The following story can be found online at: <a href="http://www.csmonitor.com/World/2011/0706/Radical-changes-needed-to-meet-rising-food-demands-UN">http://www.csmonitor.com/World/2011/0706/Radical-changes-needed-to-meet-rising-food-demands-UN</a>



## 'Radical' changes needed to meet rising food demands: UN

A new United Nations report calls for a 'green revolution' in agriculture, saying farmers must increase food production by as much as 100 percent by 2050.



A farmer spreads fertilizer in a paddy field at Traouri village, located in the northern Indian state of Haryana on July 5.

Ajay Verma/Reuters

By Patrick Wall, Contributor / July 6, 2011

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The global food system is environmentally destructive and requires "radical" changes if it is to meet rising food demands, says a new United Nations report.

Current farming practices degrade the environment and contribute to global warming, which in turn reduces food production, according to the report. To feed a growing population, farmers around the world must increase food production by up to 100 percent by 2050 – but do so using sustainable methods, with a focus on small farming.

"The world now needs a truly green revolution in agriculture," says the UN's annual World Economic and Social Survey, which was released Tuesday.

Recent food shortages and price spikes highlight "deep structural problems" in the global food system, according to the report. Modern agriculture is plagued by over-cultivation, deforestation, and water pollution, the study says, which results in low crop yields.

These practices, combined with climate change and government policies, threaten almost two dozen nations with a "protracted food security crisis." Worldwide, some 925 million people are undernourished, the report says, with the vast majority living in developing countries.

Meanwhile, the governments in these countries have done little to support the world's 1.5 billion small farmers, who dominate agriculture in developing nations.

"There have been decades of underinvestment by the public sector," says Manuel Montes, a UN economist and one of the survey authors. "Agricultural investment has to be revived in order to meet the demands of food production."

Governments should improve infrastructure, such as roads and water systems, and provide credit and technical support to small farmers, according to the report. Nonprofit organizations and philanthropies can fund research and provide training to farm workers.

The report says the goal should be to provide small farmers with the skills and resources needed to increase food production without harming the environment.

"Small farm holders are at the heart of the food security challenge," says the report, which cites estimates that up to 90 percent of staple foods are produced locally. "It is at this level that most gains in terms of both sustainable productivity increases and rural poverty reduction can be achieved."

Small farmers can choose from a variety of eco-friendly agricultural practices, including crop rotation, rainwater harvesting, and organic fertilizing. They can also learn to properly store and preserve the food they grow – about a third of which is lost before consumption, according to a May UN report.

The Global Service Corps, a nonprofit founded in 1993, is one of many organizations that train rural farmers to use sustainable practices.

Volunteers in the group's Tanzania program teach small farmers how to store grains, vaccinate chickens and use "bio-intensive" farming methods, such as composting. The training enables farmers with limited access to chemical fertilizers and fresh water to grow more food at a lower cost – which the UN report says is critical.

So far, most of the farmers have been eager to try the new techniques, says Global Service Corps founder, Rick Lathrop.

"They can see that the corn in our plot is eight feet high, and the corn in the conventional plot is only four feet," says Mr. Lathrop. "All they have to do is see it."