CLIMATE – NEWS

ISSUE – XVIII

July to September 2008

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

CLIMATE CHANGE INTERNATIONAL NEWS

CO_2 EMISSION UP BY NEARLY A FIFTH IN 12 YEARS

By Emily Beament, PA Environment Correspondent
2 July, 2008
http://www.independent.co.uk/environment/climate-change/co2-emissions-up-by-nearly-a-fifth-in-12-years-858859.html

Carbon dioxide emissions caused by UK consumers increased by almost a fifth between 1992 and 2004, A study by the Stockholm Environment Institute at York University looked at the carbon footprint of all the goods and services consumed by British residents, including those imported from other countries. The research found the amount of carbon dioxide emissions associated with consumption in the UK increased by more than 115 million tonnes in that time, from 646.8 million tonnes to 762.4 million tonnes.

Emissions grew because of an overall increase in the amount of products being consumed and a shift from manufacturing in the UK to other countries where production involved a higher carbon output, such as China. The study counted emissions created through the production and transport of products such as televisions and clothing abroad, as well as goods and services produced in the UK and consumed here including gas and electricity. But it subtracted the carbon footprint of products manufactured here but exported for consumption abroad, to give a clear picture of the emissions associated with consumption in the UK.

While "territorial" emissions - those created in the UK and measured under the UN's Kyoto Protocol on reducing greenhouse gases fell by 5% from 1992 to 2004, consumer-related emissions rose 18%. Consumption emissions were 37% higher than the territorial emissions in 2004, the study said. Thomas Wiedmann, research associate at the Stockholm Environment Institute at York University, said the study drew up the "total carbon footprint of UK consumers" and provided an insight into the global impacts of consumption in Britain. "It gives support for the view that in an increasingly globalised market all economies need to play their part in reducing greenhouse gas emissions," he said. Dr Wiedmann said the study included, for example, the electricity needed to make clothes in China which were then

exported to the UK for sale. Much of the time, that energy was more carbon intensive because countries such as China relied heavily on coal, he said.

The study, using a new modeling approach, was commissioned for the Department for Environment, Food and Rural Affairs. Environment Secretary Hilary Benn said: "Under international climate change agreements, we only have direct influence over our domestic emissions and they are, and will remain, the basis for these commitments. "But as we accelerate the move to a low carbon economy, we must help business and individuals to understand and reduce the environmental impacts of the products and services they produce, sell or consume, wherever in the world they are made."

He added: "These findings reinforce the need for a global approach to tackling climate change, based on a carbon market that stimulates action and investment in clean energy and energy efficiency in all economies."

DEVELOPING NATIONS REJECT G-8 CLIMATE PLAN

By Tom Raum, Associated Press
10 July, 2008
http://www.nysum.com/foreign/developing-nations-reject-g-8-climate-plan/81547/

TOYAKO, Japan — China, India, and other energy-guzzling developing nations yesterday rejected key elements of a global warming strategy embraced by President Bush and leaders of wealthy nations. And the U.N's top climate official dismissed the G-8 goals as insignificant. The sharp criticism emerged at the close of a summit here of the Group of Eight industrial powers that was dominated by the issue of how to address the warming Earth. The G-8 leaders invited their counterparts from fast-growing, pollution-emitting nations to sideline talks on the topic, but the session merely showcased a widening rift over the best approach.

It was the final G-8 summit of Mr. Bush's presidency and he said "significant progress" had been made on fighting global warming when the leaders agreed to slash greenhouse gas emissions in half by 2050 and to insist that developing nations be part of any new international agreement.

"In order to address climate change, all major economies must be at the table, and that's what took place," Mr. Bush said before boarding Air Force One to return to Washington. The "major economies" are the world's 16 largest-emitting nations, accounting for 80% of the world's air pollution. The expanded meeting that included all of them was the first time their leaders had sat down together for climate discussions. But it ended with only a vague reference in their final declaration to a long-term goal for reducing global emissions and a pledge for rich and poor countries to work together. Only a few of the emerging powers Indonesia, Australia, and South Korea agreed to back the 50% by 2050 reduction target. The five main developing nations China, India, Brazil, Mexico, and South Africa, who together represent 42% of the world's population issued a statement explaining their split with the G-8 over its emissions-reduction goals. They said they rejected the notion that all should share in the 50% target, since it is wealthier countries that have created most of the environmental damage up to now.

