

# ENVIS - NBRI



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### CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

News

James Hansen's legacy: Scientists reflect on climate change in 1988, 2018, and 2048

The announcement shook the political establishment in 1988. George H. W. Bush, in the middle of a heated presidential campaign, vowed to use the "White House effect" to battle the "greenhouse effect." Four years later, with then-President Bush in attendance, the United States became a founding member of the United Nations Framework Convention on Climate Change — which still guides global climate action today. Of course, it was not enough. Bush's actions at the time were perceived as weakening the treaty — a missed opportunity. Since 1988, global carbon dioxide emissions have risen 68 percent. At the time of Hansen's speech, fossil fuels provided about 79 percent of the world's energy needs. Now, despite every wind turbine and solar panel that's been installed since, it's actually worse — 81 percent. Hansen's warning was prescient and his predictions were scarily accurate. Every county in every U.S. state has warmed significantly since then. Sea-level rise is accelerating, heavier rains are falling, countless species of plants and animals are struggling to adapt..........Read more...

**Date:** June 22, 2018 **Source:** GRIST.ORG

## Expert panel will be set up to use advanced technology to deal with air pollution: Environment Ministry

The Environment Ministry said on Monday a committee of experts would be formed to look into the technological advances, including application of satellite-based measurement, to improve air quality and reduce pollution. Every winter smog causes deterioration of air quality, raising the pollution to dangerous levels in the national capital. The ministry said a meeting with expert institutions was held to discuss the application of advanced technologies to deal with the rising air pollution and improve the overall air quality management framework."An expert group will be constituted, which will provide its recommendation in a month's time on early warning system, including dissemination protocol and application of satellite-based measurement for improving air quality information and management," the ministry said in a statement. "The Department of Science and Technology will take lead on technology interventions for possible use before the onset of winter. They should provide the results of their assessments in two weeks, so that pilots could be quickly rolled out," it said.........Read more...

Date: June 25, 2018 Source: The Economic Times

#### How toxic air is causing malnutrition in trees

London, June 25 (IANS) Besides affecting human health, air pollution is also causing malnutrition in trees by harming a fungi that is important for providing mineral nutrients to tree roots, finds a new study. Mycorrhizae fungi is hosted by the trees in their roots to receive nutrients from the soil. These fungi provide essential nutrients like nitrogen, phosphorus and potassium from soil in exchange for carbon from the tree. This plant-fungal symbiotic relationship is crucial for the health of the tree. However, high levels of the nutrition elements like nitrogen and phosphorus in the mycorrhizae changes them to act as pollutants rather than nutrients, the findings showed. The signs of malnutrition can be seen in the form of discoloured leaves and excessive falling of leaves. ...... Read more...

Date: June 25, 2018
Source: The Economic Times

#### Six benefits of buying a green home

Date: June 28, 2018
Source: The Economic Times

#### Forests may lose ability to protect against extremes of climate change

"Forest canopies produce microclimates that are less variable and more stable than similar settings without forest cover," said Kimberley Davis, a UM postdoctoral research associate and the lead author of the study. "Our work shows that the ability of forests to buffer climate extremes is dependent on canopy cover and local moisture availability -- both of which are expected to change as the Earth warms." She said many plants and animals that live in the understory of forests rely on the stable climate conditions found there. The study suggests some forests will lose their capacity to buffer climate extremes as water becomes limited at many sites. "Changes in water balance, combined with accelerating canopy losses due to increases in the frequency and severity of disturbance, will create many changes in the microclimate conditions of western U.S. forests," Davis said. .....Read more...

Date: June 29, 2018 Source: The Science Daily

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