

Editorial

Editorial

Alan Wells

Climate change: A looming humanitarian catastrophe

Intergovernmental Panel on Climate Change

Paradoxically, the more serious a situation becomes the more it becomes the butt of jokes. It is, therefore, very worrying to hear a UK comedian predict that it will not be long before the polar ice-cap will fit into a gin and tonic.

Equally concerning, if you read between the lines, is that in the US, where the government rejects official recognition of the scientific fact that North America will suffer severe economic change from global warming, an online gambling service is offering odds on when rising waters caused by global warming will submerge Cape Henry in Virginia and Cape Hatteras in North Carolina. The odds, offered by BetUS.com, against this happening by 2015 are 200-1 and 300-1 respectively. An estimated 3,000 people placed bets in the first three days of online booking.

Can these events have been fuelled by the most recent report from the Intergovernmental Panel on Climate Change (IPCC) on 6 April 2007? The new study, the synthesis of the work of 2,500 scientists and the second part of the IPCC's Fourth Assessment Report (AR4), predicts that existing divisions between rich and poor countries will be exacerbated by the pattern of the impact of climate change. The world's poor will be disproportionately the victims of global warming. Rajendra Pachauri, the IPCC's Chair, warned that the poorest of the poor will be worst hit as they are "least able to adapt to climate change."

We know that the impacts of global warming are already visible. Changes consistent with higher temperatures have been noted in 29,000 sets of data and 75 separate studies and range from melting permafrost in Arctic regions to shifting distributions of fish populations. Eighty-nine per cent of these are consistent with a warming world. This new report sets out the changes which will impact on the natural world and human society: fresh-water resources; food; coastal systems; community; health; and natural eco-systems.

Results of climate change will be rapidly catastrophic for struggling populations in Africa, Asia and South America which will suffer from increased drought, crop failure, disease, extreme weather events and rising sea levels. In Africa many millions will suffer from sharply increased hunger and water stress as agriculture starts to fail over vast areas. Indeed, by 2020 rain-fed agriculture could be reduced by 20%

and between 75 and 250 million people are projected to be exposed to an increase of water stress. In Asia as Himalayan glaciers melt large scale flooding in the 'mega-deltas' will bring water-borne diseases and fresh-water shortages. This will be followed by water shortages as the glaciers disappear. By 2050 crop yields in central and south Asia may drop by 30%. In South America as the Andean glaciers vanish agricultural lands and even the eastern parts of the tropical Amazon rain-forest will turn arid.

By contrast, the rich industrial societies of Europe, North America and Australasia, despite having done most to cause global warming through past greenhouse gas emissions, will be best able to afford counter-measures to limit future consequences. Here the results will be less immediately catastrophic. In Europe hotter summers and warmer winters will be met by the harvesting of different crops. Wildlife will change and there will be greater risks of flooding as the Alpine glaciers melt. In North America there will, at first at least, be more plentiful crops, although this will yield to intense heatwaves, more hurricanes, more pests and forest fires. In Australasia an initial increase in agricultural productivity will be followed by a general decrease. Wildlife will be lost and there will be more water shortages. Russia has gone so far as to take the idiosyncratic view that it will benefit from climate change because warmer temperatures could lead to less money being spent on heating and its crop yields will rise.

AR4 has been endorsed by all major UN member states, although China and Saudi Arabia sought systematically to dilute that section of the report's summary (which will be read by heads of government) spelling out the degree of certainty researchers attach to the impact of climate change, described in the original draft as "very high confidence". The summary is crafted by scientists but endorsed by diplomats to give it political as well as academic credibility. The US-brokered compromise summary omitted the clause altogether. Even so, the final consensus document is unequivocal and makes for stark reading.

Is the lesson to be learnt from this that politics could be undermining our understanding of climate change and climate change research? Certainly politicians have different ways of operating and different standards of evidence than those of scientists. This may be perceptible from the IPCC's next summary report of a meeting which will discuss the economic fallout of climate change and the ways in which the rise in greenhouse gas concentrations can be curbed.

A fourth report in November will sum up all the findings.

UN Security Council

As I reported last month, the UN Security Council was persuaded into a public debate by British officials' argument that a global response was necessary to a looming crisis which could displace 200 million people

Editorial

by 2050 because of rising sea levels, heavier floods and more droughts. Although Security Council debates are restricted to agenda items representing a threat to international peace and security, British diplomats pointed out that Aids had been debated and that displaced persons would be seeking refuge elsewhere. The UN Secretary General, Ban Ki Moon, was supportive, observing that climate change is as big a threat to mankind as is war. Despite US and Chinese scepticism the debate went ahead on 17 April.

UK Foreign Secretary Margaret Beckett (since the UK held the presidency of the Council in April) chaired the debate and said that the potential for climate change to cause wars brought it within the Council's purview. She noted that President Yoweri Museveni of Uganda, whose economy depends on hydropower from a reservoir depleted by drought, had called climate change "an act of aggression by the rich against the poor." Some developing nations, like Peru, Panama and small island states, among the most threatened by climate change, agreed with Britain. So did Secretary General Ban Ki-moon. "Projected changes in the earth's climate are [...] not only an environmental concern," Mr Ban said. "[A]s the Council points up [...], issues of energy and climate change can have implications for peace and security."

China and other countries disagreed. China's deputy ambassador, Liu Zhenmin, was blunt in rejecting the session. His nation's economy is growing fast and still depends heavily on coal and other fossil fuels that scientists say are contributing to climate change. Russia, China, Qatar, Indonesia and South Africa, among others, also said the Security Council was not the place to take concrete action. Pakistan argued against the debate on behalf of 130 developing nations, with many saying the Council was encroaching on more democratic bodies, like the 192-member United Nations General Assembly.

