



31 March 2014 - Effects of climate change are already occurring on all continents and across the oceans, and parts of the world will become inhabitable if the temperature is allowed to rise with 4 degrees.

The world, in many cases, is ill-prepared for risks from a changing climate, according to the [new report](#) by the Intergovernmental Panel on Climate Change ([IPCC](#)). The impacts of global warming are likely to be "severe, pervasive and irreversible".

"Nobody on this planet is going to be untouched by the impacts of climate change," IPCC chairman Rajendra Pachauri told journalists at a news conference in Yokohama.

Scientists and officials meeting in Japan say the document is the most comprehensive assessment to date of the impacts of climate change on the world. The report details the impacts of climate change to date, the future risks from a changing climate, and the opportunities for effective action to reduce risks. A total of 309 coordinating lead authors, and review editors, drawn from 70 countries, were selected to produce the report. They enlisted the help of 436 contributing authors, and a total of 1,729 expert and government reviewers. The report – a three year joint effort – grew to 2,600 pages and 32 volumes.

Observed impacts of climate change have already affected agriculture, human health, ecosystems on land and in the oceans, water supplies, and some people's livelihoods. The striking feature of observed impacts is that they are occurring from the tropics to the poles, from small islands to large continents, and from the wealthiest countries to the poorest.

Although the poorer countries are likely to suffer more in the short term, the rich won't escape.

"The rich are going to have to think about climate change. We're seeing that in the UK, with the floods we had a few months ago, and the storms we had in the US and the drought in California," said Dr Huq.

"These are multibillion dollar events that the rich are going to have to pay for, and there's a limit to what they can pay."

The future looks grim. After 2050, the risk of more severe yield impacts increases, as boom-and-bust cycles affect many regions. All the while, the demand for food from a population estimated to be around nine billion will rise. Under some scenarios, climate change could lead to dramatic drops in global wheat production as well as reductions in maize.

Many fish species, a critical food source for many, will also move because of warmer waters, and in some parts of the tropics and in Antarctica, potential catches could decline by more than 50%.

But it is not all bad news, as the co-chair of the working group that drew up the report points out.

"I think the really big breakthrough in this report is the new idea of thinking about managing climate change as a problem in managing risks," said Dr Chris Field.

"Climate change is really important but we have a lot of the tools for dealing effectively with it - we just need to be smart about it."