

Press Release

Embargoed Until Tuesday December 14th at 10.00 AM in Argentina (13:00 GMT)

What is dangerous climate change?

Buenos Aires–14th December. A report launched today at the tenth UN Climate Conference in Buenos Aires (COP 10) highlights the dangerous consequences and risks for many regions, ecosystems and human cultures if global mean temperature is allowed to rise above 1.5-2°C over pre-industrial levels. The report published by the European Climate Forum (ECF) and the Potsdam Institute for Climate Impact Research (PIK) outlines the initial results of a major scientific Symposium on key regions and their vulnerability to climate change which was held in Beijing 27-30 October 2004 and attended by over sixty scientists, stakeholders and policy makers from more than 20 countries.

The aims of the Beijing Symposium were to identify the projected effect of climate change in a selected set of regions and stimulate scientific and political discussion and a dialogue as to what levels of climate change are ‘tolerable and what might constitute dangerous levels of change’.

Bill Hare from PIK who organized the scientific content of the Symposium says “The report details potential loss of cultures, extinction of species and ecosystems, risks of major water and food security threats, exacerbation of regional disputes, and large scale displacement of people when global warming exceeds a few degrees above pre-industrial levels.”

According to the report climate change could have disastrous consequences for South Asia, causing social unrest and creating environmental refugees. A global warming of around 2.5°C was felt to be potentially dangerous for food security in India if associated with significant reductions in the amount of precipitation and changes in timing. A similar level of warming was associated with potentially dangerous and rapid increase in flood risk in Bangladesh.

In China, a 2.5–3°C increase of global mean temperatures over pre industrial levels could reduce rice yield by 10-20% under worst case assumptions on CO₂ fertilisation, while in Southern Africa a 2-2.5°C warming could significantly increase the risk of commercial crop failure. In some regions where fish provides a major source of protein, such as Malawi, a similar increase in temperature could virtually eliminate the primary source of protein for almost 50% of the population.

In the Arctic summer sea ice projected to be lost for a global mean warming of roughly 2.5°C above pre-industrial levels which will push polar bears, walruses, some marine birds and certain types of seals towards extinction. The traditional Inuit hunting culture is endangered and its destruction appears very likely if warming continues.

Prof. Carlo Jaeger from PIK, Chairman of the ECF and one of the organizers of the Beijing Symposium, says “I believe that this report shows that long term global temperature increases of more than 2 degrees above pre-industrial levels constitutes dangerous interference with the climate system. This can lead to sea-level rise of several meters and involve a whole range of major risks to human well-being and environmental integrity. These are the kind of dangers that must be avoided according to Article 2 of the UN Framework Convention on climate change.”

Also under threat for warming above 1.5-2°C are the Australian Alpine region, coral reefs on the Great Barrier Reef and World Heritage Rainforests.

In Western China glaciers are expected to disappear by 2100, but glacial retreat will jeopardise water security during the dry season long before then and in Peru glacial retreat will affect food security and power generation - almost 70% of power generation in Peru is hydro-electric. Water supply for the capital of Peru, Lima is threatened if warming and drying continues and there are no solutions clearly in sight.

There appears to be a grave danger that the Amazon region is at risk from the combined effects of climate change and land clearance, forest fragmentation and fire. Over the next several decades there is a risk of an abrupt and irreversible flip in the ecosystems of the region from forests to savannah with large-scale loss of biodiversity and loss of livelihoods for people in the region.

For California, warming of slightly more than 2°C is projected to lead to a 30-70% loss in snow pack suggesting a loss of 13-30% of California's water supply in the absence of massive increases in water capture and storage capabilities.

Bill Hare from PIK says "The scale and magnitude of the risks identified in the Beijing Symposium for levels of global mean warming of around 1.5-2°C add to the urgency of the need for an international debate over acceptable limits to human induced climate change".

This press release and the report in English can be found on www.european-climate-forum.net. The latter will be available on 14th of December at 9:00 (GMT). Translations into other languages of the summary of the report will become available after the 14th of December on the same website.

EMBARGOED Tuesday 14th December 10:00 Buenos Aires time (13:00 GMT).

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