

Enviro Monitor

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Air quality



- Rs 100-crore plan to discourage crop burning, improve Delhi air
- Ghaziabad, Gurgaon and Delhi among India's five most polluted cities
- Uttar Pradesh India's most polluted state
- India fourth worst country in curbing environment pollution Nitrogen dioxide levels rising despite dip in diesel usage
- Chulhas linked to 25% of pollution-related deaths
- Indoor air pollution linked to lung, kidney dysfunction
- New pollution-control device for furnace units

Climate change



- Climate change likely to lower farmers' income by 25%.
- Think global warming isn't real? 'Indian summers may last 8 months by 2070'
- Warming puts millions more at risk from river floods
- Tamil Nadu gathering data on climate change-prone areas for the web

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- Centre readies Rs 6000-crore plan to recharge groundwater
- Marathwada region of Maharashtra faces water scarcity again; 3500 villages record low yield
- Watershed for water conservation in Rajasthan
- With water crisis looming, Gujarat to cut supply to cities

Waste management



- Impose heavy penalty for burning agricultural waste, says *Economic Survey*
- E-waste polluting Delhi's groundwater, soil
- Delhi: Garbage collection charges soon



Rs 100-crore plan to discourage crop burning, improve Delhi air. The plan envisages measures including creation of fodder banks, composting paddy waste on the farm, involving unemployed youth for managing field waste and using new machines such as the Happy Seeder. The Union Ministry of Environment, Forest and Climate Change is spearheading this initiative to discourage crop burning in Punjab, Haryana, Uttar Pradesh and Rajasthan to ensure that Delhi has cleaner air in 2018 winter. The programme

depends heavily on technological solutions and the biggest thrust area would be in-situ management of crop residue.

Ghaziabad, Gurgaon and Delhi among India's five most polluted cities. Three cities from the National Capital Region — Ghaziabad, Gurgaon and Delhi — were among India's five most polluted cities last year, according to the Central Pollution Control Board. Ghaziabad, with an average air quality index (AQI) of 258, topped the list. Gurgaon was close behind with an AQI of 247, and Delhi ranked fourth at 228. Noida, Faridabad and Alwar — other heavily polluted cities in the NCR — ranked 8th, 11th and 12th. The CPCB rated Thiruvananthapuram as the city with the cleanest air with an AQI of 64. The list was prepared based on annual average Air Quality Index values from 51 cities across India in 2017.

BEST CITIES
• Thiruvananthapuram
• Bengaluru
• Navi Mumbai
• Vijayawada
• Jorapokhar

Uttar Pradesh India's most polluted state: Greenpeace report. With 15 of its cities among 30 cities with highest levels of toxic air in the country, Uttar Pradesh is India's most polluted state, says a Greenpeace India report. The report [Airpocalypse II](#) is based on air pollution related data collected from Central and State Pollution Control Boards' and Committees' annual reports and their websites and through applications under Right to Information Act wherever data was unavailable or gaps existed in the available data. The report brought out the list of most polluted cities in the country based on particulate matter data of PM10 levels for 280 cities during 2016 and in some cases also 2015, covering large parts of the country.

India fourth worst country in curbing environment pollution. Failure to check air pollution has made India the fourth worst country in the world in terms of curbing environmental pollution, according to Environmental Performance Index's (EPI) latest [rankings](#). India ranked 177 out of 180 countries, in contrast to the rank of 141 two years ago. Switzerland emerged the leading country in overall environmental performance. EPI Rankings is a bi-annual report produced by researchers at Yale and Columbia Universities in collaboration with the World Economic Forum.

BEST COUNTRIES
• Switzerland
• France
• Denmark
• Malta
• Sweden

Nitrogen dioxide levels rising despite dip in diesel usage. The concentration of nitrogen dioxide (NO₂), a toxic gaseous pollutant, substantially rose in Delhi in 2017, despite a fall in diesel consumption, according to data from the six National Air Quality Monitoring (NAMP) stations in the city. The Delhi government attributed the fall in levels of particulate matter (airborne particulate matter) in the city to the fall in diesel consumption, but annual NO₂ level breached 50 microgram per cubic metre (ug/m³) last year for the first time since 2013.

