

IPCC WARNS OVER GREATER RISK TO FOOD AND WATER SECURITY



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Speed read

- Extreme events such as floods and heat waves will hit key human resources
- Climate change is likely to increase human displacement and conflict
- The challenge is managing climate risks, particularly to coasts and islands

[NEW DELHI] The climate change-related risks from extreme events such as floods and heat waves will rise further with global warming, aggravating food and water insecurity, especially for some of the poorest communities, says the second instalment of the latest UN Intergovernmental Panel on Climate Change (IPCC) report.

The report of the second working group of the IPCC's Fifth Assessment Report (AR5), dealing with impacts, adaptation and vulnerability, and offering new insights into key risks due to climate change, was released this week (31 March) in Yokohama, Japan.

“Nobody on this planet is going to be untouched by the impacts of climate change,” IPCC chair Rajendra Pachauri warned.

Christopher Field, the co-chair of the second working group, added: “We are not in an era where climate change is some kind of a future hypothetical. We live in a world where the impacts of climate change that have already occurred are widespread and consequential ... There is no question that we live in a world that is already altered by climate change.”

The report highlights many global shifts that climate change has already caused. It says that changing rainfall and melting snow and ice are affecting water resources in many regions. Glaciers continue to shrink, affecting run-off and water resources downstream. Permafrost is thawing. And wheat and maize yields have fallen in many regions.

The report also repeats warnings about shifts in species’ migratory ranges and the threats this may pose to food security. And it raises concerns about increased human displacement and resulting conflicts.

Impacts in Asia

Asia will be particularly hard-hit by water scarcity, food insecurity, the redistribution of land species and an increased risk to coastal and marine ecosystems, the report says. And it predicts that South Asia will be the region most impacted by global warming, due to more extreme weather events such as floods and droughts.

It has “rung warning bells for Asia” and has “very serious implications” for South Asia in particular, says Chandra Bhushan, deputy director at the Centre for Science and Environment, a Delhi-based NGO.

A major reason for the greater impact in the region is its large population of impoverished people, says Bhushan. Bangladesh, India and Pakistan together account for almost half the

world's poor people, he says.

Purnamita Dasgupta, coordinating lead author of the report's chapter on rural areas, and professor at the Institute of Economic Growth in Delhi, tells *SciDev.Net* that the impacts of climate change "will add to the existing vulnerabilities of people in rural areas, such as lack of access to water and infrastructure".

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"We could have more poverty shocks because the poor are already disadvantaged," she says, adding that climate change acts as a "threat multiplier".

With 70 per cent of people in developing countries living in rural areas, the "rural poor would be impacted through reduced access to water" and "stand to lose whatever assets they have" with a rise in extreme events such as floods and drought, she says.

The report provides scientific evidence on how adaptation could reduce the risks that climate change will pose and how to manage those risks, Dasgupta says. "We now have enough evidence to show that adaptation is important."

But Pachauri says that it is difficult at this stage to work out the costs of adaptation measures, as few countries are yet to practise it. But he agrees that the report highlights the urgent need for adaptation and "hopefully restores the balance between the need for both mitigation and adaptation measures" by countries.

He adds that there is a huge dearth of local knowledge on the kinds of adaptation needed in particular locations, and on which local institutions could be fully engaged in adaptation policies,

practices and corresponding cost estimates. “That is a real gap” in knowledge that experts need to work on, he tells *SciDev.Net*.

Some positive messages

Yet the report says that “adaptation is already occurring” to an extent, as some governments are beginning to embed it in some planning processes.

“One thing that we have come up with is the importance of adaptation and mitigation choices because this is the only way we might be able to reduce the risks of climate change,” Pachauri said at a press briefing.

Camilla Toulmin, director of UK-based research organisation the International Institute for Environment and Development, said in a statement: “Some of the world’s least developed countries are already forging ahead. Ethiopia has committed to carbon-neutral development. Bangladesh has invested US\$10 billion of its own money to adapt to extreme climatic events. Nepal is the first country to develop adaptation plans at the community level.”

Source : <http://www.scidev.net/global/climate-change/news/ipcc-risk-food-water-security.html>