



CLIMATE – NEWS

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CLIMATE CHANGE INTERNATIONAL NEWS

COLLAPSE OF ICE BRIDGE PUTS ANTARCTIC ICE SHELF IN PERIL

7 April, 2009 United Nation Environment Programme
<http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=579&ArticleID=6121&l=en>

An ice bridge linking the Wilkins ice shelf to two islands in Antarctica has collapsed, triggering warnings that climate change is having a clear impact on the region.

A satellite picture from the European Space Agency (ESA) shows that a 40 km long strip of ice holding the Wilkins in place had splintered at its narrowest point, about 500 meters wide. The Wilkins shelf, which is the size of Jamaica, has been retreating since the 1990s. It is one of many Antarctic ice shelves that have begun to break up over the past few decades and it is part of the Antarctic Peninsula, which has seen some of the most dramatic temperature increases in the area - up to 3 degrees, according to Elaine Baker of UNEP GRID-Arendal's Shelf Programme.

Christian Lambrechts, a Policy and Programme Officer with UNEP's Division of Early Warning and Assessment (DEWA), warned that the development was significant: "Although the Wilkins Ice Bridge collapse will have no direct consequence on sea level rise, it might have an indirect impact, as the decay of the ice shelf will reduce the stability of the glaciers that are feeding it," he said.

"The collapse of the Ice Bridge will expose a new expanse of sea surfaces that absorb an increased amount of solar radiation, contributing to continued and accelerated warming," he added. According to research conducted in March 2009 by the World Meteorological Organization (WMO) for the International Polar Year (IPY), warming of the Antarctic is much more widespread than previously known. The research found that a freshening of the bottom water near Antarctica is consistent with increased ice melt from that continent that could affect ocean circulation.

Indeed, the loss of the Wilkins ice bridge, jutting about 20 meters out of the water and which was almost 100 km wide in 1950, may now allow ocean currents to wash away far more of the shelf. A 2008 report released by UNEP and the World Glacial Monitoring Service (WGMS) showed that the average rate of glacial melting and thinning more than doubled between the years 2004-2005 and 2005-2006. The estimates, based on measuring the thickness of glacier ice, indicated an average loss of around 1.5 metres in 2006, up from just over half a metre in 2005.

GLOBAL WARMING THREATENS TIBET RAILWAY: REPORT

6 May, 2009 Reuters

<http://www.reuters.com/article/environmentNews/idUSTRE5451IM20090506>

BEIJING (Reuters) - China's controversial railway to the remote and restless mountainous region of Tibet could be threatened by global warming, which may melt the permafrost on which the tracks are built, state media said. "In Tibet, the mercury has climbed an average of 0.32 degrees Celsius every decade since records began in 1961," China Meteorological Administration head Zheng Guoguang was quoted as saying by the official Xinhua news agency.

"This is much higher than the national average temperature rise of 0.05-0.08 degrees Celsius every 10 years," Zheng added, speaking at a meeting in the Tibetan regional capital of Lhasa. Tibet, being so high, acted as a "magnifier" for global warming, Zheng said. The impact of global warming has accelerated glacial shrinkage and the melting glaciers have swollen Tibet's lakes," Zheng added. "If the warming continues, millions of people in western China would face floods in the short term and drought in the long run. "In the worst case, such warming could cause permafrost to melt and threaten the plateau railway linking Tibet with (neighboring) Qinghai province," the report paraphrased him as saying.

Beijing has said it wants to combat climate change yet ensure China's economic development is unimpeded. Xinhua said the government believes the railway will be safe to use for the next 40 years if the thaw continues at its present speed.

Over the last two decades it has spent more than 1 billion yuan (\$146.6 million) reinforcing the main highway to Tibet, where the permafrost is also melting, Xinhua added. China says the 30 billion yuan rail line, opened in 2006 and passing through towering mountains and vast deserts, will help bring economic development to ethnically distinct Tibet. Tibetan activists, however, say it speeds the immigration of Han Chinese to Lhasa and the plateau, and allows increased exploitation of Tibet's significant mineral resources.

