



# CLIMATE – NEWS

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

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## CLIMATE CHANGE INTERNATIONAL NEWS

### UN CLIMATE CHANGE CONFERENCE IN CANCUN DELIVERS BALANCED PACKAGE OF DECISIONS, RESTORES FAITH IN MULTILATERAL PROCESS

11 December, 2010 Cancun UNFCCC, Press Release

The UN Climate Change Conference in Cancun, Mexico, ended with the adoption of a balanced package of decisions that set all governments more firmly on the path towards a low-emissions future and support enhanced action on climate change in the developing world.

The package, dubbed the 'Cancun Agreements' was welcomed to repeated loud and prolonged applause and acclaim by Parties in the final plenary.

"Cancun has done its job. The beacon of hope has been reignited and faith in the multilateral climate change process to deliver results has been restored," said UNFCCC Executive Secretary Christiana Figueres. "Nations have shown they can work together under a common roof, to reach consensus on a common cause. They have shown that consensus in a transparent and inclusive process can create opportunity for all," she said.

"Governments have given a clear signal that they are headed towards a low-emissions future together, they have agreed to be accountable to each other for the actions they take to get there, and they have set it out in a way which encourages countries to be more ambitious over time," she said.

Nations launched a set of initiatives and institutions to protect the poor and the vulnerable from climate change and to deploy the money and technology that developing countries need to plan and build their own sustainable futures. And they agreed to launch concrete action to preserve forests in developing nations, which will increase going forward.

They also agreed that countries need to work to stay below a two degree temperature rise and they set a clear timetable for review, to ensure that global action is adequate to meet the emerging reality of climate change.

"This is not the end, but it is a new beginning. It is not what is ultimately required but it is the essential foundation on which to build greater, collective ambition," said Ms Figueres.

**Elements of the Cancun Agreements include:**

- Industrialised country targets are officially recognised under the multilateral process and these countries are to develop low-carbon development plans and strategies and assess how best to meet them, including through market mechanisms, and to report their inventories annually.
- Developing country actions to reduce emissions are officially recognised under the multilateral process. A registry is to be set up to record and match developing country mitigation actions to finance and technology support from by industrialised countries. Developing countries are to publish progress reports every two years.
- Parties meeting under the Kyoto Protocol agree to continue negotiations with the aim of completing their work and ensuring there is no gap between the first and second commitment periods of the treaty.
- The Kyoto Protocol's Clean Development Mechanisms has been strengthened to drive more major investments and technology into environmentally sound and sustainable emission reduction projects in the developing world.
- Parties launched a set of initiatives and institutions to protect the vulnerable from climate change and to deploy the money and technology that developing countries need to plan and build their own sustainable futures.
- A total of US\$30 billion in fast start finance from industrialised countries to support climate action in the developing world up to 2012 and the intention to raise US\$100 billion in long-term funds by 2020 is included in the decisions.
- In the field of climate finance, a process to design a Green Climate Fund under the Conference of the Parties, with a board with equal representation from developed and developing countries, is established.
- A new "Cancun Adaptation Framework" is established to allow better planning and implementation of adaptation projects in developing countries through increased financial and technical support, including a clear process for continuing work on loss and damage.
- Governments agree to boost action to curb emissions from deforestation and forest degradation in developing countries with technological and financial support.
- Parties have established a technology mechanism with a Technology Executive Committee and Climate Technology Centre and Network to increase technology cooperation to support action on adaptation and mitigation.

**UNFCCC CHIEF SAYS CANCUN MUST BE FOLLOWED BY HIGHER GLOBAL EMISSION CUTS AND RAPID LAUNCH OF NEW CLIMATE BODIES AND FUNDS**

20 December, 2010 Bonn UNFCCC, Press Release

Nations must follow up their successful UN Climate Change Conference in Cancun with higher global emission cuts and the rapid launch of new institutions and funds to show the world that a new era of international cooperation on climate change is an established fact, Christiana Figueres, Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), said.

Cancun was a big step, bigger than many imagined might be possible. But the time has come for all of us to exceed our own expectations because nothing less will do, she said.

The Cancun Agreements, reached on 11 December in Cancun, Mexico, call for countries to list under the UNFCCC the emission reduction targets and actions which they announced in 2010, forming the collective basis for the largest mitigation effort the world has ever seen. They also agreed to build a comprehensive system of mutual accountability towards these goals.

