

## COP17, Durban: Is this the funeral party for the Kyoto Protocol?

As I write this editorial, the United Nations' conference on climate change (COP17) is taking place in Durban. The theme is *Working together, saving tomorrow, today.* Arguments and counter arguments are being generated between developed and developing countries on how to deal with the problems of climate change. What is not clear is the political will to take bold steps to save our planet from self-destruction by its inhabitants. One of the most critical issues is an extension to the Kyoto Protocol to cut down greenhouse gas (GHG) emissions that have been linked to horrendous climate changes, in recent times. But what is the Kyoto Protocol, which is generating so much debate, and little, or no, consensus, to extend its legal binding status?

The Kyoto Protocol is an international agreement, linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialised countries and the European community to reduce GHG emissions. This amounts to an average of five per cent against the 1990 levels over the five-year period 2008-2012. The major distinction between the Protocol and the Convention is that while the Convention encouraged industrialised countries to stabilise GHG emissions, the Protocol committed them to do so.

The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997. Detailed rules on its implementation were adopted at COP7 in Marrakesh in 2001, and became effective on 16 February 2005. However, the Kyoto Protocol offered additional means of meeting countries' targets, by way of three market-based mechanisms. These are emissions trading, known as "the carbon market", clean development mechanism (CDM), and joint implementation (JI).1

While politicians, civil society, human rights activists, corporate bodies, and captains of industries, who generate the greenhouse gases, try to argue their viewpoints, let us examine the specific impact of climate change on health.

In their 2007 published report, Confalonieri et al highlighted the following ways in which climate change impacts specifically on health:<sup>2</sup>

- Malnutrition: They projected that malnutrition would increase
  globally due to climate variability, as drought reduces the variety in
  diets and overall consumption. This is already evident in the horn
  of Africa. There is severe drought in Somalia, Djibouti, Ethiopia, and
  Eritrea, and this has now extended to the northern parts of Kenya.
- Diarrhoeal diseases: Major storm and flood disasters have occurred
  in the last two decades. The devastating effects of Hurricane Katrina
  are still fresh in our memories, as well as the recent, continuous
  floods in Thailand. The Thailand floods began in late July 2011, and
  have killed 527 people so far, mostly due to drowning. Outbreaks

- of food poisoning, cholera, diarrhoea, and leptospirosis, have been reported. The cumulative impact of these outbreaks on people's health status in Thailand is yet to be quantified.
- Heat waves: Hot days, hot nights, and heat waves have become more frequent. The latter is associated with marked short-term increases in morbidity and mortality, especially among the elderly.
- Infectious disease vectors: There is some evidence of climate-change-related shifts in the distribution of tick vectors of disease, and some (non-malarial) mosquito vectors in Europe and North America. Disease incidence rates, such as dengue fever, are on the increase in south-east Asia, while malaria cases have increased in sub-Saharan Africa, despite vector control measures. There is good evidence that diseases transmitted by rodents sometimes increase during heavy rainfall and flooding, because of altered patterns of human-pathogen-rodent contact.

Examples of the specific impact of climate change on health are not exhaustive. How do we progress from COP17, if we are to make a real difference to our environment? With over 17 000 delegates at COP17, the carbon footprint that is being generatedby air travel as a result, indicates that the delegates either do not believe that GHG emissions exist, or indeed that they cause climate change. As an sign of commitment to reducing the carbon footprint that would be generated by delegates, COP18 (scheduled to be held in South Korea in 2012) should be conducted via video conferencing, linking all the various countries. The five-year extension of the Kyoto Protocol should be decided upon at the closing session of COP17. Is this wishful thinking on my part? If it is not extended at COP17, history will record the conference as the "funeral party" of the Kyoto Protocol. Only time will tell. By the time you receive a copy of this journal, COP17 will be over. It finishes on 9 December 2011.

Have a restful and peaceful Christmas holiday. We must all contribute to reducing GHG emissions in whichever way that we can. See you in 2012, with useful tips for a greener earth!

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## References

- United Nations. Framework Convention on Climate Change: Kyoto Protocol [homepage on the Internet]. c2011. Available from: http://unfccc.int/kyoto\_protocol/ items/2830.php
- Confalonieri UB, Menne R, Akhtar KL, et al. Human health. Climate change 2007: impacts, adaptation and vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Parry ML, Canziani OF, Palutikof JP et al, editors. Cambridge, UK: Cambridge University Press, 2007; p. 391-431.