

Climate change and cherry blossom

3 April 2014

Alistair Woodward

<u>Professor Alistair Woodward</u>, epidemiologist and climate change expert. Alistair was Convening Lead Author of Chapter 11 (Human Health) in the 5th IPCC Assessment Report. <u>A</u> <u>commentary on the full chapter is available at the Lancet</u>. Listen to Alistair on Radio NZ's Nine to Noon programme just after 9am on Friday 4 Apirl, discussing this report and his reflections.



Last Saturday in Japan the lights went off at 8.30 pm. This was to mark Earth Hour, the mass event intended to show support for global environmental issues. Fortuitous, some suggested, that it coincided with the final day of the IPCC meeting in Yokohama. The IPCC (Intergovernmental Panel on Climate Change) had gathered to approve the second of the 5th assessment reports, which was written by Working Group 2 and deals with climate change impacts, vulnerability and adaptation.

The lights in the Yokohama Convention Centre were turned on again at 9.30 pm, but for a while it looked as though this was not the favourable omen that the IPCC wished for. Delegates talked through the night, many feared the meeting would not come to closure, and the Working Group 2 report was not approved until midday Sunday.

What was on the table in Yokohama, and why did the meeting drag on so long?

The members of the IPCC (the UN states) were debating, line by line, the summary for policy makers, which aims to be a compact, accessible digest of the work of 30 chapter groups. In the case of Working Group 2 the summary runs to about 30 pages, while the full report extends over 2000 pages.

The late finish was not due to doubts about the scientific basis of the report. This was the focus in 2007 when the IPCC met to approve the previous assessment. The science is not settled, it never will be entirely, but it is now sufficiently robust that the attention of governments has shifted elsewhere.

Governments are concerned now with the implications for global policy: where and when the impacts of climate change will occur (and what obligations and commitments may be incurred), and what are effective (and palatable) measures to reduce climate risk.

So it is not so much the science, but the presentation of the science, that governments are concerned with. These are some of the really sticky issues that slowed down progress at Yokohama.

How do we represent effects of climate change that are almost certainly already experienced, but are poorly represented in the scientific literature? Examples include the social and ecological consequences of drought in Africa.

How do we frame resilience and adaptation in ways acceptable to states with a wide range of governance models (and no common views on issues such as devolution, community development and the role of non-governmental organisations)?

What are the reference points for "change"? Most projections use the period 1980-2000 or thereabouts as a starting point, because the data are strong and the models are relatively stable. But many developing countries are suspicious that high-income countries are angling to shift responsibility, and want to use the pre-industrial era (around 1800-1850) as the basis for all comparisons.

It is worth stressing some of the new elements in the 5th assessment. Notably, it pays much greater attention to the so-called "high end" climate scenarios, reflecting the directions taken by recent research and the persistent failure of international negotiations to make progress toward substantial reduction in emissions. Some scenarios project warming of 4-7 degrees Celsius over much of the global landmass by the end of the 21st century. If this happens, human capacity to deal with heat will be exceeded in the hottest parts of the year in some regions, and during that time unprotected outdoor labour will no longer be possible. If this happens, there will be questions about the habitability of some parts of the globe.

The new assessment concluded that there may be some gains from climate change (such as reduced cold-related morbidity and mortality), but found the evidence is now stronger than before that positive impacts will be outweighed, world-wide, by negative impacts. Climate-sensitive outcomes such as increased hunger and disseminated vector-borne diseases are moderated by other factors (living conditions and health care, for instance). AR5 drew on studies that modelled for the first time the potential health consequences of changes in climate alongside projected social and economic changes. This research illustrates how climate change opposes the health gains achieved by social development, and may hold back progress in the poorest countries.

Last week in Yokohama was the beginning of the cherry blossom. Families spread out blankets under the trees along the waterfront and celebrated the arrival of spring, unaware perhaps that the season now begins a little earlier every year. Climate change is with us, and the impacts are apparent already. Slow progress in the IPCC plenary is an indication of how much is at stake, and how difficult it is to reconcile a wide variety of interests. But the longer governments postpone serious reductions in greenhouse emissions, the more painful the corrections will be.

Public Health Expert Briefing (ISSN 2816-1203)

Source URL: *https://www.phcc.org.nz/briefing/climate-change-and-cherry-blossom*