

Climate Change and Food Crisis

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[The greenhouse effect already has an impact on food production. Farmers in rich countries with temperate climates are the only ones likely to benefit from rising temperatures, and only so if the changes are not too drastic. In other regions of the world, the consequences could be detrimental including a decline in food production.]

Climate change makes extreme weather conditions more likely. There will be more droughts, storms and floods, and they all will be more intense than they have been so far. Such events can destroy entire harvests. When such events occur in exporting countries, the global market is affected. According to the FAO, the skyrocketing prices of the past few years partly result from production losses caused by weather. Australia is one example; droughts have become the norm there.

Clearly, climate change is already leaving its mark on the global food market. But this is only the beginning. Depending on how high temperatures rise and how regional weather conditions change, the consequences could be more drastic. Since the International Panel on Climate Change (IPCC) published its fourth report in 2007, a number of additional studies have shown that the risks of climate change are growing.

Climate change affects agriculture in several ways. Rising temperatures influence the growth of plants. Many natural habitats are shifting toward the poles or into higher latitudes. Moreover, precipitation patterns are changing. In areas that previously made do without artificial irrigation, harvests are in danger when the rains set in even a few weeks late or just too strongly. Many regions must expect to receive less precipitation. Water will then become scarcer both for personal consumption and agriculture.

Furthermore, many parts of the world will be subject to a larger number of more extreme weather conditions, such as heat waves and storms. Not least, the sea level is expected to rise, putting some of the most fertile land in coastal regions and river deltas in danger of flooding; salinity will also increase in soil and groundwater.

THE 2°C THRESHOLD

To a certain extent, a greater concentration of carbon dioxide in the atmosphere would make certain plant species grow faster. But in light of the problems discussed above, it would be foolish to view climate change as a driver of agricultural productivity. The risks for agriculture are varied, and any global mean temperature increase of more than 2°C above pre-industrial levels would be a catastrophe for tropical countries.

It is too late to stop climate change altogether. Humankind can only try to minimise the effects. The latest research shows that global emissions will have to be reduced by much more than half by 2050 if the temperature increase is to be kept at 2°C worldwide. To reach this goal, the international community of nations will have to reach an agreement on strict climate-protection regulations. Rich countries have to lead the way, for they are the ones who have caused the most damage by far.

At the same time, policy makers will nonetheless have to find an answer to an unpleasant question: how will they deal with the consequences of climate change that can no longer be prevented? This year's food-price crisis highlights

the urgency of the matter. The fate of millions of people is at stake. Those who already lack proper access to food and clean water are the most vulnerable. The same can be said of nation states. Those countries that already suffer food shortages are among the most vulnerable to the effects of climate change.

Many developing countries are just starting to understand the depth of the problem. As the main emitters, industrial countries not only have a moral as well as a legal obligation to cover the adaptation costs of poorer countries affected. At the same time, the governments of poor countries have to prepare for climate change too. One of the most basic human rights - the right to food - is at stake.

First and foremost, adaptation strategies will have to serve the needs of the most vulnerable. That task seems especially challenging given these people are often already marginalised. They live in parts of the world especially threatened by climate change, such as coastal areas and eroding slopes. For instance, the outermost islands in the Ganges Delta have practically no protection from storms and floods.

Studies are becoming increasingly accurate in forecasts of the changes in store for specific countries and regions. Nonetheless, the data concerning developing countries are still scant, and not enough research is being done. These countries need more support. In addition to intense research, capacity-building efforts must be stepped up and strategies to cope with the changes developed.

Climate change is a new kind of challenge, so the motto will have to be one of "learning on the job". While there are numerous concepts, not all of them will succeed.

The right to proper nutrition plays an especially important role in the debate on adapting to climate change. Those suffering from famine - or merely malnutrition - must be enabled to demand responsible action from their governments. Systematic records have to be taken about which segments of the people are in the greatest danger and where they live. In terms of food scarcity, climate change will only worsen the current poor state of affairs. Governmental and nongovernmental stakeholders in agriculture and rural development have to take this challenge seriously.

UN talks on climate change are increasingly paying attention to adaptation. In 2009, these negotiations will lead to a climate summit in Copenhagen, where a new international treaty to succeed the first commitment period of the Kyoto Protocol is to be signed. If that treaty is to turn out fair, it will have to provide significantly more financial support to the countries that have emitted the least but will suffer the most from climate change. These countries deserve compensation; and attention must focus on those in the greatest peril.

The governments of developing countries will have to say how they are going to rise to the challenges. After all, they have signed international agreements obligating them to respect social, cultural, and economic rights. In itself, adaptation support will not suffice to end the marginalisation of certain groups of people. It must, in any case, be geared to that goal, in line with integrated strategies of rural development. —*Third World Network Features*