

Map reveals worldwide impacts of climate change

July 18 2014

Scientists from the University of Southampton have helped to create a new map, which shows the impact climate change could have on the whole planet by the end of the century, if carbon emissions continue to increase.

The Human Dynamics of Climate Change map, launched at the Foreign and Commonwealth Office last night (16 July), was developed by the Met Office Hadley Centre with specific contributions from universities, Government and science organisations.

The map shows a range of potential impacts:

- Temperatures on the warmest days of the year rising by 6°C or more across Europe, parts of Asia and part of North America
- An increase in risk of flooding across 70 per cent of Asia
- The number of days of drought going up by more than 20 per cent in parts of South America, Australia and Southern Africa
- Maize yields falling by up to 12 per cent in Central America
- Sea temperatures rising by up to 4°C in some parts of the world
- Millions of people flooded due to [sea level rise](#), particularly in East, Southeast and South Asia

The map illustrates how [climate change](#) could affect the global economy as regions connected by trade are affected by changes in crop yield, droughts, flooding and high temperatures. It also shows how many already water-stressed regions of the world could face an increase in the

frequency and duration of droughts, at the same time as an increase in demand for water for agriculture and for the consumption of a growing population.

Professor Robert Nicholls and Dr Sally Brown, from Engineering and the Environment at the University of Southampton, contributed data and research which shows the number of people in coastal regions around the world that could potentially be flooded in the future as sea levels rise.

Dr Brown says: "We know that rising sea levels are already having profound impacts in many parts of the world. We hope that this tool will help scientists, policy makers and governments better understand the threat that climate change poses to our collective future prosperity and security and what actions are needed."

Foreign Office Minister, Mark Simmonds said: "This map shows how the impacts of climate change on one part of the world will affect countries in other parts of the world, particularly through the global trade in food. This reinforces the point that climate change is a global problem: no country is immune, and we all need to work together to reduce the risks to our shared prosperity and security."

Dame Julia Slingo, the Met Office Chief Scientist, said: "We've used the latest science to assess how potential changes in our climate will impact people around the world. This map presents that information together for the first time. While we see both positive and negative impacts, the risks vastly outweigh any potential opportunities."

The launch event included a discussion on climate change led by Sir David King, the Foreign Secretary's Special Representative on Climate Change and Sir Mark Walport, the Government's Chief Scientific Adviser.

Provided by University of Southampton

Citation: Map reveals worldwide impacts of climate change (2014, July 18) retrieved 18 April 2024 from <https://phys.org/news/2014-07-reveals-worldwide-impacts-climate.html>

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