ARCTIC ICE CONTINUES TO THIN

30 July, 2008 New Scientist
http://environment.newscientist.com/channel/earth/climate-change/mg19926673.400-arctic-...

SANTA is skating on very thin ice. In 2007 the sea ice at the North Pole was at its thinnest since records began. Christian Haas of the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, Germany, and his team estimated the thickness of late summer ice at the North Pole in 2001, 2004 and 2007. They found that the ice was on average 1.3 metres thick at the end of the summer in 2007. By contrast, its depth was 2.3 metres in 2001 and 2.6 metres in 2004.

"In 2007 the ice was 1.3 metres thick on average, compared with 2.6 metres in 2004" The team went to the North Pole aboard the German icebreaker RFV Polarstern in August and September of 2001, 2004 and 2007. While there, they used helicopter-borne instruments to determine the thickness of large swathes of ice by measuring its conductivity.

Previously, glaciologists had measured ice thickness in spots by placing instruments directly on the ice. Records from 1991 show that the summer ice that year was 3.1 metres thick. While the ice at the North Pole used to be thick "old" ice, much of it now is thinner first-year ice, which has had only a single winter to grow. Earlier studies had already shown that the extent of Arctic sea ice reached its lowest level in 2007, 23 per cent below the previous minimum set in 2005. Taken together, the studies suggest that the Arctic could soon be ice-free during summer.

ACID RAIN REDUCES METHANE EMISSIONS FROM RICE PADDIES

7 August, 2008 Science Daily
http://www.sciencedaily.com/release/2008/08/08086154802.htm

Acid rain from atmospheric pollution can reduce methane emissions from rice paddies by up to 24 per cent according to research led by Dr Vincent Gauci of The Open University. This is potentially a beneficial side effect of the high pollution levels China - the world's largest producer of rice - is often associated with. Methane is 21 times more powerful as a greenhouse gas than carbon dioxide. "The reduction in pollution happens during a stage of the lifecycle when the rice plant is producing grain. This period is normally associated with around half of all methane emissions from rice and we found that simulated acid rain pollution reduced this emission by 24 per cent," said Dr Gauci.

The project - funded by the Natural Environment Research Council - used rice soils and grain from Portuguese paddies. Soils from these paddies have been exposed to very little acid rain and are similar to Asian rice soils before they became polluted. To test the effects of acid rain, the researchers added frequent small doses of sulphate, which simulate acid rain experienced in polluted areas of China.
"We had similar results when exposing natural wetlands to simulated acid rain but this could be more important since natural wetlands are mostly located far from major pollution sources,

whereas for rice agriculture, the methane source and the largest source of acid rain are both in the same region - Asia," added Dr Gauci.
"We need to do further research but it looks like there could be a combination of processes at work. One line of investigation we'd like to confirm is that the sulfate component of acid rain may actually boost rice yields. This might, paradoxically, have the effect of reducing a source of food for the methane producing micro-organisms that live in the soil."
This is because some sugars produced by rice plants are lost in the soil and micro-organisms feed on these sugars. But when the rice plant is producing grain, the carbohydrates are directed into grain production and away from soil so limiting the amount of food available for micro-organisms.
"There is also likely to be competition between these micro-organisms and sulphate-reducing bacteria. Normally in these conditions sulphate-reducers win which results in less methane."
Dr Gauci added a note of caution to the results. "Acid rain is one of several pollution problems in Asia that need solving in the coming decades but we need to appreciate the potential consequences of that clean up, one of which could be an increase in methane emissions as the effect of the acid rain wears off."

EAT KANGAROO TO 'SAVE THE PLANET'

9August, 2008BBC NEWS
http://new.bbc.co.uk/1/hi/uk/7551125

Switching from beef to kangaroo burgers could significantly help to reduce greenhouse gas emissions, says an Australian scientist.
The methane gas produced by sheep and cows through belching and flatulence is more potent than carbon dioxide in the damage it can cause to the environment. But kangaroos produce virtually no methane because their digestive systems are different. Dr George Wilson, of the Australian Wildlife Services, urges farming them. He says they have a different set of micro-organisms in their guts to cows and sheep. Sheep and cattle account for 11% of Australia's carbon footprint and over the years, there have been various proposals to deal with the problem. Now Dr Wilson believes kangaroos might hold the answer. He said: "It tastes excellent, not unlike venison - only a different flavour." The country already produces 30 million kangaroos farmed by landholders in the outback. But Dr Wilson is keen to see that population dramatically increased to produce the same amount of kangaroo meat as that currently produced by conventional livestock.