It needs to be implemented as fast as possible, and it needs to be accompanied by credible accountability systems that will help in measuring real progress, said Ms. Figueres. If all these targets and actions are fully implemented, UN estimates show they could deliver only 60 percent of the emission reductions that science says will be needed to stay below the agreed two degree rise in average temperatures, and two degrees does not guarantee the survival of the most vulnerable peoples.

All countries, but particularly industrialized nations, need to deepen their emission reduction efforts and to do so quickly, the Executive Secretary said.

### **Building up agreed support to the developing world**

The Cancun Agreements also include the most comprehensive package ever agreed by governments to help developing nations deal with climate change, including new institutions, funding channels and a technology transfer mechanism to help the developing world build its own sustainable, low-emissions future, adapt more effectively to climate change, and preserve and protect its forests for the good of all nations.

In Cancun, governments renewed their trust in each other, but to succeed fully they need to press boldly ahead with what they have agreed. Implementation is the most effective avenue to harness the support of business and civil society, both of which are critical, Ms. Figueres said.

## **GLOBAL TEMPERATURE TO RISE 3.5 DEGREES C. BY 2035: INTERNATIONAL ENERGY AGENCY**

Stephen kurczy

11 November, 2010 The Christian Science Monitor

<http://www.csmonitor.com/world/global-issues/2010/1111/global-temperature-to-rise3.5--->

Unless governments cut subsidies for fossil fuels and adopt new policies to support renewable energy sources, the Copenhagen Accord to hold global warming to less than a 2-degree increase will not be reached.

Global temperatures are projected rise 3.5 degrees C. over the next 25 years, the International Energy Agency said Tuesday, meaning that governments worldwide will have failed in their pledge to hold global temperature at a 2-degree increase. But there's hope yet, says Fatih Birol, the chief economist for the Paris-based International Energy Agency (IEA).

If governments remove subsidies for fossil fuels and increase investments in renewable energy to make them cost competitive, then the Copenhagen Accord can still be upheld. The voice of guarded optimism comes just ahead of a summit starting November 29 in Cancun, Mexico, for another round of climate talks.

“Renewable energies need substantial subsidies from governments,” Dr. Birol said in a telephone interview. “The important task is to decide whether they will support energy renewable in the future. It could be bad news for energy security and climate change if they don’t.”

**ALTERNATIVE ENERGY QUIZ: Are you "smarter than Al Gore"?**

None of that may be surprising, considering the 28-nation Copenhagen Accord signed in December 2009 was not legally binding and also fell short of recommendations from the UN-sponsored Intergovernmental Panel on Climate Change for how to prevent temperatures from rising more than 2 degrees C. Yet if global warming is going to be curtailed, then governments must support the development and use of renewable energy.

“Renewable energy can play a central role in reducing carbon-dioxide emissions and diversifying energy supplies, but only if strong and sustained support is made available,” IEA executive director Nobuo Tanaka said in a statement release of the 2010 World Energy Outlook.

The IEA projects global energy demand to surge 36 percent over the next 25 years. As that happens, use of modern renewable energy sources will triple as their share in total primary energy demand increases from 7 percent to 14 percent, the IEA said.

According to current government commitments and policies, the IEA projects government intervention in support of renewable (electricity from renewable and biofuel) will increase from \$57 billion in 2009 to \$205 billion (in 2009 dollars) by 2035. Still, these

current government policies “are collectively inadequate to meet the Copenhagen Accord’s overall goal of holding the global temperature increase to below 2 degrees C.,” according to the report.

As carbon dioxide emissions rise 21 percent to 35 billion tons, temperatures will rise 3.5 degrees C.

To keep temperatures from rising more than 2 degrees C., the share of renewable among total energy use must reach to 38 percent by 2035, governments must end their subsidies on fossil fuels, and global demand for coal, oil, and gas must plateau before 2020.

## **EGGSELLS COULD HELP COMBAT CLIMATE CHANGE, RESEARCH SUGGESTS**

26 October, 2010 Science Daily

<http://www.sciencedaily.com/releases/2010/10/101026111607.htm>

The food industry generates a lot of waste products, but one of these, eggshells, could help combat climate change, according to research published in the *International Journal of Global Warming* this month.

