



CLIMATE – NEWS

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ICFRE – CLIMATE CHANGE NEWS From the Biodiversity and Climate Change (BCC) Division, Directorate of Research, Indian Council of Forestry Research and Education, P.O: New Forest, Dehra Dun – 248006

CLIMATE CHANGE INTERNATIONAL NEWS

RESEARCHERS SAY WARMING MAY CHANGE AMAZON

January 02, 2007 — By Michael Astor, Associated Press

RIO DE JANEIRO, Brazil – Global warming could spell the end of the world's largest remaining tropical rain forest, transforming the Amazon into a grassy savanna before end of the century, researchers said.

Jose Antonio Marengo, a meteorologist with Brazil's National Space Research Institute, said that global warming, if left unchecked, will reduce rainfall and raise temperatures substantially in the ecologically rich region. "We are working with two scenarios: a worst case and a second, more optimistic one," he said in a telephone interview with The Associated Press.

"The worst case scenario sees temperatures rise by 5 to 8 degrees until 2100, while rainfall will decrease between 15 and 20 percent. This setting will transform the Amazon rain forest into a savanna-like landscape," Marengo said

CHINA REPORT WARNS OF AGRICULTURE PROBLEMS FROM CLIMATE CHANGE

January 03, 2007 — By Associated Press

BEIJING – Climate change will severely harm China's ecology and economy in the coming decades, possibly causing large drops in agricultural output, said a government report made public Wednesday.

The report, issued by six government departments including the State Meteorological Bureau, the China Academy of Sciences and the Ministry of Technology, comes several days after state media said 2006 was hotter than average, with more natural disasters than normal.

"Climate change will increase the instability of agricultural production," the report said, according to the official Xinhua News Agency on Wednesday. "If no measures are taken, in the latter half of the century production of wheat, corn and rice in China will drop by as much as 37 percent."

It said that average temperatures in China would rise by 2 or 3 degrees Celsius in the next 50 to 80 years, and that this would cause "the speed of change to accelerate".

SCIENTISTS SAY 2007 MAY BE WARMEST YET

January 04, 2007 — By Raphael G. Satter, Associated Press

LONDON – A resurgent El Nino and persistently high levels of greenhouse gases are likely to make 2007 the world's hottest year ever recorded, British climate scientists said Thursday.

Britain's Meteorological Office said there was a 60 percent probability that 2007 would break the record set by 1998, which was 1.20 degrees over the long-term average. "This new information represents another warning that climate change is happening around the world," the office said. The reason for the forecast is mostly due to El Nino, a cyclical warming trend now under way in the Pacific Ocean. The event occurs irregularly the last one happened in 2002 and typically leads to increased temperatures worldwide.

While this year's El Nino is not as strong as it was in 1997 and 1998, its combination with the steady increase of temperatures due to global warming from human activity may be enough to break the Earth's temperature record, said Phil Jones, the Director of the Climatic Research unit at the University of East Anglia.

"Because of the warming due to greenhouse gases, even a moderate warming event is enough to push the global temperatures over the top," he said.

INDIA COULD SHOW THE WAY ON CLIMATE, UK MINISTER SAYS

January 19, 2007 — By Jeremy Lovell, Reuters

LONDON – India could set the pace for key developing countries by moving to a low carbon economy and opening the door to a new deal on global warming, British Environment Minister David Miliband said on Thursday.

Speaking before a visit to the South Asian country, he said its economy was growing by 9 percent a year, it was investing heavily in renewable energy as millions of its people were at risk from climate change. "I think India can be a leapfrog economy – leapfrog not just in terms of its levels of growth but leapfrog in terms of a development path that is low carbon," Miliband told Reuters.

"Because 25 percent of the Indian population live in coastal areas and 27 percent of the Indian economy is agriculture, climate change and rising sea levels are desperately dangerous for the Indian people and the India economy," he said.