Chulhas linked to 25% of pollution-related deaths in India. Exposure to air pollutant PM 2.5 from the burning of domestic biomass (chulha) is the deadliest source of air pollution in India, responsible for around 25% of all pollution-linked deaths in the country, according to a study. The study, [Burden of](#)

[Disease Attributable to Major Air Pollution Sources in India](#), found that the burning of biomass or solid fuel was the biggest source of PM 2.5 in both cities and villages. The situation could be worse as the study did not measure its indoor impact.

Indoor air pollution linked to lung, kidney dysfunction. A cross-sectional study of over 400 kitchen workers in Lucknow and Coimbatore showed that almost 50% of them suffered from poor lung functions and microalbuminuria. They also noticed that Coimbatore workers had a higher risk of obstructive lung problems. The study conducted by researchers from Indian Institute of Toxicology Research (CSIR- IITR) also examined the particulate matter pollution (PM2.5 and PM1) in the kitchen environment and found high concentrations of particulate matter of both sizes, volatile organic compounds, carbon monoxide and carbon dioxide. The study was carried out among male workers in Lucknow and Coimbatore and a control group.

New pollution-control device for furnace units. Considering the deteriorated air quality of Mandi Gobindgarh seriously, the Punjab Pollution Control Board developed a pollution-control device for induction furnace industries of the Gobindgarh area. The air quality of the Gobindgarh area falls in the poor quality zone and the major culprit for this is the pollution by furnace industries, besides emissions from other industries and roads. The PPCB developed the new device for induction industries in collaboration with the Punjab Science and Technology Council. This will help achieve a better air quality in the area. New system replaces the canopy hood on the crucible of the furnace to side hood along with augmented ID fan capacities, so as to collect the air emissions for treatment.

[The Hindu](#), 11 January 2018 | [Hindustan Times](#), 11 January 2018 | [The Times of India](#), 12 January 2018 | [The Hindu](#), 13 January 2018 | [The Tribune](#), 15 January 2018 | [Indian Express](#), 24 January 2018 | [Hindustan Times](#), 30 January 2018 | [The Economic Times](#), 31 January 2018



Climate change likely to lower farmers' income by 25%. Climate change could lower the farmers' income by up to 25%, the *Economic Survey* warned and suggested the need for "dramatic" improvement in irrigation, use of new technologies and better targeting of power and fertiliser subsidies. The document also said that in the absence of any adaptation by farmers and any changes in policy (such as irrigation), farm incomes will be lower by around 12% on an average in the coming years. The average

income of a farmer is estimated at Rs 77,976 per year, according to the Dalwai committee report. The Modi government has targeted to double the farmers' income by 2022.

Think global warming isn't real? 'Indian summers may last 8 months by 2070'. Prolonged heat-wave conditions—i.e., a summer lasting up to eight months—could be the new norm by the 2070s for the Gangetic plains, if greenhouse-gas emissions are not cut to limit the global temperature increase to 2°C, according to a new study in the journal [Environmental Research Letters](#). In the Gangetic plain, one of the world's most climate sensitive regions, wet-bulb temperatures currently touch 31°C, on average, one day every year. By the 2070s, these heat waves may become 100 to 250 times more frequent, said the study.

Warming puts millions more at risk from river floods. Scientists say millions more people around the world are threatened by river floods in coming decades due to climate change. Researchers in Germany say greater flood defenses are particularly needed in the United States, parts of India and Africa,

Indonesia and Central Europe. Using computer simulations, scientists at the Potsdam Institute for Climate Impact Research say the number of people affected by the worst 10 per cent of river flooding will increase by up to 156 million in Asia alone by 2040. The study published in the journal [Science Advances](#) concludes that flood risks will rise regardless of efforts to curb climate change because of greenhouse gases already emitted in past decades.

Tamil Nadu gathering data on climate change-prone areas for the web. The Tamil Nadu government is mapping the areas across the state, which are vulnerable to climate change by collating data and feeding it in a Tamil Nadu State Climate Change Knowledge Management Portal. The initiative launched now is part of the National Mission on Strategic Knowledge for Climate Change which seeks to build a vibrant and dynamic knowledge system that would inform and support national action for responding effectively to the objective of ecologically sustainable development.