Basab Chaudhuri of the University of Calcutta and colleagues have demonstrated that the membrane that lines an eggshell can absorb almost seven times its own weight of the greenhouse gas carbon dioxide from the atmosphere. The carbon dioxide thus trapped could be stored in this form until energy-effective methods of using the gas could be found that would not compound the environmental problems associated with carbon emissions. Carbon dioxide is widely used in the chemical industry for the preparation of a wide range of products as well as in some settings as an alternative to toxic solvents. It might also one day be possible to efficiently convert trapped carbon dioxide into a clean fuel.

Atmospheric carbon dioxide levels have been rising since the mid-nineteenth century when fossil fuels -- coal, oil, and gas -- first began fuelling the industrial revolution. The rise in average global temperatures seen in recent decades is due mainly to the increasing concentration of greenhouse gases in the atmosphere. In 2005, carbon dioxide levels were more than a third higher than they had been prior to the industrial revolution; rising from 280 parts per million by volume of gas to 381 ppm. As of October 2010, the concentration is 388 ppm. To put these numbers into perspective, almost 300 billion tonnes of carbon have been released into the atmosphere through the burning of fossil fuels and cement production since 1751, but half of this carbon has been released since the mid-1970s.

The Calcutta team explains that eggshell comprises three layers, a cuticle on the outer surface, a spongy calcium-containing middle layer and inner layer. The second and third layers are composed of protein fibers bonded to calcium carbonate. The membrane is just below the shell and is about 100 micrometers thick. Separating the membrane from the cuticle is currently not an efficient process. But, given that India alone consumes 1.6 million tonnes of eggs each year, there is certainly an incentive for improving on this situation in order to use the membrane material in climate change amelioration.

Chaudhuri and colleagues have demonstrated that a weak acid can be used to separate the membrane from the shell for use as a carbon dioxide adsorbant. The researchers point out that a mechanical separation method would be needed to make the process viable on an industrial scale. However, Chaudhuri also muses that we could all help reduce CO<sub>2</sub> levels by exposing our egg membranes to the air after eating our eggs.

## **IRON STIMULATES BLOOMS OF TOXIN-PRODUCING ALGAE IN OPEN OCEAN, STUDY FINDS**

Tim Stephens

8 November, 2010 Science Daily

<http://www.sciencedaily.com/releases/2010/11/101108161222.htm>

A team of marine scientists has found that toxin-producing algae once thought to be limited to coastal waters are also common in the open ocean, where the addition of iron from natural or artificial sources can stimulate rapid growth of the harmful algae. The new findings, reported this week in the *Proceedings of the National Academy of Sciences*, add to concerns about proposals to use iron fertilization of the oceans as a way to combat global warming.

Blooms of diatoms in the genus *Pseudo-nitzschia*, which produce a neurotoxin called domoic acid, are a regular occurrence in coastal waters. During large blooms, the algal toxin enters the food chain, forcing the closure of some fisheries (such as shellfish and sardines) and poisoning marine mammals and birds that feed on contaminated fish. But until now, blooms of these algae in the open ocean have attracted little attention from researchers.

"Normally, *Pseudo-nitzschia* cells are sparse in the open ocean, so they don't have much effect. But these species are incredibly responsive to iron, often becoming dominant in algal blooms that result from iron fertilization. Any iron input might cause a bloom of the cells that make the toxin," said Mary Silver, professor emerita of ocean sciences at the University of California, Santa Cruz, and lead author of the new study.

Because both natural and artificial additions of iron to ocean waters cause phytoplankton (single-celled algae) to grow vigorously, and because phytoplankton take up carbon dioxide as they grow, iron fertilization of the oceans has been suggested as a way to reduce atmospheric concentrations of carbon dioxide and thereby combat global warming.

## **SEA LEVELS RISING AROUND SOUTH ATLANTIC'S FALKLAND ISLANDS, 19<sup>TH</sup> - CENTURY BENCHMARKS REVEAL**

20 October, 2010 Science Daily

<http://www.sciencedaily.com/releases/2010/10/101020091855.htm>

"We have been fortunate in being able to compare modern sea-level measurements obtained from tide gauges and from satellite radar altimeters with historical measurements made at Port Louis in the Falkland Islands in 1842," explained researcher Prof. Philip Woodworth of the National Oceanography Centre.