SCIENTISTS EXPECTING MASSIVE ICEBERG FROM GLACIER CRACK

Felicity Ogilvie

8 May, 2009

<http://www.abc.net.au/news/stories/2009/05/08/2565209.htm>

A massive iceberg with enough freshwater in it to fill Sydney Harbour 135 times over is about to break off the Mertz glacier in Antarctica. The iceberg will be 75 kilometres long and contains 750,000 gigalitres of ice which is apparently quite a lot. Scientists

are not sure if it is a natural event or if global warming is to blame. But a joint Australian and French team hope to find out. The Mertz Glacier is near Commonwealth Bay in East Antarctica. It flows into the southern ocean for 140 kilometres before it drops icebergs into the sea. A large crack has formed about half way along the Mertz Glacier, which means it is going to drop a very large iceberg. French glaciologist Benoit Legresy is measuring the break-up. "Just at the moment, it's undergoing a massive calving event which promises to release an iceberg which will be between 20 to 25 kilometres wide and 75 kilometres long by about 400 to 500 metres thick," he said.

The iceberg contains enough fresh water to fill Sydney Harbour 135 times - that is 30 percent of the world's annual water consumption. When it breaks off, the iceberg won't melt straight away because it could take up to 30 years for the currents to move it to water that is warm enough to melt the ice. The scientists realised the large iceberg was forming when they looked at satellite pictures of the Mertz Glacier and saw two large cracks. When the cracks kept getting bigger Benoit Legresy decided to measure the break-up. "There's very few that have been picked up before the calving event, so we're in a pretty good situation where we are now, is we had the time to go on the glacier and put our instruments on it before the calving happens," he said. Mr Legresy has put eight GPS beacons on the glacier to measure how the ice is moving. "They are precise GPS beacons which are autonomous; they can operate as long as you're around and they measure the position where they are every 30 seconds, and this position is measured to almost a centimetre level," he said. Two of the GPS beacons are on either side of a major crack on the Mertz Glacier. PhD student Lydie Lescarmontier has been analysing the data from the beacons. "We know that the speed of the opening is 12 centimetres per day for example and we can correlate this current for example and we know that when currents pushing the ice stone, we have an acceleration of the opening of the crack," he said. The French scientists are spending this year working at the University of Tasmania with their Australian colleague, Professor Richard Coleman.

RAINFOREST IS WORTH MORE STANDING

Victoria Gill

5 June, 2009 Science reporter, BBC News

<http://news.bbc.co.uk/2/hi/science/nature/8083706.stm>

The Indonesian rainforest is worth more standing than felled say researchers. A new analysis has shown that payments to reduce carbon emissions from the forests could generate more income than palm oil production on deforested land. Protecting the forests could become profitable under a proposed scheme called Reduced Emissions from Deforestation and Degradation (REDD). In the journal Conservation Letters, they say this scheme will help protect threatened forests.

Palm oil, an ingredient in products including food and soaps, has become an important feedstock for biodiesel. This has created controversy because in Indonesia and Malaysia, which are its major producers, companies clear and often burn swathes of forest to grow their crops. These ecologically-rich forests are home to a huge variety of species, including endangered orangutans, and to very carbon-rich peat swamps. Oscar Venter from the University of Queensland led the study that focused on Kalimantan, in Indonesia - just one forested region where deforestation has stirred environmental concern. The aim was to find out if protection of the forests could be as profitable as palm oil.

Forest custodians

Under REDD, oil palm companies could be called on to protect the forested areas they own, and sell "carbon credits" for the amount of carbon contained in that forest. "Despite their rich biodiversity, we haven't been able to protect these forests with conservation funds," said Dr Venter. Funds "So we looked at what REDD would be able to do and what that would mean for biodiversity." He and his team looked at the financial reports of palm oil companies to see how much money they how much more they earned from oil production, and from selling timber.

