

Foreword

I am writing this from within a few hundred miles of the North Pole, on board a Greenpeace research ship. We are heading due north in what should, at this time of year, be thick, old, impassable pack ice but is actually thin one- and two-year old ice floes that our small boat easily rides over or navigates through. The sea ice has retreated far further than ever before and the 2012 sea ice melting season is still not over.

With me are leading sea-ice scientists from the US national snow and ice data centre in Colorado and Cambridge University in Britain. By nature they are conservative, but now they are surprised, even shocked. They knew the Arctic ice was getting thinner and that the area which it usually covers in summer months has been getting smaller since the 1970s. But what they have witnessed this year in the Arctic is extraordinary and unprecedented. No scientist expected this speed of melt. The weather conditions have not been particularly conducive for this record retreat, nor have there been unusual storms. Something else is happening, they say, and it can only be the observed warming in the Arctic. One of the scientists aboard has calculated man's contribution to the Arctic meltdown as over 60 per cent.

The world is now in uncharted waters and there is no way we can tell how climate change will affect places and people in the next few years. It is happening far faster and much deeper than the models ever expected. The questions pile up but there are no definite answers: will there be a largely ice-free Arctic in the summer months within 10-20 years? Almost certainly; perhaps far sooner, say some. Will the jet stream that largely influences the weather in the northern hemisphere be affected, bringing more of the extremes the US, Russia and Europe have recently seen? Probably. Will the process of climate change accelerate? Certainly. What will this mean to the developing countries of Africa or Asia, to the low-lying Pacific islands, the world's great coastal cities like Lagos and Chittagong, the plains and the foodbaskets, the deserts and oceans?

For the melting Arctic, read more frequent, more severe droughts in sub-Saharan Africa and the Andes, fiercer cyclones in Bangladesh and stronger heatwaves in Europe. We don't know the details or the timing but we can expect the poorest countries, the indigenous peoples and the most vulnerable communities to be the most affected.

The injustice of climate change is terrifying. As this urgent, much-needed volume makes clear, the rich, who have largely caused this terrifying situation with their historical emissions, are still refusing or delaying action. These contributions from some of the world's most far-sighted commentators should be required reading for heads of state, policymakers, journalists, activists and the concerned public. Together they make the loudest call for political and individual action and give governments the legitimacy to act. But we must beware the false solutions that reinforce the systems which have resulted in climate change and the food and energy crises.

There is still time to avoid the worst of climate change and to address the inequalities which have caused it.

But we can no longer delay.

John Vidal,
Environment Editor, *The Guardian*,
aboard the *Arctic Sunrise*