



Food Security and Climate Change: Using IFPRI Results as a Call for Action

The first decade of the twenty-first century has already brought us two food price crises, which have adversely affected the world's poor people. A world population expected to reach 9 billion by 2050 and rising incomes in many developing countries means increased food demand that, in turn, means significant challenges to meeting these needs through agricultural production. On top of these challenges, climate change will negatively affect agricultural productivity and make it more difficult for smallholder farmers to manage risk. IFPRI estimates that production of rice and wheat could decrease by as much as 19 percent and 34 percent, respectively, by 2050 due to the effects of climate change.

To address the adverse effects of climate change on poor people, who will be hit the hardest by a warming world, IFPRI maintains a strong research program that strives to find ways to ameliorate the consequences for the most vulnerable groups. Specifically, IFPRI researchers are assessing the precise impact of climate change on the poor, the role that agriculture plays in emitting greenhouse gas and how it can curtail these emissions, and how small farmers can adapt to other impending changes.

In 2009, IFPRI researchers and collaborators published [Climate Change: Impact on Agriculture and Costs of Adaptation](#), a food policy report that assessed the relationship between climate change and agriculture as it pertains to hunger, malnutrition, and people living in poverty. Evidence presented in the report demonstrated that at least US\$7 billion per year in additional funding is required to offset the negative effects of climate change on human well-being.

Armed with these research results, IFPRI and its partners collaborated with key organizations, such as the Food and Agriculture Organization of the United Nations, the Global Forum on Agricultural Research, and the International Federation of Agricultural Producers, to ensure that agriculture was a top priority on the agenda for the 2009 UN Climate Change Conference in Copenhagen.

In his [speech](#) in Copenhagen, US Secretary of Agriculture Tom Vilsack cited IFPRI's food policy report when he explained how climatic stresses can impact food production by reducing yields and threatening people's livelihoods, particularly in developing nations.

David Waskow, climate change program director at Oxfam America, also referenced the food policy report in his [testimony](#) before the US Congress, explaining that climate change will lead to a 20 percent increase in child malnutrition by 2050. Mr. Waskow asked Congress to provide meaningful resources in support of climate change adaptation efforts in the world's most vulnerable countries.

When explaining the costs of protecting agriculture against climate change, the following publications also cited IFPRI's 2009 climate change food policy report: a [quarterly report](#) by the Government of Malaysia's Department of Energy; a [newsletter](#) by South Africa's Department of Agriculture, Forestry and Fisheries; the 2009 [Environment and Natural Resource Management Policy](#) for the International Fund for Agricultural Development (IFAD); the [proposal](#) for the upcoming Consultative Group on International Agricultural Research Program 7 on climate change; and an [article](#) in the *Economist*.

[Food Security, Farming, and Climate Change to 2050: Scenarios, Results, Policy Options](#), a research monograph published by IFPRI in December 2010, helped inform a report by the Government of Australia titled [Transforming Rural Land Use](#), which discussed the implications of climate change for food security. Given the recent release of this research monograph, new uses of the research results are still unfolding.

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