New system to measure air quality

A key focus will be to develop forecasts around the stubble-burning that adds to Delhi's pollution woes.File photo

India is tying up with the United States and Finland to develop a pollution-forecast system that will help anticipate particulate matter (PM) levels at least two days in advance and at a greater resolution than what is possible now. The Ministry of Earth Sciences (MoES) will be coordinating this exercise and the plan is to have a system in place by winter, according to Madhavan Rajeevan, secretary, MoES.

Currently, the System of Air Quality and Weather Forecasting and Research (SAFAR), run out of the Indian Institute of Tropical Meteorology, Pune, serves as the apex forecaster of pollution trends in Delhi, Mumbai, Pune and Ahmedabad. It generates a likely air quality profile, a day in advance, for these cities. IITM is an organisation under the MoES.

The new system, to be jointly developed with expertise from the Finnish Meteorological Institute and the U.S.' National Oceanic and Atmospheric Administration, will use a different modelling approach as well as computational techniques from that employed in the SAFAR model.

Better resolution

"SAFAR will continue to be the backbone [for pollution forecast] but this system, which will require our scientists to get special training, will use a different method of analysis. This could mean better resolution and more accurate forecasts," said Mr. Rajeevan.

A key focus would be to develop forecasts around the "stubble-burning season" that adds to Delhi's pollution woes in the winter. This refers to the partially-burnt straw and chaff from fields in Uttar Pradesh and Haryana, when farmers are preparing their fields for the sowing season. "We hope to develop the system before this winter," Mr. Rajeevan added.

Last week, the Union Environment Ministry released a draft of the National Clean Air Programme (NCAP) that aims to improve air quality monitoring in India by increasing the number of pollution monitoring stations and, incorporating it into a pollution forecast system.

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