In 1839, distinguished naval officer and polar explorer James Clark Ross (1800–1862) set off on an expedition to the Southern Ocean with two ships, HMS *Erebus* and HMS *Terror*. In April 1842, he stopped at Port Louis, primarily to make magnetic field and other measurements, but also to make repairs to his ships which had been badly damaged in the Drake Passage. Having set up a winter base, he took the opportunity to make careful measurements of sea level relative to two benchmarks cut into the cliffs and marked with brass plaques. These marks remain in good condition to this day. This fact, along with the apparent good quality of Ross's data, has allowed Woodworth's team to compare the sea level records from 1842 with measurements taken at Port Louis using modern instruments in 1981–1982, 1984 and 2009. They also used information from nearby Port Stanley, where a permanent tide gauge was operated in the 1960s and 1970s and where NOC has had an operational gauge since 1992.

After correction for air pressure effects and vertical land movement due to geological processes, the researchers find that sea levels rose by an average of around 0.75 millimetres a year between 1842 and the early 1980s. They point out that this figure is similar to previous estimates for the long-term rate of sea-level rise at Port Arthur in Tasmania, measurements with which Ross was also associated, and at other locations in the Northern and Southern Hemispheres. However, they also find evidence that the rate of sea-level rise has accelerated over recent decades. Specifically, they estimate that sea levels around the

Falkland Islands have risen by an average of around 2.5 millimetres a year since 1992, a figure consistent with measurements made by satellite radar altimeters over the same period.

Longer-term data from the Falklands, and from many other locations, are needed to establish whether the apparent acceleration in sea-level rise is due to increased global warming, or the result of some kind of decadal fluctuation. “The benchmarks left by James Clark Ross on the cliffs of Port Louis will facilitate future studies of sea-level change – just as Ross intended,” said Woodworth.

## **HOW CARBON DIOXIDE CONTROLS EARTH'S TEMPERATURE.**

**NASA'S LACIS: "THERE IS NO VIABLE ALTERNATIVE TO COUNTERACT GLOBAL WARMING EXCEPT THROUGH DIRECT HUMAN EFFORT TO REDUCE THE ATMOSPHERIC CO<sub>2</sub> LEVEL."**

8 October, 2010 Climate Progress

<http://climateprogress.org/2010/10/18/carbon-dioxide-thermostat-controls-earth-temperature/>

A study by GISS climate scientists recently published in the journal *Science* shows that atmospheric CO<sub>2</sub> operates as a thermostat to control the temperature of Earth.

CO<sub>2</sub> is the key atmospheric gas that exerts principal control (80% of the non-condensing GHG forcing) over the strength of the terrestrial greenhouse effect. Water vapor and clouds are fast-acting feedback effects, and as such, they are controlled by the radiative forcing supplied by the non-condensing GHGs. There is no viable alternative to counteract global warming except through direct human effort to reduce the atmospheric CO<sub>2</sub> level.

NASA's Goddard Institute for Space Studies has posted three articles on their website explaining two important new studies, “Atmospheric CO<sub>2</sub>: Principal control knob governing Earth's temperature” (subs. req'd) in *Science* by Andrew Lacis *et al.* and “The attribution of the present-day total greenhouse effect” (subs. req'd) in *JGR* by Gavin Schmidt *et al.* Together they make a terrific tutorial on the critical role human-caused CO<sub>2</sub> plays in climate change.

Schmidt is best known as a key contributor to the must-read blog, Real Climate. Lacis may be best known as the NASA climatologist whose 2005 critique of the IPCC Fourth Assessment draft — “There is no scientific merit to be found in the Executive Summary” — was embraced by the anti-science disinformers until it was revealed he thought the IPCC consensus was in fact some watered down, least-common denominator piece of wishy-washiness that understates our scientific understanding, which it is (see “Disputing the ‘consensus’ on global warming”).

## HUGE PARTS OF WORLD ARE DRYING UP: LAND 'EVAPOTRANSPIRATION' TAKING UNEXPECTED TURN

11 October, 2010 Science Daily

<http://www.sciencedaily.com/releases/2010/10/101010133630.htm>

The soils in large areas of the Southern Hemisphere, including major portions of Australia, Africa and South America, have been drying up in the past decade, a group of researchers conclude in the first major study to ever examine "evapotranspiration" on a global basis.

Most climate models have suggested that evapotranspiration, which is the movement of water from the land to the atmosphere, would increase with global warming. The new research, published online this week in the journal *Nature*, found that's exactly what was happening from 1982 to the late 1990s.