They compared these earnings to the predicted carbon emissions from planned palm oil projects, and calculated that if carbon credits could be sold for \$10 (£6) per tonne, conserving the forest could be more profitable than clearing land for oil palm. "This is the break-even price if oil palm can only be grown in areas that are at least moderately suitable, or if some oil palm can be relocated to already [deforested] areas. Any price over [that] means REDD becomes more profitable than oil palm," explained Dr Venter. "Carbon markets, while they fluctuate, are where the price of carbon is currently established. So we compared our prices to prices on major global markets, which at the time were selling carbon for around \$30 per tonne of CO₂." REDD is a UN-led programme, introduced in 2005, to create a practical financial system to protect the rainforests.

Dr Venter hopes this research will strengthen the case to include it in the climate agreement that replaces the Kyoto accord, which is set to be decided upon at a

meeting in Copenhagen later this year. "If REDD does become part of the next international climate agreement, it will have the potential to fund forest protection in areas slated for oil palm conversion," said Dr Venter. He said the findings showed that it was possible to create "financial incentives to ensure that the world's tropical forests last into the next century, instead of becoming a memory of the past". Conservation funds have not been sufficient to save rainforests' inhabitants. "Tropical forests are disappearing at an incredible pace - the equivalent of 50 football fields a minute, imperiling biodiversity and creating massive carbon emissions that are degrading our global climate," said William Laurance, a scientist from the Smithsonian Tropical Research Institute in Panama. But Dr Laurance told BBC News that palm oil production would be "very tough to stop" because it is so profitable. "At present prices for carbon, we won't be able to stop rainforest destruction for oil palm," he told BBC News. "REDD will only be competitive for slowing destruction of peat forests, which are jam-packed with carbon and become massive sources of greenhouse gases when cleared.

"But we can pressure the worst companies and fight to protect the highest-priority areas," he told BBC News. "REDD is probably our best chance to invest billions of dollars into forest conservation, and to help developing nations make a reasonable profit from their forests."

AFRICAN FARMS BECOMING TOO HOT TO HANDLE

Bob Holmes

17 June, 2009 New Scientist

<http://www.newscientist.com/article/dn17327-african-farms-becoming-too-hot-to-handle.html?DCMP=OTC-rss&nsref=climate-change>

African farmers will soon face growing seasons hotter than any in their experience. To cope with this rapid climate change, they – and the plant breeders who supply their crops – will need to make big changes, and soon. Agricultural experts have predicted for some time that **farmers are likely to face problems** as climates become hotter and drier than they are today. Indeed, some farmers in South Africa are **already reporting difficulties**

To see how fast, and how broadly, this will strike, **Marshall Burke**, an agricultural economist at Stanford University, and colleagues, averaged the results from 18 global climate models to forecast likely temperature and rainfall conditions in 2025, 2050 and 2075 in regions of Africa where maize, millet and sorghum are grown today. Then, assuming that year-to-year variability would remain the same as today – perhaps a **conservative assumption** – they asked how much these future climates would overlap with existing climates. They found that farmers in Africa will face average temperatures outside the current range of experience in their locality in 42% of years by 2025 – and 97% by 2075. Since temperature strongly affects crop yields, farmers will need to find new varieties adapted to these higher temperatures, Burke says. Future rainfall showed more overlap with current conditions, largely because rainfall already varies more from year to year.

POLAR BEAR AND WALRUS POPULATIONS IN TROUBLE, STOCK ASSESSMENT REPORT SUGGESTS

19 June, 2009 Science Daily

<http://www.sciencedaily.com/releases/2009/06/090618195804.htm>

The U.S. Fish and Wildlife Service has released reports documenting the status of polar bears and Pacific walrus in Alaska. The reports confirm that polar bears in Alaska are declining and that Pacific walrus are under threat. Both species are imperiled due to the loss of their sea-ice habitat due to global warming, oil and gas development, and unsustainable harvest. “Polar bears and walrus are under severe threat, and unless we act rapidly to reduce greenhouse pollution and protect their habitat from oil development, we stand to lose both of these icons of the Arctic,” said Brendan Cumming, oceans program director at the Center for Biological Diversity.