Most industrial nations, including the EU, agreed with Britain. As did Papua New Guinea, head of the Pacific small island states, which fear they may disappear under rising oceans levels as the earth warms up. Italy's deputy foreign minister, Vittorio Craxi, said members should support Mr. Ban's effort to create a new United Nations Environmental Organization to coordinate action on climate change. The United States, the world's largest emitter of greenhouse gases that spur climate change, however, opposes mandatory caps on emissions but has instead pushed alternative fuels and energy efficiency. United States officials said the US would support proposals to strengthen the United Nations Environment Programme but sees no need to create a new, more powerful UN agency to fight global warming threats as proposed by 46 countries in February. France led calls for the formation of a UN Environmental Organization to provide funding and research and to coordinate government actions addressing issues

including water shortages and species extinction. The US argues that the existing UNEP is sufficient for helping countries honour environmental treaty obligations.

So, the UN hit an impasse over the debate on global warming and, sadly, matters may go no further. Britain undertook not to seek any Security Council action to force non-signatories to sign up to greenhouse gas emission limits set by the Kyoto Protocol. Worse, UN member states have rejected calls by Achim Steiner, the head of the UN Environment Programme, and Yvo de Boer, executive secretary of the UN Convention on Climate Change, for a summit to discuss the next steps after the Kyoto Protocol expires in 2012.

Can business lead the way?

Special interests are, of course, a major obstacle to acting on climate change. ExxonMobil says of carbon dioxide: "You call it pollution, we call it life." In the Security Council debate the acting American ambassador, Alejandro D. Wolff, said the issue of climate change must be dealt with in a way that does not affect economic growth and development. It is attitudes such as these that have resulted in the fossil fuel industry, particularly in the US, remaining a fossil fuel industry rather than becoming an energy industry.

Perhaps they should read The Climate Group's 2007 report, *Carbon Down, Profits Up*. This relates that, in the UK business sector, 27 companies (including BP, BT and HBOS) have reported direct cost savings as a result of actions taken to reduce emissions. On average these companies have cut greenhouse gas emissions by 18% and energy efficiency is one of the most beneficial investments they have made. Companies such as HSBC and BskyB are investing in green energy and carbon offsets to achieve net zero emissions.

More businesses are recognising that there is economic sense in investing in low carbon solutions to become carbon neutral. Fuel efficiency and building insulation, for example, (indeed 25% of overall actions) carry no net cost as they pay their own way over time. For many of the technologies, including renewable power, costs decrease with use. It does not cost the earth to save the planet.

There are an astonishing five climate Bills before the US Congress. Until the US administration and US businesses are persuaded that emission reduction does not necessarily affect economic growth and development the debates in the Capitol will be merely hot air likely to add to global warming.

Group of Eight industrialised nations

Next month I hope to report more positively on a special G8 meeting on climate change scheduled for Berlin in May as the German Chancellor, Angela Merkel, has committed to keep climate change at the top of the G8 agenda.

Editorial

Rest of the World

Encouragingly, 11 South American nations have reached agreement on encouraging the production and use of biofuels throughout the continent after a long debate protracted in part by ethanol disagreements between Venezuela and Brazil. Unfortunately, farmers, politicians, industry leaders and environmentalists have clashed over just how much ethanol can be produced, how much land it would take to grow the crops to make it, and how much it would cost. They also disagree on the benefits of ethanol in cutting back fuel consumption and in fighting pollution, especially global warming gases. In North America in January 2007 President Bush announced a push to reduce gas consumption in the US by 20% over 10 years by substituting alternative fuels, mainly ethanol. Scientists with the Environmental Protection Agency estimated that could mean about a one per cent increase in smog.

In Africa the Ugandan government has reassured the World Bank that it will honour its agreement of 2001, in which it promised to conserve the Mabira Forest and the areas around the nearby Kalagala falls on the River Nile, to lessen the negative environmental impact of the Bujagali Dam. Daudi Migereko, minister of energy and mineral development, made a statement following increased public concern over the government's proposed giveaway of part of Mabira Forest to a sugar producing company for expansion. The proposed degazetment of the forest led to violent clashes in the capital, Kampala, leaving three people dead and several injured. The World Bank expressed concern over the debate on the degazetment of Mabira Forest Reserve and is yet to give its final approval to the power project that is much needed to address the country's power crisis, which, experts say, is slowing down the country's economic growth.

China has tried to put environmental worries into

perspective. Economic growth and development should come before greenhouse gas emission cuts, states the *National Climate Change Assessment*, a 400-page report by Chinese officials. It says that upcoming environmental changes – from increased droughts to rising seas – are likely to affect the government's sustainable development plans, but China should reject calls for emissions limits as unfair and economically risky.

GM maize (MON 863)

More news from GMWatch.org. For the first time in the world, an independent study on the health risks of a GM maize authorised for consumption shows signs of hepatorenal toxicity. It is a countervaluation performed by CRIIGEN (France), of a regulatory study by the Monsanto Company, on rats fed with a GM maize (MON 863) over a three-month period. MON863 is a transgenic maize genetically modified to express the Bt-toxin (Cry3Bb1) which enables the plant to be insect repellent against the corn rootworm pest. It is different from other GM corns of the market since these express the Cry1Ab toxin which is toxic to the European corn borer. It received European approval for use in animal feed in 2005 and for human consumption in 2006.

The raw data were used to obtain the commercial release of this GM maize at an international level.

These revelations are certainly sufficient to require an immediate ban of GM maize MON 863 and all its hybrids from human or animal consumption, as well as new and more carefully conducted feeding studies. This maize cannot now be considered safe to eat. GMWatch is calling urgently for a moratorium on other approved GMOs while the efficacy of current health testing methods is reassessed.