But in 1998, this significant increase in evapotranspiration which had been seven millimeters per year slowed dramatically or stopped. In large portions of the world, soils are now becoming drier than they used to be, releasing less water and offsetting some moisture increases elsewhere.

Due to the limited number of decades for which data are available, scientists say they can't be sure whether this is a natural variability or part of a longer-lasting global change. But one possibility is that on a global level, a limit to the acceleration of the hydrological cycle on land has already been reached. If that's the case, the consequences could be serious. They could include reduced terrestrial vegetation growth, less carbon absorption, a loss of the natural cooling mechanism provided by evapotranspiration, more heating of the land surface, more intense heat waves and a "feedback loop" that could intensify global warming.

"This is the first time we've ever been able to compile observations such as this for a global analysis," said Beverly Law, a professor of global change forest science at Oregon State University. Law is co-author of the study and science director of the AmeriFlux network of 100 research sites, which is one major part of the FLUXNET synthesis that incorporates data from around the world.

"We didn't expect to see this shift in evapotranspiration over such a large area of the Southern Hemisphere," Law said. "It is critical to continue such long-term observations, because until we monitor this for a longer period of time, we can't be sure why this is occurring."

Some of the areas with the most severe drying include southeast Africa, much of Australia, central India, large parts of South America, and some of Indonesia. Most of these regions are historically dry, but some are actually tropical rain forests. The rather abrupt change from increased global evapotranspiration to a near halt in this process coincided with a major El Nino event in 1998, the researchers note in their report, but they are not suggesting that is a causative mechanism for a phenomenon that has been going on for more than a decade now.

Greater evapotranspiration was expected with global warming, because of increased evaporation of water from the ocean and more precipitation overall. And data indeed show that some areas are wetter than they used to be. However, other huge areas are now drying



out, the study showed. This could lead to increased drought stress on vegetation and less overall productivity, Law said, and as a result less carbon absorbed, less cooling through evapotranspiration, and more frequent or extreme heat waves.

Some of the sites used in this study are operated by Law's research group in the central Oregon Cascade Range in the Metolius River watershed, and they are consistent with some of these concerns. In the last decade there have been multiple years of drought, vegetative stress, and some significant forest fires in that area.

Evapotranspiration returns about 60 percent of annual precipitation back to the atmosphere, in the process using more than half of the solar energy absorbed by land surfaces. This is a key component of the global climate system, linking the cycling of water with energy and carbon cycles. Longer term observations will be needed to determine if these changes are part of decadal-scale variability or a longer-term shift in global climate, the researchers said.

This study was authored by a large group of international scientists, including from OSU; lead author Martin Jung from the Max Planck Institute for Biogeochemistry in Germany; and researchers from the Institute for Atmospheric and Climate Science in Switzerland, Princeton University, the National Center for Atmospheric Research in Colorado, Harvard University, and other groups and agencies. The regional networks, such as AmeriFlux, Carbo Europe, and the FLUXNET synthesis effort, have been supported by numerous funding agencies around the world, including the Department of Energy, NASA, National Science Foundation, and National Oceanic and Atmospheric Administration in the United States.

## CLIMATE CHANGE NATIONAL NEWS

### RAJASTHAN FARMERS SAY CLIMATE CHANGE AFFECTING LIVELIHOOD

5 October, 2010 World News

<http://www.newkerala.com/news/world/fullnews-56304.html>

Small and marginal farmers are suffering the most due to climate change manifesting through rising temperature and erratic rainfall, dwindling the scope for livelihood in agriculture and animal husbandry. This was the common refrain of farmers from different agro-climatic zones of Rajasthan, who presented their testimonies at a public hearing on climate change organized by the Centre for Community Economics and Development Consultants' Society (CECOEDECON) at Sitapura Industrial Area.

"The public hearing was organised in the run-up to the Climate Summit at Cancun in Mexico to draw the attention of national and international policy-makers to the plight of farmers, livestock owners and small producers at the grassroots affected by global warming", said Sharad Joshi, Secretary, CECOEDECON. CECOEDECON is one of the few non-governmental organizations accredited by the United Nations Framework Convention on Climate Change (UNFCCC). More than 150 representatives from different parts of Rajasthan took part in the hearing, which was attended by researchers, experts, government officers of agriculture, water and animal husbandry departments and representatives of NABARD and the State Livelihood Mission.