Most scientists agree temperatures will rise by 2 to 6 degrees Celsius this century, mainly because of carbon emissions from burning fossil fuels for power and transport, putting millions of lives at risk from flood and famine.

INDONESIA MAY LOSE 2,000 ISLANDS TO CLIMATE CHANGE

January 29, 2007 — By Reuters

JAKARTA – Indonesia could lose about 2,000 islands by 2030 due to climate change, the country's environment minister said on Monday. Rachmat Witoelar said studies by U.N. experts showed that sea levels were expected to rise about 89 centimetres in 2030 which meant that about 2,000 mostly uninhabited small islets would be submerged.

WORLD WATCHES AS SCIENTISTS FINISH LONG-AWAITED GLOBAL WARMING REPORT

January 30, 2007 — By Angela Charlton, Associated Press

PARIS – The planet's temperature is rising, sea levels threaten to swallow coastlines and the world's residents want to know, more than ever, how worried to be. An authoritative answer comes this week.

Some 500 scientists and officials convened in Paris on Monday for a week of word-by-word editing of a long-awaited report on how fast the world is warming. How serious it is and how much is the fault of humans. The report by the Intergovernmental Panel on Climate Change, to be released on Friday, could influence what many governments and businesses do to fight global warming. It will be watched closely in the United States, whose government stands accused by many around the world of underplaying the peril.

EU SETS TARGETS TO CUT CARBON EMISSIONS

20 February 2007, Brussels, Belgium

As part of a European energy policy to combat climate change, EU environment ministers have agreed on continent-wide plans to cut greenhouse gases by as much as 30 per cent.

Despite attempts to water down proposals, particularly by Finland and Poland, the EU Environment Council has backed a unilateral target to cut carbon emissions by 2020 to 20 per cent, and supported a 30 per cent reduction target if other nations would make efforts to control global warming. In order to stay below an internationally accepted 2°C global warming threshold and an objective stated by European governments, an overall greenhouse gas reduction of approximately 30 per cent by 2020, and 80 per cent by mid-century compared to 1990 levels, is needed in all developed nations.

The next step is for EU Heads of State to endorse the proposed targets at the next European Council meeting, scheduled to take place from 8 to 9 March 2007.

CHINA EXPERIENCES WARMEST YEAR IN HALF CENTURY IN 2006

20 February 2007, Beijing, Zee News

China experienced its warmest year in half a century in 2006, with the average temperature in the country reaching 9.9 degrees celsius. The year 2006 was the country's warmest year since 1951, the China Meteorological Bureau said.

Over the past 50 years, the most evident temperature rises occurred in the northern and north-eastern parts of China and the inner Mongolia autonomous region, experts with the state climate centre under the bureau said. Last year, 13 out of 39 state climate observation stations on the Qinghai-Tibet plateau, which is highly sensitive to climate changes, recorded an all-time high temperature. Since 1950, there has been a trend of warming in most parts of China in terms of both average annual temperature and winter temperature, data released by the meteorological bureau said. From the 1986-1987 winter to now, China experienced 19 warm winters. Meteorologists say if the average temperature between December to the coming February is 0.5 degrees celsius higher than that of the same period in the past three decades, the winter could be defined as a warm one.

Scientists believe that carbon dioxide emission is the major culprit for global warming, which is bringing about more pests and droughts in some places, coupled with more frequent climate-related disasters such as typhoons and thunderstorms.

US GAS EMISSIONS SET TO GROW

3 March 2007, Zee News

The Bush administration estimates that US gas emissions that contribute to global warming will grow nearly as fast through the next decade as they did in the previous decade, according to a draft of a report being compiled for the United Nations. The document, the `United States Climate Action Report`, emphasizes that the projections show progress toward a goal Bush laid out in a 2002 speech: that emissions of Carbon Dioxide and other greenhouse gases grow at a slower rate than the economy, The New York Times reported. Since that speech, he has repeated his commitment to lessening "greenhouse gas intensity" without imposing formal limits on the gases.