SCIENTISTS PREDICT GLOBAL WARMING WILL REDUCE NUMBER OF HURICANES

By John Dale Dunn, M.D., J.D.
1August, 2008 Environment and Climate News, The Heartland Institute
http://www.heartland.org/Article.cfm?artId=23558

Global warming is likely to reduce the number of hurricanes that occur each year, according to two new studies by forecasters who previously claimed global warming would cause more hurricanes. Global warming is not to blame for the spike in hurricanes that occurred earlier this decade, research meteorologist Tom Knutson reported in the June issue of *Nature*

Geoscience. Knutson also reported global warming will likely reduce the number of future hurricanes.

According to Knutson, the number of Atlantic Ocean hurricanes will decline by 18 percent by the end of the century, and the number of those making North American landfall will decline by 30 percent. The number of the most powerful storms those with winds over 110 miles per hour will decline by 8 percent.

The study further predicts hurricanes and tropical storms will become somewhat wetter, which may be welcome news to southeastern states that endure periodic droughts, particularly during the summer/fall hurricane season. The Emanuel study directly contradicts sensationalist media assertions of global warming being responsible for recent hurricane activity. Assuming the computer models are correct, Emanuel reported, "the greater part of the large increase in power dissipation over the past 27 [years] cannot be ascribed to global warming."

Similarly, William Gray of Colorado State University, who is widely regarded as one of the foremost hurricane experts in the world, pointed out at the March 2008 International Conference on Climate Change that real-world evidence never supported the assertion global warming was causing an increase in hurricane activity.

75 INSTITUTIONS ROPED IN TO STUDY CLIMATE IMPACT

12 August 2008, 0139 hrs IST, Nitin Sethi, TNN
http://timesofindia.indiatimes.com/File_75_institutions_roped_in_to_study_climate_change_impact/articleshow/3353759.cms

NEW DELHI: How vulnerable is India to climate change? The answer will emerge with the widest and largest set of studies being now undertaken to look at the possible impacts of climate change on the country. The ministry of environment and forests is coordinating the details of what will be the largest ensemble of scientific and economic studies undertaken by the government as part of its official report to the UN Framework Convention on Climate Change. Seventy-five research, academic and government institutions are being coordinated into studying all kinds of possible impacts that global warming could bring to Indian shores.

Based on projections developed by Indian Institute of Tropical Meteorology on how dozens of climate parameters will play out with different levels of global carbon dioxide emissions, these prime Indian institutions will carry out their studies to evaluate an array of possible impacts, for good or for bad, that could hurt or benefit the country. At the macro-level, it will show the possible impacts on Indian economy in the short and long term with different levels of global temperature rise. The big picture will be drawn up by collating studies done under the process called India's second National Communication to UNFCCC (NATCOM 2) on water resources, agriculture, river systems, forests, coastal zones, human health and energy. The last such authoritative report was submitted, as required by the convention, in 2004. While many researchers and organisations have, before and since then, published their findings in recognised journals, these set of studies gain importance as they will have the government's approval Similar studies were done for the 2004 report NATCOM 1 as well,

but the work being undertaken now will be far wider and in-depth than before. The impact of climate change on river hydrology was studied for 12 river basins. This will be enhanced to study 14 river basins and also look at the role of man-made structures like dams and irrigation canals. Similarly, the impact on power projects and energy generation will also be assessed. In the critical agricultural sector, unlike the last time when only the key rice-wheat systems were studied, the research organisations will review the possible impacts on cereals, legumes, potato, onion, tomato, cotton and coconut crops as well.

HOT AND COLD: CIRCULATION OF ATMOSPHERE AFFECTED MEDITERRANEAN CLIMATE DURING LAST ICE AGE

27 August, 2008. Science Daily
http://www.sciencedaily.com/releases/2008/08/080826172723.htm

A new study published in the scientific journal Science reveals the circulation of the atmosphere over the Mediterranean during the last ice age, 23,000 to 19,000 years ago, and how this affected the local climate. This innovative study paves the way for future interdisciplinary efforts to understand and predict regional climate change, and is co-authored by Professor Eelco Rohling of the University of Southampton School of Ocean and Earth Science, based at the National Oceanography Centre, Southampton.

