

Global experts: Warming could double food prices

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In this April 8, 2010 file photo, Nyagod Kuel, 2, attempts to eat on her bed in a hospital ward in Akobo in southeastern Sudan. Two years of failed rain and tribal clashes in this Sudan region bordering Ethiopia have laid foundations for a humanitarian crisis the U.N. mission dubs the "hungriest place on earth." On our current emissions path, climate change becomes the "threat multiplier" that could double grain prices by 2050 and leave millions more children malnourished, global food experts reported Wednesday Dec. 1, 2010. (AP Photo/Jerome Delay, File)

(AP) -- Even if we stopped spewing global warming gases today, the world would face a steady rise in food prices this century. But on our current emissions path, climate change becomes the "threat multiplier" that could double grain prices by 2050 and leave millions more children malnourished, global food experts reported Wednesday.

Beyond 2050, when climate scientists project temperatures might rise to as much as 6.4 degrees C (11.5 degrees F) over 20th century levels, the planet grows "gloomy" for agriculture, said senior research fellow Gerald Nelson of the International Food Policy Research Institute.

The specialists of the authoritative, Washington-based IFPRI said they fed 15 scenarios of population and income growth into supercomputer models of climate and found that "climate change worsens future human well-being, especially among the world's poorest people."

The study, issued here at the annual U.N. climate conference, said prices will be driven up by a combination of factors: a slowdown in productivity in some places caused by warming and shifting rain patterns, and an increase in demand because of population and income growth.

Change apparently already is under way. Returning from northern India, agricultural scientist Andrew Jarvis said wheat farmers there were finding warming was maturing their crops too quickly.

"The temperatures are high and they're getting reduced yields," Jarvis, of the Colombia-based International Center for [Tropical Agriculture](#), told reporters last month.

For most farmers around the world, trying to adapt to these changes "will pose major challenges," Wednesday's IFPRI report said.

Research points to future climate disruption for agricultural zones in much of sub-Saharan Africa, south Asia and parts of Latin America, including Mexico. In one combination of [climate models](#) and scenarios, "the corn belt in the United States could actually see a significant reduction in productivity potential," Nelson told reporters here.

"Unlike the 20th century, when real agricultural prices declined, the first half of the 21st century is likely to see increases in real agricultural prices," the IFPRI report said.

Even with "perfect mitigation," the implausible complete elimination immediately of carbon dioxide and other greenhouse gas emissions, it said real prices for grain would rise because of growing demand and other factors - by 18 percent for rice by 2050 under the most optimistic scenario, to up to 34 percent for corn in the most pessimistic, a scenario envisioning high population growth.

But climate change "acts as a threat multiplier," making feeding billions more mouths even more challenging, IFPRI said.

With [climate change](#) factored in, the increases in real prices by 2050 could range from 31 percent for rice in the most optimistic scenario, to 100 percent for corn in the most pessimistic. And IFPRI has estimated that such skyrocketing prices could boost the global population of undernourished children by 20 percent, by an additional 25 million children.

Up until 2050, endpoint of the experts' projections, some of the impact could be offset by research development of higher-yielding varieties of corn, wheat and other crops, and by freer, more flexible global trade in food commodities, IFPRI said.

But beyond 2050, if temperatures rise sharply, "the world is a much more gloomy place for agriculture," Nelson said.

Only deep reductions in greenhouse gas emissions and billions spent to help farmers adapt to a changing climate can head off serious food shortages, Nelson said. IFPRI, which is supported by world governments, estimates that at least \$7 billion additional spending a year

is needed for crop research and improved irrigation, roads and other upgrades of agricultural infrastructure.

Needed just as much, it said, are better satellite data on how the world's farming zones are changing crops, land use and practices, and on-the-ground information from "citizen data-gatherers equipped with GPS-enabled camera phones and other measuring devices.

"Such data would yield huge payoffs in illuminating the state of the world as it unfolds," it said.

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