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## Bogus prophecies of doom will not fix the climate

By Richard Tol

Climate change demands action but not just on emissions, writes Richard Tol

Humans are a tough and adaptable species. People live on the equator and in the Arctic, in the desert and in the rainforest. We survived the ice ages with primitive technologies. The idea that climate change poses an existential threat to humankind is laughable.

<u>Climate change</u> will have consequences, of course. Since different plants and animals thrive in different climates, it will affect natural ecosystems and <u>agriculture</u>. Warmer and wetter weather will advance the spread of tropical diseases. Seas will rise, putting pressure on all that lives on the coast. These impacts sound alarming but they need to be put in perspective before we draw conclusions about policy.

According to Monday's report by the <u>Intergovernmental Panel on Climate Change</u>, a further warming of 2C could cause losses equivalent to 0.2-2 per cent of world gross domestic product. On current trends, that level of warming would happen some time in the second half of the 21st century. In other words, half a century of climate change is about as bad as losing one year of economic growth.

Since the start of the crisis in the eurozone, the income of the average Greek has fallen more than 20 per cent. Climate change is not, then, the biggest problem facing humankind. It is not even its biggest environmental problem. The World Health Organisation estimates that about 7m people are now dying each year as a result of air pollution. Even on the most pessimistic estimates, climate change is not expected to cause loss of life on that scale for another 100 years.

Rising temperatures may even be beneficial at first. Many more people die in unusually cold winters than in unusually hot summers. Carbon dioxide helps plants grow, and higher ambient concentrations make them less thirsty. These benefits are rapidly outweighed by the harm that occurs as warming becomes more pronounced, and are probably gone with a 2C rise. Incremental impacts turn negative once temperatures rise by about 1C – a level that seems unavoidable regardless of what we do with greenhouse gas emissions.

Climate change is complex and its impacts more so. We have limited knowledge of the consequences of the modest change that has occurred in the past. There is even more uncertainty about the effects of the rapid change expected in the future.

Poorer countries – which are more dependent on agriculture and tend to be in hotter places – are much more vulnerable to climate change. If Britain's climate becomes more like Spain's, it can copy that country's regime of siestas, late dinners and houses that keep the heat out. But hotter places will need to invent new coping mechanisms from scratch. They are also likely to have fewer resources, and may not have access to the needed technologies.

To protect London against the rising sea, the Thames Barrier will need to be replaced. This is expensive but it will be done. Bangladesh is also vulnerable to a rise in the sea level; it has a hard time coping even with current floods. However, it is about as poor as another low-lying, densely populated country was a century and a half ago when it started its first big flood-safety programme – the Netherlands. It did so because it had a strong government capable of decisive action. As long as that is lacking in Bangladesh, the country will be vulnerable to climate change. But its core problem is political.

Malaria is another example. It was once endemic in Europe and North America. But clouds of pesticide killed the mosquitoes, and draining of inland wetlands reduced their habitat. Today malaria is confined to poor countries. Climate change will make the disease worse. Economic growth will make it go away.

In the worst case, climate change could cut crop yields in Africa in half. Yet yields would increase tenfold – in the same climate, on the same soil – if subsistence farmers started using crops and techniques pioneered on experimental farms. Climate change may be a big issue in Africa. But it is not nearly as important as lack of tenure, poor roads, roving warlords and so on.

Cutting emissions is not the only way to reduce the impacts of climate change. Adaptation and development are alternatives. But these trade-offs are rarely discussed. More than 15 per cent of all development aid is now spent on attempts to prevent climate change. Is that the best way to help the intended beneficiaries? Or does it reflect the donors' priorities?

None of this is to say that climate change is not a problem that needs to be solved. We cannot let the planet grow warmer and warmer. It will take decades at least before carbon-neutral technologies saturate the market. We had better start now.

But emissions reduction is not the only way to keep the impacts of climate change in check. Yesterday's IPCC report – repeating its prophecies of doom if emissions are not curbed – missed an opportunity to advise policy makers on how to improve lives.

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