The Intergovernmental Panel on Climate Change has identified the Mediterranean as a "future climate hot spot" likely to suffer increasingly from severe droughts, heat waves and wildfires, due to global climate change. This is potentially bad news for the many people who now live in the region.

The new work gives important clues about regional rainfall patterns in the past. This will help scientists check computer simulations of the Mediterranean climate, which is essential for predicting and planning for future climate in the region. The team led by geologist Joachim Kuhlemann involves scientists from the University of Tübingen, the National Oceanography Centre, Southampton, and the Institute of Particle Physics in Zürich. The scientists have assembled information on the altitudes of glaciers in mountains around the Mediterranean during the last ice age so as to help reconstruct climate.

The first surprise is that the Mediterranean climate at that time was similar to that seen during cold spells in the region today and particularly during the Little Ice Age (15th to 19th century), but more extreme. The new evidence suggests that the Mediterranean climate depends strongly on the shape of surrounding mountain chains. A second finding is that cold polar air often invaded the Mediterranean region during the last ice age, causing more rain and snow to fall on Mediterranean mountains. This precipitation would have been an important source of water during the dry Mediterranean summer. Computer models will need to account fully for these key observations, before they may be confidently applied to the forecasting of future change, say the scientists.

CLIMATE TALKS: INDIA, CHINA, JOIN HANDS AGAINST RICH COUNTRIES

Nitin Sethi, TNN
29, August 2008 Times of India, New Delhi

Accra: They are the fiercest economic rivals as well as neighbours that infrequently spar over international borders. But the "Hindi-Chini bhai bhai" bonding is hard to miss at the climate change talks in Accra. Their close coordination, bilateral understanding and strategic moves have stumped the rich countries. The industrialized countries, such as the EU members and Japan, have over the past couple of days run a shrill campaign to draw a wedge through the powerful G77 countries and China grouping and put the emerging economic power houses-India, China, Brazil and South Africa-on the mat. But china and India's working in tandem has been a key reason for the good old divided and rule policy of the rich nations, cabal coming apart.

Both the countries have using similar tones taken an aggressive stand against what they think is the industrialized countries' attempt to change the very characters of the UNFCC- the international compact on climate change, which at present requires only the rich countries to cut their greenhouse gas emissions against fixed targets. The rich countries want the four economic power houses to also take commitments even though the four bear little historical burden for the crisis the world faces. But the impacts of China and India's coordinated moves have been visible. With rumours floating that some countries were working hard to break the African countries out of the G77, the two have threatened that the global fight against climate change could come to naught if 'certain' developed countries continue to push their divisive agenda.
" All the countries to the UN Frame work Convention on Climate Change decided that there would be two groups of countries-the culprits and the others who are suffering because of historical and accumulating emissions of industrialized countries" Yu Qingtai, climate change ambassador of China, told TOI. The Indian delegation, too, has been equally stringent in warning the rich nations to stop diverting attention from their failure to cut emissions under the existing regime- phase I of the Kyoto Protocol- and instead use varying tactics to put the onus on India and China.

"There is close coordination between China and India' including bilateral meetings, on the issue. We are very happy with this," Qingtai added.
The new mutual admiration club at Accra first became evident when both publicly complimented each other on their respective domestic action plans' even promising to enhance cooperation on its implementation. The tango of the two Asian giants seems to have ensured that the negotiation in Accra don't dance away from what all developing countries believe is the first and centre pin of negotiation how much reduction in their greenhouse gas emissions the rich countries will really take in the short term.

ICFRE NEWS

PARTICIPATION OF DG, ICFRE IN ACCRA CLIMATE CHANGE TALKS 21-27 AUGUST 2008 ACCRA GHANA

Shri Jagdish Kishwan, DG, ICFRE attended the Accra Climate Change meeting from 21-27 August 2008, and made a presentation on Reducing Emissions from Deforestation and Degradation in Developing Countries (REDD) at Accra, Ghana.

UPCOMING EVENTS

TWENTIETH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL (MOP-20)

16 - 20 November 2008, Doha, Qatar.

