



2010 Annual Meeting

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2411 [The Effects of Global Climate Change on Food Security](#)

Saturday, February 20, 2010: 10:30 AM
Room 11A (San Diego Convention Center)

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It is impossible to predict the exact effects of climate change on food security, but one can make projections of likely outcomes by synthesizing knowledge of processes in the climate and food systems. Because of uncertainties, it is important to consider outcomes with low probability but high consequence, although to date most work has focused only on most likely outcomes. It is also necessary to consider the distribution of impacts across different levels of society, not simply aggregate effects on national food availability or prices. Here I summarize recent work that attempts to delineate worst, most likely, and best-case scenarios of impacts of climate change on food production, prices, and poverty by 2030. Although the small price changes under the medium scenario are consistent with previous findings, we find the potential for much larger food price changes than reported in recent studies and the IPCC which have largely focused on the most likely outcomes. In our low productivity scenario, prices for major staples rise 10-60% by 2030. The poverty impacts of these price changes depend as much on where impoverished households earn their income as on the agricultural impacts themselves

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