Sixty-two-year-old Hanuman Sahay Sharma from Naila said the animal husbandry activities had practically come to naught in his village due to scarcity of water and fodder. The farming of jamun and tomato has stopped following a sharp decline in the ground water level.

Om Prakash of Singhana village in Jhunjhunu district said on the basis of his experience spanning 40 years that agriculture and livestock rearing avocations had been directly affected. Irregular and unpredictable rains as well as increase in temperature have adversely affected the crop yield.

Several farmers such as Bao Bai Jatav of Suraj Ka Kheda village and Mathura Lal Sahariya of Gesua village in Tonk district, Om Prakash Sharma of Kabida village in Sikar district, Bhaira Ram of tribal-dominated Salumbar village in Udaipur district and Bhogilal Sahariya of Shahbad in Baran district underlined the need to protect the earth and the precious life on it by sustained and meaningful efforts.

The farmers narratives would be submitted to the policy-makers to help them devise action plans and strategies to combat climate change.

## **GREEN TECHNOLOGY SHARING MECHANISM FINALIZED INDIA PLAYS CRUCIAL ROLE IN HELPING REACH AGREEMENT**

Nitin Sethi

10 December, 2010 Times of India New Delhi

CANCUN: Amidst the grim mood at Cancun, there is one good news, or at least partial good news: the over-arching architecture of a global green technology sharing and development mechanism has been finalized.

India played a crucial role in hammering out the deal on the technology framework though it could all get held up if negotiators are unable to come to similar level of consensus on other key issues forming part of a global long-term deal, namely mitigation targets, international scrutiny protocols, financing climate change action, forestry and the future of Kyoto Protocol.

The technology sharing and development mechanism will have a Technology Executive Committee on top with a climate technology centre under it. The climate technology centre will guide and manage several regional technological centres or hubs all over the world which will help find and develop innovations and technologies that would reduce emissions.

The structure comes as a compromise made by the developing countries with US and other rich countries. The developing countries had initially demanded that existing technologies be transferred to the poor and that new green technologies be produced with funds from the rich countries and be put in the public domain and concerns about IPR costs be resolved.

They asked for the architecture of a technology deal be made accordingly. The US instead proposed a hub-and-spoke model where the technology centre would facilitate networking and the nodes facilitate preparation of projects on technological innovations. The US and EU were dead set against any concerns about IPR being raised at all. In the compromise reached, the areas of dispute such as relation between TEC and CTCs and control over these has remained unresolved and will be figured out over 2011. Agreeing to just this wire-frame for technology sharing has taken three years and India has always been a leading player in talks

## **G20 WANTS FINANCING OUT OF UN TALKS**

Nitin Sethi

10 December, 2010 Times of India New Delhi

CANCUN: If the logjam on Kyoto and a legally binding long-term treaty were not enough to throw Cancun talks into disarray, the G20 has now stepped in to strip the UN Framework Convention on Climate Change further of any substantial worth.

The G20 has told member countries that the issues of financing climate change action be taken out of the UN talks and be handed over to them. The move could further demolish the consensus-driven process within the UN talks and potentially rob the climate change

convention of any worth to the developing countries that have seen little real money despite commitments and promises by the rich countries.

The G20 has asked member countries that they allow the finance ministries under the aegis of this umbrella devise the Green Fund that the Copenhagen Accord had envisaged. The Green Fund was notionally set up under the accord to facilitate transfer of monies from the rich countries to the poor to act against climate change.

## **GROWING EMISSION RATE IN INDIA WORRYING: NARAYANA MURTHY, INFOSYS MENTOR**

28 December, 2010, The Economic Times

<http://economictimes.indiatimes.com/news/news-by-industry/et-cetera/growing-emission-rate-in-india-worrying-narayana-murthy-infosys-mentor/articleshow/7176680.cms>

CHENNAI: An improper system of controlling and checking gas emissions had seen India become the 5th largest carbon dioxide emitter in the world, N R Narayana Murthy said on Monday. The country's emissions, which were 1.6 billion tonnes in 2005, are expected to rise to 6.5 billion tonnes in 2030, the founder of Infosys Technologies added. He was delivering a lecture at the Theosophical Society in Adyar.