The paper quoted Kristen A. Hellmer, a spokeswoman for the White House on environmental matters as saying that the report will show that the President's portfolio of actions addressing climate change and his unparalleled financial commitments are working. But the paper said when shown the report, an assortment of experts on climate trends and policy described the projected emissions as unacceptable given the rising evidence of risks from unabated global warming.

BRITAIN PROPOSES LEGAL LIMITS ON CARBON EMISSIONS

14 March 2007, Reuters

Britain became the first country to propose legislation for setting binding limits on greenhouse gas emissions. In its draft Climate Change Bill, the government proposed carbon dioxide emissions had to be cut by at least 60 percent by 2050, and created an independent monitoring committee to check annual progress.

ICFRE NEWS

PARTICIPATION BY DG – ICFRE IN SECOND WORKSHOP ON REDUCING EMISSIONS FROM DEFORESTATION IN DEVELOPING COUNTRIES

7 - 9 March 2007, Cairns, Australia

Shri Jagdish Kishwan, DG – ICFRE participated in the second workshop organized by the United Nations Framework Convention on Climate Change (UNFCCC) on **“Reducing emissions from deforestation in developing countries”** held from 7 – 9 March 2007 at Cairns, Australia as country representative.

Shri Kishwan, DG – ICFRE, made a presentation on **“Reducing emissions from deforestation in developing countries: The Indian Proposal”** wherein an alternate policy approach to Avoided Deforestation was suggested and the concept of “compensated conservation” to reward the countries that have increased their forest cover thereby, Carbon – stocks inspite of great population pressure and demand for land resources was proposed. It was projected that India would be entitled to claim incentive for maintaining baseline stocks estimated at 8.79 GtC in 2006 as also on an increment of 0.96 GtC effected till 2030 as a result of improvement of the present extent of forests, and due to afforestation outside forest land. These interventions led to noticeable headway in meeting India’s concern towards providing incentive to countries for conserving and improving its forests.

WORLD FORESTRY DAY

21 March 2007, Ministry of Environment and Forests, New Delhi

Shri Chandi Prasad Bhatt delivered a lecture on ‘Forests and Poverty Alleviation’ on the occasion of World Forestry Day on 21 March 2007 at a function organized by the Ministry of Environment and Forests, New Delhi. He focused on the relations between forests and villages and suggested ways to improve the quality of life of the rural people while at the same time protecting, improving and developing forest areas of the country.

Shri Bhatt emphasized that due to degradation of forests, the tribal people and villagers were facing cultural and economic problems because of their dependency on forest products. The main sufferers are the women, who are economically, the weakest. In such places, the women play a key role in managing the day-to-day affairs of the family. The parent society of the Chipko movement, *‘Dasholi Gram Swarajya Mandal’* has tried to understand the deep relationship between forests and women. The Chipko movement started in 1977 was culmination of such a spirit by the women of the Bhyundar village of district Chamoli, to protect the mixed forests of their area.

He underlined that each village should have its own forest which can be developed as Village Forest. To maintain village forests, Forest Panchayats should be created. He informed that in Uttarakhand alone, there are more than 11,000 Van Panchayats today. Shri Chandi Prasad Bhatt suggested that if a ‘Village Forest’ exists in every village and the responsibility to maintain, develop and to use forest products is given to the Van Panchayats, it will help to remove the problem of poverty and unemployment and also help to decrease the amount of money spent by the Government on soil and water conservation, pollution control and to maintain climatic balance. This, thus leads to overall development of the country.

UPCOMING EVENTS

26TH SESSION OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 4 May 2007. Bangkok, Thailand.