This meeting is tentatively scheduled to take place from 16-20 November 2008, in Doha, Qatar, in conjunction with the eighth Conference of the Parties to the Vienna Convention. 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/

FOURTEENTH CONFERENCE OF THE PARTIES TO THE UNFCCC AND FOURTH MEETING OF THE PARTIES TO THE KYOTO PROTOCOL

1- 12 December 2008, Poznan, Poland.

UNFCCC COP 14 and Kyoto Protocol COP/MOP 4 are scheduled to take place from 1-12 December 2008 in Poznan, Poland. These meetings will coincide with the 29th meetings of the UNFCCC's subsidiary bodies. For more information contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999;e-mail:secretariat@unfccc.int;Internet: http://unfccc.int/meetings/unfccc_calendar/items/2655.php?year=2008

FOREST DAY 2 - UNFCCC COP 14 PARALLEL EVENT SHAPING THE GLOBAL AGENDA FOR FORESTS AND CLIMATE CHANGE

6 December 2008, Poznan, Poland.

Forests are now at the very center of the climate change debate. Following the success of the inaugural Forest Day at last year's Bali COP13, CIFOR will host Forest Day 2 at the UNFCCC COP14 in Poznan, Poland, 6 December 2008. The event will be co-hosted by the Polish Government and the State of Forests, and the Collaborative Partnership on Forests (CPF).

Forest Day 2 will bring together the world's pre-eminent forest stakeholders, agenda setters and policy makers to address the key forest and climate issues of our time: • Reducing

Emissions from Deforestation and forest Degradation (REDD) • Climate Change adaptation • Poverty, livelihoods, equity and justice • Data collection, baselines and methodologies • Rights, compliance, law and enforcement • Forest investment and environmental service payments.http://www.cifor.cgiar.org/Events/CIFOR/forest_day2.htm

FAO HIGH-LEVEL CONFERENCE ON WATER FOR AGRICULTURE AND ENERGY IN AFRICA: THE CHALLENGES OF CLIMATE CHANGE

15 - 17 December 2008. Sirte, Libya.

The overall purpose of this conference will be to address the availability of water resources in Africa under the circumstances of increased demand by the agricultural and energy sectors and in the context of changing climatic conditions. The conference will analyze the present situation and needs, in terms of water for agriculture and energy, and the potential, the costs and the sources of financing, with a view to proposing to Heads of State and Government the policies, strategies and programmes for effective use and management of water resources. For more information contact: e-mail: Maher.Salman@fao.org; Internet: http://www.fao.org/nr/water/events.html or http://www.fao.org/nr/water/docs/sirteconceptnote.pdf

SCIENTIFIC CONGRESS ON CLIMATE CHANGE: GLOBAL RISKS, CHALLENGES AND DECISIONS

10 - 12 March 2009. Copenhagen, Denmark.

The University of Copenhagen is hosting this international scientific congress in cooperation with nine other universities that belong to the International Alliance of Research University. The aim of the congress is to provide a synthesis of existing and emerging scientific knowledge in the lead up to the fifteenth Conference of the Parties to the UN Framework Convention on Climate Change, which will take place in late 2009. All findings from the congress will be compiled in a book, and an executive summary will be made available to policy makers to assist them in their deliberations. For more information contact: Jane Søgård Hansen, University of Copenhagen; tel: +45-3532-4251; e-mail: jsha@adm.ku.dk; Internet: http://climatecongress.ku.dk/

30TH SESSIONS OF THE UNFCCC SUBSIDIARY BODIES

1-12 June, 2009 Bonn, Germany.

The 30th sessions of the Subsidiary Bodies of the UN Framework Convention on Climate Change (UNFCCC) – the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA) – are scheduled to take place from 1-12 June 2009, in Bonn, Germany. For more information contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail:secretariat@unfccc.int;Internet: http://unfccc.int/meetings/unfccc_calendar/items/2655.php?year=2009

Compiled and Edited By:

Dr. Renu Singh **IFS**
Head
Biodiversity and Climate Change (BCC) Division
ICFRE, Dehra Dun

Dr. Om Kumar
Scientist 'B'
Biodiversity and Climate Change Division
ICFRE, Dehra Dun

Kindly send suggestions to:

renusingh@icfre.org
kumarom@icfre.org