

Smog warning, 10-point solution came last month at Delhi meet

IIT-K PROF'S CLAIM Group of scientists had forewarned about severe air pollution during World Sustainable Meet

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KANPUR: Even as authorities are trying to battle the hazardous smog in the state capital and other districts of Uttar Pradesh, a top environmental scientist claimed on Tuesday that the alert about severe air pollution was issued last month.

A group of eminent global scientists had even suggested 10 measures for checking the growing air pollution during the four-day World Sustainable Meet held at Delhi from October 5 to October 8.

"The scientists had suggested short, medium and long term measures for checking the air pollution which has become a big threat to the atmosphere," said Dr SN Tripathi, environmental scientist who had addressed the meet.

"Under the short term measures the scientists had suggested that garbage disposal through burning must be

PM 2.5 LEVEL 12 TIMES HIGHER IN KANPUR: PCB

KANPUR: On Sunday people woke up guessing about what it is—smog or fog.

Throughout the day the guess work continued on grounds with people arguing that since winter hasn't set in, how such a scenario could emerge.

The question has been settled by the state pollution control board's data. It was smog.

And worse, the dangerous PM 2.5 level was 12 times higher in Kanpur, according to board experts. The PM 2.5 level was found 764 when it should ideally be 60. Regional officer of board Sikander Ahmad said people should take extra care when going out.

Better would be if they could cover their face restricting chances of extra fine particles reaching the air way mechanism of the body. **HTC**



■ Dense smog has engulfed the city.

FILE PHOTO

SUNDAY REPORT

Time	PM 2.5 level
12 am	236
1 am	259
2 am	341
3 am	390
4 am	505
5 am	553
6 am	448
7 am	585
8 am	668
9 am	764

Under the short term measures the scientists had suggested that garbage disposal through burning must be stopped.

DR SN TRIPATHI, senior professor at IIT-K

also a senior professor at Indian Institute of Technology, Kanpur (IIT-K).

He said the scientists had also suggested that paving should be done along roads.

"No space between the houses pavement and roads should be left uncovered," he said while adding that banning the age-old pollution causing vehicles was another suggestion made at the meet.

In the medium term measures, it was suggested that farmers should be stopped from burning crop residue.

"They should be made aware of the technology for generating power through crop waste so that the smoke does not affect the air and the atmosphere," he said.

As part of long term measures, it was suggested that the government should encourage the use of zero-sulphur fuel for vehicles, introduce electric buses in city and discourage transportation of goods through roads by trucks as they cause heavy air pollution.

Besides, the scientists also gave 10 sustainable suggestions, which included launching of clean air mission (CAM-India) which should have the mandate to implement government policies for air pollution mitigation across several ministries dealing with transport, power, construction, agriculture, rural development, and environment, as well as across city and state jurisdictions.

The scientists also gave suggestions for transport, residen-

tial, power and industry sectors and also about dust and waste.

In transport sector, the scientists suggested switching to low sulphur fuel (10 ppm) and implement Bharat VI (similar to Euro VI) standards for engine emissions which require tail-pipe controls like diesel particulate filters for PM and selective catalytic reduction for NOx. This will also call for engine optimization and technologies like exhaust gas recirculation.

It was also advised to shift freight transport from road to lower-emission modes such as rail, inland waterways, and coastal shipping.

In residential sector, it was suggested that cleaner fuels (LPG, electricity) and biomass stoves with an efficiency of 50% or more and with a forced draft fan to those who cannot afford LPG must be promoted.

Similarly, in agriculture sector, the meet suggested for developing business models for collection, transport, and storage of agriculture residues and farm manure.

They also preferred converting agriculture residues and farm manure to electricity for rural power and biomass pellets for women who depend on biomass stoves.

This strategy aims at developing and customizing gasification technologies for converting agricultural waste into useful energy.

For power and other industry sectors it was suggested that adoption of cleaner and

efficient production technologies such as supercritical technologies in power sector, vertical shaft kilns, hoffman kilns, and tunnel kilns for brick manufacturing be made.

For urban households, it was recommended to improve energy efficiency of room air conditioners. This solution will reduce emissions that produce sulphates, nitrates, and black carbon.

It also suggested deploying national Emission Trading Schemes (ETS) with cap and trade for power generation and other large polluting industries. "The government is already experimenting with ETS in three industrial clusters in Gujarat, Tamil Nadu, and Maharashtra, which needs to be scaled up," said Tripathi.

Implementing stringent emission standards to control gaseous pollutants and fine particulate emissions from both power plants and big industries was also strongly recommended.

Finally, for dust and waste management, the meet recommended wall-to-wall paving of streets and vacuum cleaning of roads; enforce ban on open burning of solid waste; manage waste and recovery of methane from landfills.

"While the implementation of above mentioned 10 solutions is needed urgently, the government also needs to work on combination of new policies, off-the-shelf available existing technologies and new technologies," said Tripathi.