The answers to all these issues, he said, lay in achieving sustainable development. Sustainability, he told the audience, should be seen in a broader sense. "Sustainability is a movement. It is ensuring that everyone is in harmony with the environment and without compromising on the right our future generations have over a sustained environment," he said. About 360 million of India's population were below the poverty line while 44% of the population or 500 million people had no electricity, he pointed out.

One billion of the world's population, of whom 200 million were Indians, faced water scarcity; three billion, of whom 750 million were Indians, had no proper water facility for sanitation, Narayana Murthy said. "The issue is alarming. The decrease in water scarcity, increase in carbon dioxide emission and global warming are inter-related and the end result will have an adverse effect on the quality of living on earth," he said.

Noting that companies like Unilever, Honda and Infosys did their best to preserve sustainability of the environment, he said Unilever had a minimal natural gas consumption of 46%, Honda had developed Hybrid cars and Infosys did water recycling. The recycled water was used for flushing toilets, air-conditioning and landscaping, he said.

The recent UN climate change programme at Cancun in Mexico had seen countries like US and China announcing plans to reduce 80% of global gas emission. Similarly, the National Action Plan on climate change announced by Prime Minister Manmohan Singh includes steps to bring down solar emissions, enhance energy generation and manage water efficiently, improve agriculture.

## ICFRE NEWS

### ONE WEEK DST TRAINING FOR WOMEN SCIENTISTS AND TECHNOLOGISTS ON “CLIMATE CHANGE AND CARBON MITIGATION” FROM 4 TO 8 OCTOBER 2010 AT ICFRE DEHRADUN

One week training programme for women scientists and technologists on “Climate Change and Carbon Mitigation” was organized by the Biodiversity and Climate Change Division at ICFRE, Dehradun from 4 to 8 October 2010. 22 women scientists and technologists participated in this course. The training programme was sponsored by the Department of Science and Technology, Government of India New Delhi. The programme was highly appreciated by the participants.



### PARTICIPATION OF ICFRE IN THE ‘UN CLIMATE CHANGE CONFERENCE’ FROM 4 TO 9 OCTOBER 2010 AT TIANJIN, CHINA

Shri V.R.S. Rawat, Scientist- E, Biodiversity and Climate Change Division, participated in the fourteenth session of the AWG-KP and the twelfth session of the AWG-LCA of UN climate change conference from 4 to 9 October 2010 at the Tianjin Meijiang Convention and Exhibition Center (MJCEC), Tianjin, China.

### PARTICIPATION OF ICFRE IN THE UNFCCC COP 16 AND COP/MOP 6 FROM 29<sup>Th</sup> NOVEMBER TO 10<sup>Th</sup> DECEMBER 2010 AT CANCUN, MEXICO

Shri V.R.S. Rawat, Scientist- E, Biodiversity and Climate Change Division, participated as a member of Indian delegation in the 16th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) and the sixth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) held from 29<sup>th</sup> November to 10<sup>th</sup> December 2010 at Cancun, Mexico.

## **UPCOMING EVENTS**

### **CARBON MARKETS AND CLIMATE FINANCE AFRICA**

25- 26 January, 2011 Johannesburg, South Africa

**Website:** <http://www.greenpowerconferences.com/link/CM1101ZA.html?link=ALERT>

**Contact name:** Laura Proctor

Finance Africa to help create a positive legislative and regulatory environment and attract investment

Organized by: Green Power Conferences

Deadline for abstracts/Proposals: Not available.

### **“SUSTAINABLE WATER RESOURCES MANAGEMENT AND CLIMATE CHANGE ADAPTATION (SWRMCCA)”**

17-19 February, 2011 Durgapur, West Bengal, India

Organized by National Institute of Technology, (NIT), Durgapur  
The details of the conference are also available on web site  
<http://www.nitdgp.ac.in/nit10/ceintconf/home.htm>

Contact: Dr. Vijay Kumar Dwivedi Prof. Dept. of Civil Engg. NIT, Durgapur Organizing Secretary - SWRMCCA  
Mobile : 09434788097

### **CLIMATE CHANGE, AGRI-FOOD, FISHERIES AND ECOSYSTEMS**

19-21 May, 2011, Agadir (Morocco)

This Conference is jointly organized by:

The Faculty of Law, Economics and Social Sciences, Ibn Zohr University, Morocco

The North-South Center for Social Sciences (NRCS), Morocco

The German Technical Cooperation (GTZ), Germany

In Collaboration with:

The Institute for Research and Development (IRD) , France

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