The IPCC-26 is scheduled for 4 May 2007, in Bangkok, Thailand, immediately following the 9th session of Working Group III, to be held from 30 April - 3 May 2007. Prior to this, the tenth session of Working Group I will be held in France from 29 January - 1 February 2007 and the eighth session of Working Group II will be held in Brussels, Belgium, from 2-5 April 2007. For more information contact: Rudie Bourgeois, IPCC Secretariat; tel: +41-22-730-8208; fax: +41-22-7 30-8025/13; e-mail: IPCC-Sec@wmo.int; Internet: <http://www.ipcc.ch/>

26TH SESSIONS OF THE UNFCCC SUBSIDIARY BODIES AND KYOTO PROTOCOL AD HOC WORKING GROUP

7 May 2007 - 18 May 2007. Bonn, Germany

The 26th sessions of the subsidiary bodies to the UN Framework Convention on Climate Change (UNFCCC) are scheduled for May 2007. They are likely to be held alongside the third session of the Kyoto Protocol's Ad Hoc Working Group and various workshops and other events, including a third UNFCCC dialogue on long-term cooperative action. For more information contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; Internet: <http://www.unfccc.int>

INTERNATIONAL CONFERENCE ON CLIMATE CHANGE

Hong Kong, 29-31 May 2007

The conference will provide a platform to explore the scientific, technical and socio-economic issues relevant to the understanding of human induced climate change, assess its potential impacts, propose mitigation and adaptation measures, and to develop strategies to implement these measures. Internet: <http://www.hkie.org/hk/iccc2007/>

27TH MEETING OF THE OPEN-ENDED WORKING GROUP OF THE MONTREAL PROTOCOL

4 June 2007 - 8 June 2007. Nairobi, Kenya

OWEG-27 is tentatively scheduled to take place from 4-8 June 2007, in Nairobi, Kenya. It is likely to be preceded by the 38th meeting of the Implementation Committee. For more information contact: Ozone Secretariat; tel: +254-20-762-3850/1; fax: +254-20-762-4691; e-mail: ozoneinfo@unep.org; Internet: <http://ozone.unep.org/Events/meetings2006and2007.asp>

CONFERENCE ON CLIMATE CHANGE: TOWARDS A LOW CARBON ECONOMY

West Sussex-United Kingdom, 23-27 July 2007

The conference may investigate questions such as: How can the increased concern for climate security best be translated into effective programmes to create a low carbon economy? How can scientific advances be translated into effective energy saving? What financial and regulatory mechanisms are needed? Which different strategies are needed in both North and South? Internet: <http://www.wiltonpark.org.uk/themes/environment/conference.aspx?confref=WP866>

RECENT STUDIES

CO₂ CAN BE STORED IN AQUIFERS FOR YRS: STUDY

8 February 2007, Houston, Zee News

Injecting carbon dioxide emissions from electric power plants into deep underground aquifers may be a suitable long-term disposal method for the greenhouse gas, the Massachusetts Institute of Technology said on Wednesday.

Carbon dioxide, one of the primary greenhouse gases blamed for global warming, comes from burning coal and natural gas to produce electricity. Capturing carbon and storing it underground through sequestration has been viewed as a way to reduce carbon dioxide impact on the Earth's atmosphere. One of the biggest risks of a sequestration has been the possibility that carbon would rise to escape into the atmosphere over time.

Researchers have studied the sequestration of carbon dioxide in three geologic formations: depleted oil and gas fields, unminable coal seams and deep saline aquifers. The new study looked at what happens when carbon is injected into saline aquifers. Research showed that it may be possible to capture carbon dioxide emissions from a power plant, inject the compressed gas underground through the life of the generating unit, leaving it safely stored for centuries. Over time, the carbon dioxide will dissolve, leaving a small amount that will adhere to the rock in the form of iron and magnesium carbonates, the report said.

The paper was published in a recent issue of Water Resources Research, according to MIT. Co-authors of the study include Martin Blunt of Imperial College of London and Franklin Orr Jr. of Stanford University.

COSMIC RAYS BLAMED FOR GLOBAL WARMING

11 February 2007, Richard Gray, Science Correspondent, Sunday Telegraph

Scientists, in a controversial new research, claim that cosmic rays from outer space play a far greater role in changing the Earth's climate than global warming experts previously thought.

