

Enviro Monitor

January 2019

Climate change



- 2018 could be the warmest year on record for oceans
- Faster CO2 rise expected this year
- Urbanisation of Tirunelveli city might warm it up

Air quality



- Farm stubble fuels NTPC's Dadri plant
- Delhi air rich in 3 toxins that can cause brain damage
- Bosch's air quality study to help

Forest resources



- Tripura launches project for sustainable catchment forest management
- Maharashtra to boost green cover with Miyawaki method
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Waste management



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2018 could be the warmest year on record for oceans. Oceans are warming at a much faster rate than expected. The new research published in Science fuels growing concerns over the risks of climate change. The data showed more consistent, but stronger ocean warming since 1960, than previously reported by the Intergovernmental Panel on Climate Change's Fifth Assessment Report published in 2013. India, with its massive coastline of nearly 7517 km is also among the most

vulnerable countries to the impact of ocean-warming and rising sea levels. The warming trends raise concern because the Indian Ocean plays a major role in driving weather patterns in the sub-continent, especially for monsoon rains.

Faster CO2 rise expected this year. This year may witness one of the largest increase in atmospheric carbon dioxide in over six decades of record keeping, scientists say. The forecast by researchers from the UK Met Office and University of Exeter is based on a combination of factors including rising anthropogenic emissions and a relative reduction in the uptake of carbon dioxide by ecosystems due to tropical climate variability.

Urbanisation of Tirunelveli city might warm it up. Tamil Nadu's Tirunelveli city now has less vegetation and more urban areas, all in just one decade. This could create an 'urban heat island' — urban area that is significantly warmer than its surrounding rural areas, according to a [study](#). According to Rajchandar Padmanaban, scientist at Portugal's NOVA Information Management School, this is common in fast-growing cities in developing countries. Padmanaban and his colleagues investigated the environmental and climatological impacts of such unprecedented urbanisation in Tirunelveli, which has seen rapid population growth over the last two decades due to immigration of people.

Green vegetation and water bodies are often lost as built-up areas in a city increase. Radiation from cemented floors, roads and buildings add to the temperature. This leads to a surge in surface and air temperatures, causing urban heat islands to form.

[Mint](#), 14 January 2019 | [The Hindu](#), 19 January 2019 | [The Times of India](#), 28 January 2019



Farm stubble fuels NTPC's Dadri plant. In a first of its kind move, state-run NTPC has started using farm stubble as fuel at one of the units at its Dadri power plant, a move that is expected to help Delhi and its neighbourhood breathe easy by stopping farmers from burning crop residue — a major contributor to winter smog — and supplementing farm income as well as creating rural jobs. NTPC was expanding the move to its other power plants as well and it would take some time to establish a regular supply chain of pellets.

Delhi air rich in 3 toxins that can cause brain damage.

Samples of air taken from Delhi and Gurugram in November and December 2018 have revealed the presence of alarming levels of toxic heavy metals such as manganese, nickel and lead, in addition to excess PM2.5, according to a study released by Lung Care Foundation. In the study, "Death in

PM2.5 levels in all the seven samples were above statutory limits, ranging from 90.3 ug/m3 to 563.5 ug/m3 - between 1.5 and 9.4 times higher than prescribed standards.

every breath", results of seven air samples from New Delhi and Gurugram were analysed. Levels of manganese in five samples were found to be much higher than the US standard while nickel concentration exceeded WHO guidelines in all seven samples.

Bosch's air quality study to help citizens. German technology major Bosch is conducting a comprehensive study on air quality and local climate in Bengaluru that would help governments and citizens plan daily activities like traffic management, commute and parking. A team from Bosch Mobility Solutions has taken up a micro-climate monitoring system (Climo) study to assess the air quality in Electronics City and its surrounding areas on a pilot basis. They have installed an air quality measuring instrument to collect data on particulate matter (PM) 2.5, PM 10, carbon monoxide, carbon dioxide, Ozone, nitrous oxide, nitrogen dioxide, sulphur dioxide, ranging temperature, noise pollution and humidity.

[The Times of India](#), 14 January 2019 | [The Times of India](#), 18 January 2019 | [Deccan Herald](#), 26 January 2019



Tripura launches project for sustainable catchment forest management.

Tripura Chief Minister has launched a project for Sustainable Catchment Forest Management at State Forest Academy Ground in Hatipara in West Tripura. The project

The project aims to the improve quality of forest in the catchment area by sustainable forest management, soil and moisture conservation and livelihood development.

would help develop the quality of forestlands and livelihood of forest dwellers in the state and is jointly funded by the Japan International Cooperation Agency and Government of India. The project would be implemented mainly in upper catchments where forest degradation and soil erosion are severe and livelihood improvement needs are high.

Maharashtra to boost green cover with Miyawaki method. In a bid to boost 33 crore plantations under the 'Green Maharashtra Mission' in 2019, the state government has decided to implement the 'Miyawaki Dense Forest Project' which will be modelled as 'Anandwan Project'. On Anandwan model, Dr Sheetal Amte-Karajgi, social entrepreneur, said that they have successfully done community forestry model and planted 2520 trees in just 825 sqmt area in three blocks under Miyawaki plantations between August 2016 and July 2018. All have 100% survival with good girth and tree height.

Bullet train to cost 131 hectares of forests. More than 200 football fields equivalent forest land will be lost for Ahmedabad-Mumbai bullet train, since as many as 131.3 hectares of forest chunk is slated to be used for the ambitious project. A major part of the land is from Thane, Bhiwandi and Palghar district areas that also include mangrove areas. The information was provided in the Lok Sabha Assembly session, where it was also stated that no environment clearance is required as it is a railway project.

[The Asian Age](#), 8 January 2019 | [Indian Express](#), 16 January 2019 | [The Times of India](#), 17 January 2019



Draft policy advocates privatisation of SWM. A draft Solid Waste Management (SWM) policy for urban areas in Karnataka has batted for reversing the July 2017 Cabinet decision to take pourakarmikas on the rolls of Urban Local Bodies (ULBs) to release them from the clutches of contractors. Prepared by the Directorate for Municipal Administration (DMA), the draft policy argues that privatisation of solid waste management would improve efficiency, attract new technology and save

costs.

Plastics to help pave 600 km of roads. The Highways Department in Tamil Nadu will soon take up work to relay around 600 km of Other District Roads, under the Comprehensive Road Infrastructure Development Programme, using shredded plastic. ODRs are single-lane roads with a width of 3.5 m and handle traffic of up to 5500 passenger car units daily.

[The Hindu](#), 18 January 2019 | [The Hindu](#), 28 January 2019