

Enviro Monitor

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- IISc to map out 50-year climate change impact in Telangana

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India's carbon dioxide emissions up 5%. India emitted 2299 million tonnes of carbon dioxide in 2018, a 4.8% rise from last year, according to a report by the International Energy Agency (IEA). India's emissions growth this year

India says it will cost at least \$2.5trillion (Rs 150 trillion approx.) to implement its climate pledge, around 71% of the combined required spending for all developing country pledges.

was higher than that of the United States and China — the two biggest emitters in the world — and this was primarily due to a rise in coal consumption. China, the United States, and India together accounted for nearly 70% of the rise in energy demand. India's per capita emissions were about 40% of the global average and contributed 7% to the global carbon dioxide burden. The United States, the largest emitter, was responsible for 14%.

Climate vulnerability assessment of all states, UTs soon. After the first-ever [vulnerability assessment of 12 Himalayan states to climate risks](#), the Department of Science and Technology now plans to carry out a climate vulnerability assessment of all states and union territories. The assessment would be based on the global methodological framework of 2014 Intergovernmental Panel on Climate Change, where vulnerability is defined by how 'sensitive' a specific eco-system is to climate change risks and what is the current adaptive capacity to mitigate the risks. Among the 12 Himalayan states, Assam and Mizoram were found to be the most vulnerable to climate change. Assam, not only has a low per capita income, but also the least area under irrigation, low percentage area covered under crop insurance and a high proportion of marginal farmers, making it extremely vulnerable.

IISc to map out 50-year climate change impact in Telangana. With climate change posing as a major threat to the environment, the Indian Institute of Science (IISc) is all set to conduct an extensive study for the Telangana government to gauge impact of climate change in Telangana over the next 50 years. The study, in collaboration with the Telangana State Development Planning Society, will guide the state government on climate change and its impact on water availability and agriculture.

[The Times of India](#), 6 March 2019 | [Mint](#), 14 March 2019 | [The Hindu](#), 26 March 2019



Environment damage behind a quarter of premature deaths, diseases. A quarter of all premature deaths and diseases worldwide are due to manmade pollution and environmental damage, according to the United Nation's [Global Environment Outlook report](#). Deadly emissions, chemicals polluting drinking water, and the accelerating destruction of ecosystems crucial to the livelihoods of billions of people are driving a worldwide epidemic that hampers the global economy, it warned. The report depicts a growing chasm between rich and poor countries as rampant overconsumption, pollution and food waste in the developed world leads to hunger, poverty and disease elsewhere. The report says air pollution causes 6-7 million early deaths annually.

Seven of the world's 10 most polluted cities are in India. Seven of the top 10 most polluted cities in the world are in India, according to a new study showing South Asia's battle with deteriorating air quality and the economic toll it is expected to take worldwide. Gurugram led all cities in pollution levels in 2018, even as its score improved from the previous year, according to data released by IQAir AirVisual and Greenpeace. Three other Indian cities joined Faisalabad, Pakistan, in the top five. The index measures the presence of fine particulate matter known as PM2.5, a pollutant that can fester deep in the lungs and bloodstream of human beings.

Karnataka: 22 districts to get air-quality monitoring stations. With air quality deteriorating alarmingly not only in Bengaluru, but also other parts of Karnataka, the state government has sanctioned funds to install Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in 22 of the 30 districts in the state. The step has been taken to study and maintain data on air quality and initiate interventions whenever quality plummets. The proposal to set up CAAQMS was sent specially to find the effects of rampant mining, which leads to several breathing disorders and diseases. The stations will be set up in major mining areas of Ballari, Hospet, Sandur and Harapanahalli. A report by the Comptroller and Auditor General of India has revealed that indiscriminate iron ore mining in Ballari district was leading to diseases like tuberculosis and other respiratory disorders among locals.

[The Hindu Business Line](#), 5 March 2019 | [The Hindu](#), 13 March 2019 | [The Times of India](#), 14 March 2019



India's biodiversity-rich zones also 'hotspots' of human impacts. Human impacts on species occur across 84% of the earth's surface, finds a study published on March 13 in *PLOS Biology*, an international journal dedicated to biological science. A team of scientists led by James Allan, University of Queensland, found this when they mapped the distribution of eight human activities — including hunting and conversion of natural habitats for agriculture — in areas occupied by 5457 threatened birds, mammals and amphibians worldwide. Malaysia ranks first among the countries with the highest number of impacted species (125). India ranks 16th with 35 threatened species affected on average.

IISC launches online database of over 10,000 plant species in peninsular India. The Centre for Ecological Sciences (CES) at Indian Institute of Science has launched an online database of peer-reviewed information on over 10,000 plant species in peninsular India. Called [Digital Flora of Peninsular India](#), it draws on information available in the herbarium housed at the Centre. The database contains comprehensive information about each plant species: its vernacular name, taxonomic description, habitat, geographic distribution, flowering time, conservation status and more.
[FirstPost](#), 5 March 2019 | [The Hindu](#), 12 March 2019



Government amends hazardous and other wastes rules. The Centre has amended the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to include prohibition on import of solid plastic waste even in special economic zones (SEZ) and by export-oriented units (EOUs). Besides prohibiting solid plastic waste from being imported including in SEZ and by EOU sectors, the [Hazardous and Other Wastes \(Management and Transboundary Movement\) Amendment Rules, 2019](#) have exempted exporters of silk waste from requiring permission from the Ministry of Environment, Forest and Climate Change.

Dumpsites polluting the soil. Researchers from Bharathiar University (Tamil Nadu) and St. Joseph's College and Christ Deemed to be University in Bengaluru sampled seven dumpsites in the city and tested the soil on physiochemical parameters as well as on vegetation parameters. These figures were compared with similar tests on 'undumped' soil next to the dumpsites. Researchers found that the soil in the dumpsites were more alkaline due to degrading organic waste, while the electrical conductivity was found to be 1.5-fold higher than that of non-dumpsites due to the leaching of sodium and potassium salts from the waste. The dumpsite will be cleaned and newer sites chosen, but the toxic effects will linger for long. The presence of batteries, old medicines and plastics contributes to the leachate that will percolate into the soil.

The concentration of heavy metals, such as cobalt, chromium and lead, were found to be 74% more in dumpsites than in adjacent non-dumpsites.

IIT Madras converts petroleum waste toluene into useful product. Using platinum nanocatalyst, a two-member team at the Indian Institute of Technology (IIT) Madras has successfully converted petroleum waste-product toluene into benzoic acid. Benzoic acid is used as a food preservative (E210) and medicine for fungal/bacterial infection. Toluene is converted into benzoic acid through selective and controlled oxidation in the presence of a catalyst — binaphthyl-stabilised platinum nanoparticles.

Dutch agency to help BBMP upgrade 10 dry waste centres . The Bruhat Bengaluru Mahanagara Palike (BBMP) has decided to upgrade 10 functional dry waste collection centres in collaboration with a Netherlands agency. About 1.5 tonnes of dry waste can be re-segregated in four hours. The manpower requirement will be down by 30%.

[The Hindu Business Line](#), 6 March 2019 | [The Times of India](#), 27 March 2019 | [The Hindu](#), 28 March 2019 | [The Hindu](#), 30 March 2019