The reports, issued pursuant to the Marine Mammal Protection Act, summarize information on population abundance and trends of polar bears and walrus, threats to the species, and include calculations of human-caused mortality and whether that mortality is sustainable. There are two polar bear populations in Alaska: a Southern Beaufort Sea stock, which is shared with Canada, and a Chukchi/Bering Sea stock which is shared with Russia. The Pacific walrus occurs in the Bering and Chukchi seas and is shared with Russia. For the Southern Beaufort Sea polar bear stock, the Fish and Wildlife Service estimated a minimum population of 1,397 bears and an annual human-caused mortality of 54 animals, well above the calculated sustainable rate of 22 animals per year. The stock assessment states that “the Southern Beaufort Sea population is now declining.”

GAS THAT SAVED OZONE LAYER MAKING WORLD WARMER

Research shows replacement of ozone – destroying CFCs are powerful Greenhouse Gases

23 June, 2009 The Time of India, New Delhi

The green movement's greatest triumph – the abolition of ozone-destroying CFC gases in the 1980s – may become its biggest embarrassment after research showing that their replacements are sharply accelerating global warming. CFC, or chlorofluorocarbon, gases were widely deployed in air - conditioning and refrigeration units before they were found to destroy the ozone layer and banned under the 1987 Montreal Protocol. They were replaced by HFCs – hydrofluorocarbons – gases which have far less effect on ozone but which have since been revealed as extremely powerful greenhouse gases.

A tone of HFC-23 used in refrigeration has the same global warming potential as 14,800 tonnes of CO₂. The problem has been increased by the rising demand for refrigeration and air- conditioning because of economic expansion and population growth in Asia.

A study out this week warns that, by 2050, HFCs could account for up to 19% of global warming. “By 2050, the contribution of HFCs to global warming will be more than that of current global CO₂ emissions from houses and office buildings,” said Guus Velders of the Netherlands Environmental Assessment Agency, who conducted the research.

The contribution of HFCs to the global warming is currently small, but can increase to between 9% and 19% of the total CO₂ contribution by 2050. He found that by 2050 the demand for HFCs was likely to have increased by 800% compared with today's figures.

INDIA REFUSES TO TOE WEST LINE ON EMISSIONS

Nitin Sethi

28 June, 2009 Times of India, New Delhi

New Delhi: India fended off pressure at the recently concluded Major Economies Forum to agree to greenhouse gas emission reduction commitments in a declaration being prepared for the G8+5 summit that is to be held in Italy in July. The Major Economies Forum, supported by the US, is a conglomeration of 20 countries, including key emerging economies and industrialized nations. Critics believe it was set up to force a decision at the global climate negotiations under the UN Framework Convention on Climate Change.

The US and other developed countries insisted on India and other developing countries to agree to a declaration for the G8 summit that would require GHG reducing commitments from them in the long run. “At the same time, the rich nations stayed ambivalent on what targets they would take in the short to mid-term,” an official said.

The rich nations have constantly demanded that growing economies like India and China take on emission cuts in the long run while running shy of either taking deeper short-term targets or discussing technology and funds transfer for adaptation to the poorer nations.

The G8+5 declaration, if one is hammered out in time, could become an overarching political statement of the key nations that would force negotiations at the UN meeting in a particular direction. The UN negotiations are seen by poor and developing countries to be far more democratic and where India and China hold the trump card along with the powerful G77 block. The G8 club is perceived by observers to be a

forum where the pressure on emerging economies can be piled on heavy as it is diplomatically difficult for them to be seen as “nay-sayers”.

ICFRE NEWS

INTERNATIONAL WORKSHOP ON “NATIONAL FOREST INVENTORY: THE EXPERIENCE OF NON-ANNEX 1 COUNTRIES”

27 to 29 April, 2009 Indian Council of Forestry Research and Education, Dehra Dun

The three day international workshop on “National Forest Inventory: The Experiences of Non-Annex I Countries” was organized by the Indian Council of Forestry Research and Education (ICFRE) and Coalition for Rainforest Nations (CfRN) from 27 to 29 April 2009 at ICFRE, Dehradun. The workshop was attended by 61 overseas delegates from 32 countries, and subject experts from six international organizations (GTZ, FAO, World Bank Forest Carbon Partnership Facility, EU JRC, CfRN, and Japan International Cooperation Agency).