Fluctuations in the number of cosmic rays hitting the atmosphere directly alter the amount of cloud covering the planet. High levels of cloud cover blankets the Earth and reflects radiated heat from the Sun back out into space, causing the planet to cool. Henrik Svensmark, a weather scientist at the Danish National Space Centre who led the team behind the research, believes that the planet is experiencing a natural period of low cloud cover due to fewer cosmic rays entering the atmosphere. This, he says, is responsible for much of the global warming we are experiencing.

He claims carbon dioxide emissions due to human activity are having a smaller impact on climate change than scientists think. If he is correct, it could mean that mankind has more time to reduce our effect on the climate. The controversial theory comes one week after 2,500 scientists who make up the United Nations International Panel on Climate Change published their fourth report stating that human carbon dioxide emissions would cause temperature rises of up to 4.5 C by the end of the century.

AIR CONDITIONERS ARE INCREASING TEMPERATURES IN BIG CITIES

15 February 2007, Washington, Zee News

Japanese researchers have found that the use of air conditioners in large buildings is increasing the overall temperature in big cities.

For the study, published in the Journal Applied Meteorology and Climatology, Dr Yukitaka Ohashi of Okayama University of Science and colleagues compared the summer temperatures in downtown Tokyo on weekends and that on weekdays.

The researchers noted that air conditioners dumped enough heat into the streets to raise the temperature by at least one to two degrees Celsius. They say that heat blasting from the rear-ends of air conditioners is contributing to the "heat island" effect that makes cities hotter and their weather sometimes more severe.

The researchers say that an AC not only moves heat from the inside to the outdoors but adds new heat to the environment also, as it is a machine that consume power.

HIMALAYAS AFFECTED BY GLOBAL WARMING: RESEARCH CONFIRMS

23 February 2007, Beijing, Zee News

The snow on the Mount Everest, at the heart of Himalayas, is melting fast due to global warming which in turn is posing a threat to the Asian rivers, including those in India, a new study carried out by Chinese, French and American researchers said.

Chinese scientists managed to drill three ice cores into the snow at the summit of the east Rongbuk glacier covering the northern collar of Mount Everest, at an altitude of 6,518 meters in 2000 and 2002. The analysis of these ice cores led to the discovery of the existence of a new climatic indicator, the content of gas in the ice, and therefore it was possible to retrace the evolution of summer temperatures at the site with such a high altitude. By accurately measuring the gas content of the two of the three cores, the researchers learnt about its evolution going back 2,000 years and they were able to observe a very profound reduction in the amount of gas trapped in the 20th century snow compared with the oldest snow at the site. These results noted a recent escalation in the melting of snow during summer on the surface of the glacier.

This research clearly indicates that climatic warming has also affected the permanent snow on the roof of the world, the researchers said.

GANGOTRI SHRINKING 17 MTS IN A YEAR

3 March 2007, Zee News

A recent study has found that the Gangotri Glacier is shrinking at a pace of 17 metres a year due to global warming and climate change. Its mammoth neighbour Pindari Glacier, too, is melting at a speed of about 9.5 metres a year, another study has pointed out.

The study carried out by the Department of Science and Technology on the Gangotri Glacier has revealed that during 1971-2004 it has been receding at the rate of 17.15 metres per

year. The Geological Survey of India's study puts Pindari Glacier melting at the rate of 9.51 metres a year during 1958-2001.

As a consequence of global warming, the melting of ice sheets and glaciers in the high mountains would lead to rise in sea level and adversely affect the low lying coastal areas in the Indian subcontinent. Fluctuation in sea level will be "highly variable" along the Indian coastline with an increase along the Gulf of Kutchh and West Bengal coastline and decrease along Karnataka coast, the studies indicate.

However, government seems helpless in checking the meltdown in view of the spread of glacial debris, economic feasibility and scale of operation. The Environment Ministry points out that the prime responsibility of reducing emissions that enhance global warming lay with developed countries, not with the developing countries like India.

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