[Business Standard](#), 11 January 2018 | [The Times of India](#), 11 January 2018 | [The New Indian Express](#), 23 January 2018 | [The Financial Express](#), 30 January 2018



Centre readies Rs 6000-crore plan to recharge groundwater. The government has finalised the contours of a Rs 6000-crore scheme to tackle the country's depleting groundwater level, almost a year-and-a-half after finance minister announced the plan in the Union Budget. Called the Atal Bhujal Yojana and piloted by the Union water resources ministry, the scheme now needs the cabinet's clearance. It will be launched in Gujarat, Maharashtra, Haryana, Karnataka, Rajasthan, Uttar Pradesh and Madhya Pradesh, covering 78 districts, 193 blocks and more than 8300 gram panchayats.

The scheme was conceived to arrest the rampant overuse of groundwater in India. According to a World Bank report, about 245 billion cubic metre of groundwater is abstracted each year in the country. This figure represents about 25% of the total global groundwater abstraction.

Marathwada region of Maharashtra faces water scarcity again; 3500 villages record low yield. The Marathwada region of Maharashtra, a perennially drought-plagued area, is once again staring at a severe water scarcity. Over 41 per cent of the villages in this region of central Maharashtra have reported 'paisewari' (average yield) below 50 paise. This will force the government to mull augmenting foodgrain and water supply in the region.

Watershed for water conservation in Rajasthan. New targets have been set for third phase of the Jal Swavalamban Abhiyan to make Rajasthan self-reliant in the water sector. The conservation of water resources will get the highest priority in the campaign, while steps will be taken to increase groundwater level and improve surface water flow in the watershed projects. The four-year-long campaign comprises four phases of one year each, during which various works for conservation of water resources have been undertaken across the State.

The research found that most houses had high volatile organic compounds — dust, radon, CO2 and high concentration of bioaerosols (organisms or dust that consists of pathogens, viruses, fungi, allergens and pollen).

With water crisis looming, Gujarat to cut supply to

cities. With severe water crisis looming large over Gujarat, the state government, after announcing a clampdown on water for irrigation and industries from March 15, has now decided to rationalize drinking water supply to the cities. Accordingly, water supply to major cities including Ahmedabad, Surat, Rajkot and Vadodara among other municipal corporations and municipalities is expected to be cut soon.

[FirstPost](#), 10 January 2018 | [The Hindu](#), 23 January 2018 | [Hindustan Times](#), 28 January 2018 | [The Times of India](#), 1 February 2018



Impose heavy penalty for burning agricultural waste, says Economic Survey.

The *Economic Survey* noted that some 35 million tonnes of rice paddy in three adjoining states (Punjab, Haryana and Western Uttar Pradesh) are burnt in late October. Heavy penalties should be imposed for burning agricultural waste, and more incentive for farmers is needed to prevent alarmingly poor air quality in Delhi-NCR and adjoining areas, the *Economic Survey* said. Besides, implementation of congestion pricing,

expansion of public buses, phasing out of old vehicles as also coordination across agencies and governments can prevent the city turning into a gas chamber, especially during winters, the survey noted.

E-waste polluting Delhi's groundwater, soil. Improperly handled electronic waste may be contaminating sections of the city's groundwater and soil, according to a study by researchers at Jamia Millia Islamia. The scientists analysed soil samples from Mandoli's Krishna Vihar — which has several mounds of unprocessed electronic waste — and found, among other pollutants, copper in the region's topsoil to be about 283 mg/kg. Just 5 km from the site, which was chosen as reference site, copper levels were around 8.39 mg/kg. Heavy metal contamination in groundwater samples from the area was also significant.

Delhi: Garbage collection charges soon. Delhiites will soon have to pay their local municipality for garbage collection every month and face penalties if they do not segregate waste, with new rules regarding solid waste management being notified by the Delhi government. Though the gazette notifications were issued for the South Delhi Municipal Corporation (SDMC) and the Delhi Cantonment Board, the rules would apply to all of Delhi.

[The Hindu](#), 12 January 2018 | [The Hindu](#), 17 January 2018 | [The Hindu](#), 29 January 2018

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