The objective of the workshop was to enable experts of developing countries to better understand the technical aspects and options related to the measurement of forest carbon stocks for developing national forest inventories.



PARTICIPATION OF ICFRE IN THE THIRTIETH SESSION OF THE SBSTA AND SBI, SIXTH SESSION OF AWG-LCA, AND EIGHTH SESSION OF AWG-KP AT BONN, GERMANY, 1-12 JUNE 2009.

The ICFRE delegation, comprising Mr Jagdish Kishwan, DG, ICFRE and Mr V.R.S. Rawat, Scientist ‘D’, Biodiversity and Climate Change Division, ICFRE participated in the meetings as part of the Government of India delegation.

Following agenda items of the SBSTA 30, AWG-LCA-6 and AWG-KP-8 were covered by ICFRE:

1. SBSTA Agenda item 5: Reducing emissions from deforestation in developing countries: approaches to stimulate action
2. AWG-LCA Agenda Item 3: Enabling the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012, by addressing, inter alia:
 - (b) Enhanced national/international action on mitigation of climate change; (para 1(b)(iii) policy approaches and positive incentives relating to REDD; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries)
3. AWG-KP 3. Consideration of further commitments for Annex I Parties under the Kyoto Protocol:
 - 3 (b) Proposals by Parties on issues outlined in the work programme of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto protocol (LULUCF)

UPCOMING EVENTS

WORLD CLIMATE CONFERENCE 3

31 August to 4 September, 2009 Geneva, Switzerland.

The First and Second World Climate Conferences, held in 1979 and 1990 respectively, resulted in major movement on climate change issues. The third conference will take as its theme “Better climate information for a better future,” and will focus on how humankind can benefit from the advances in climate prediction and knowledge. It will also serve as input to COP 15. For more information contact: Buruhani Nyenzi, WCC-3 Secretariat, WMO; tel: +41-22-730-8273; fax: +41-22-730-8042; e-mail: wcc-3@wmo.int; Internet: http://www.wmo.int/pages/world_climate_conference

AWG-LCA 7 AND AWG-KP 9

28 September to 9 October, 2009 Bangkok, Thailand.

The Seventh meeting of the AWG-LCA and the Ninth session of the AWG-KP are scheduled to take place from 28 September - 9 October at the UN Conference Centre of the UN Economic and Social Commission for Asia and the Pacific in Bangkok, Thailand. 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

HIGH-LEVEL CONFERENCE ON CLIMATE CHANGE: TECHNOLOGY DEVELOPMENT AND TRANSFER

22 to 23 October, 2009 New Delhi, India.

The Government of India and the UN Department of Economic and Social Affairs (UN DESA) are jointly organizing this high-level conference to help formulate a roadmap for technology in the context of climate change mitigation and adaptation to

support the UNFCCC process. For more information contact: fax: +1 212-963-1267/9883; e-mail: DelhiConference@un.org;
Internet: http://www.un.org/esa/dsd/dsd_aofw_cc/cc_conf1009.shtml

FIFTEENTH CONFERENCE OF THE PARTIES TO THE UNFCCC / FIFTH MEETING OF THE PARTIES TO THE KYOTO PROTOCOL

7 to 18 December, 2009 Copenhagen, Denmark.

UNFCCC COP 15 and Kyoto Protocol COP/MOP 5 are scheduled to take place from 7 to 18 December 2009 in Copenhagen, Denmark. These meetings will coincide with the 31st meetings of the UNFCCC's subsidiary bodies. Under the "roadmap" agreed at the UN Climate Change Conference in Bali in December 2007, COP 15 and COP/MOP 5 are expected to finalize an agreement on a framework for combating climate change post-2012 (when the Kyoto Protocol's first commitment period ends). For more information contact:

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