Severe + or Emergency.
- (ii) The Central Government has notified a Comprehensive Action Plan (CAP) in 2018 identifying timelines and implementing agencies for actions identified for prevention, control and mitigation of air pollution in Delhi and NCR.

Action Plans for Improvement of Air Quality of Other Cities:

- (i) Ministry of Environment, Forest and Climate Change has launched National Clean Air Programme (NCAP) in January 2019 to tackle the problem of air pollution in a comprehensive manner with targets to achieve 20 to 30 % reduction in PM_{10} and $PM_{2.5}$ concentrations by 2024 with 2017 as the base year. The overall objective is to augment and evolve effective ambient air quality monitoring network across the country besides ensuring comprehensive management plan for prevention, control and abatement of air pollution and enhancing public awareness and capacity building measures.
- (ii) 102 non-attainment cities have been identified based on ambient air quality data for the period 2011 - 2015 and WHO report 2014/2018. A total of 86 city specific action plans have been approved for ground implementation.

Monitoring

- Setting up of monitoring network for assessment of ambient air quality. Presently, ambient air quality is being monitored at 779 locations covering 339 cities in 29 States and 6 Union Territories across the country under National Air Quality Monitoring Programme (NAMP). Further, real time

monitoring is taking place at 170 locations in 102 cities in 18 States/UTs.

- Notification of National Ambient Air Quality Standards.
- Launch of National Air Quality Index.
- Implementation of Air Quality Early Warning System for Delhi in October, 2018 in association with Ministry of Earth Sciences (MoES).

Transport

- Leapfrogging from BS-IV to BS-VI fuel standards since 1st April, 2018 in NCT of Delhi and from by 1 st April, 2020 in the rest of the country.
- Introduction of cleaner / alternate fuels like gaseous fuel (CNG, LPG etc.), ethanol blending.
- Promotion of public transport and improvements in roads and building of more bridges to ease congestion on roads.
- Operationalisation of Eastern Peripheral Expressway and Western Peripheral Expressway to divert non-destined traffic from Delhi.
- Streamlining the issuance of Pollution Under Control Certificate.
- Environment Protection Charges (EPC) have been imposed on diesel vehicles with engine capacity of 2000cc and above in Delhi NCR.

Industry

- Badarpur thermal power plant has been closed from 15th October, 2018.
- Notification of stricter emission norms for power plants.
- All brick kilns have been shifted to zig-zag technology in Delhi and NCR.
- Installation of on-line continuous (24x7) monitoring devices all red category industries in Delhi and NCR.
- Revision of emission standards for industrial sectors from time to time.
- Ban on pet coke and furnace oil - monitoring of use of pet coke in Lime Kilns/Cement Kilns and Calcium Carbide Industry in Delhi and NCR States.

Biomass and Solid Waste

- A new 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" for the period from 2018-19 and 2019-20 has been launched.
- Banning of burning of biomass/garbage.
- 3 Waste-to-Energy (W-t-E) plants are currently operational in Delhi with a total capacity of 5100 Tonnes Per Day (TPD).
- Notifications of 6 waste management rules covering solid waste, plastic waste, e-waste, bio-medical waste, C&D waste and hazardous wastes issued in 2016.

Dust

- Notifications regarding dust mitigation measures for construction and demolition activities.
- Number of mechanised road sweeping machines has been increased significantly and presently 60 machines are deployed for cleaning of roads in Delhi.

Public Outreach

- Ministry of Environment, Forest and Climate Change and Uttar Pradesh, Punjab, Haryana, Rajasthan and Delhi Governments launched Clean Air for Delhi Campaign from 10th - 23rd Feb 2018 and to check air polluting activities pre and post Diwali, a special campaign called „Clean Air Campaign“ during November 01, 2018 to November 10, 2018.
- Ministry is promoting people's participation and awareness building among citizens for environmental conservation through Green Goods Deeds that focus on promotion of cycling, saving water and electricity, growing trees, proper maintenance of vehicles, following of lane discipline and reducing congestion on roads by car pooling etc.
- Development of mechanism for redressal of public complaints regarding air pollution issues in Delhi and NCR (through "Sameer App", "Email" (aircomplaints.cpcb@gov.in) and "Social Media Networks" (Facebook and Twitter) etc.

(b) The Central Government has taken several measures for taking effective and stringent actions against people and agencies causing air pollution. These include-

- Directions have been given to initiate criminal prosecution against agencies not taking measures to curb air pollution.
- Power to file complaints to initiate criminal proceedings has been delegated to all scientists of the level $\hat{A}\hat{D}\hat{E}$ and above of Central Pollution Control Board.
- Notification regarding mandatory implementation of dust mitigation measures for construction and demolition activities has been issued in January 2018.
- Regulatory bodies and enforcement agencies have been directed to ensure strict compliance of dust mitigation measures related to the construction activities, etc. They are empowered to issue show cause, levy fines and even direct stopping of work in case of violations.
- Under Graded Response Action Plan, the Task Force constituted for implementation of various graded measures may decide to ban activities that may aggravate air pollution when Air Quality Index reaches in severe+ category.

Action plan to control toxic air

1632. SHRI RAJMANI PATEL: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether it is a fact that toxic air is fast increasing in India;
- (b) whether it is a fact that toxic air contributes in a big way to cancer disease in India; and
- (c) if so, the details thereof with an action plan to control this abuse?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI BABUL SUPRIYO): (a) The ambient air quality data for metropolitan cities / million plus urban agglomerations during 2016-2018 is given in the Statement (*See below*). Analysis of data revealed that SO_2 levels were within / the National Ambient Air Quality Standard (NAAQS) in all 50 cities during 2016-18. With respect to NO_2 , 17 cities showed an increasing trend, 16 cities showed a decreasing concentration, 16 cities showed a fluctuating trend and 1 city revealed steady concentration. With respect to PM_{10} , 14 cities showed an increasing trend, 14 cities showed a decreasing concentration, 22 cities showed a fluctuating trend. With respect to $PM_{2.5}$, trends are available for 17 cities out of