Critics decry GM rule in Iraq

They argue policy allowing transgenic wheat could wipe out natural varieties in the place where wheat was born

By Anne Harding
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Recent rules changes allowing farmers to use transgenic wheat species in Iraq to help rebuild the region's agriculture have some critics concerned that the new policy could help wipe out the natural hotbed of diversity in Iraq, where wheat originated.

"Introducing transgenic wheat means replacing this diversity and leaving it to extinction," warned Nagib Nassar, a professor of genetics at the Universidade de Brasilia. "It will be replaced by a monoculture with a very narrow genetic base. This is a problem. This will be a catastrophe."

What's gotten wrong is Order 81, one of 100 orders enacted by Coalition Provisional Authority (CPA) Administrator L. Paul Bremer. Issued in 2004, Order 81 authorizes the introduction of GM crops as part of an effort to restore the nation's agricultural base, and gives intellectual property rights to the developers of new seed varieties.

This isn't the first time Iraqi farmers have been exposed to genetic modification. For thousands of years, Iraqi farmers have saved seed from each year's crops, replanting and cross-pollinating varieties for higher yields, better pest resistance, and other beneficial traits. But Order 81 makes it illegal for Iraqi farmers to reuse seeds from any crops planted using a patented seed variety. Farmers who chose to use patented varieties would have to buy new seed every year.

Critics such as the non-governmental organizations GRAIN and Focus on the Global South say US agribusiness pushed for Order 81 in hopes of turning Iraqi farmers into cash crop producers. They fear a Green Revolution-style overhaul of Iraq's ancient agricultural practices, with trademarked crop varieties requiring plenty of fertilizer and pesticide muscling out lower-yielding, but more dependable, traditional varieties.

"The FAO recently secured funding for a $5.4 million project to help restore Iraq's seed industry, nearly destroyed by the war. The project, developed jointly by Iraqi scientists and the FAO, will include training of scientists and farmers, as well as restoration of seed laboratories and seed multiplication centers. It is slated to begin in 2006. Despite ongoing violence in parts of the country, Tekeste Tekie noted, 14 of 18 Iraqi governorates are safe.

Iraq remains in dire need of assistance to rebuild its agricultural capacity. While 5 million acres of wheat were under cultivation in Iraq in 2003 before the US invasion, only 1 million are being grown today, Sanjaya Rajaram, director of CIMMYT. And during that time, yields have dwindled from two tons per hectare to a half-ton. Iraqi farmers are currently only able to cover 4% of the country's demand for high quality seed.

Given the current state of Iraq's agricultural system, however, some experts say the country is just not ready for GM crops. Any introduction of genetically modified wheat into the region would have to be done with extreme caution, after careful study, and Iraq simply does not have the necessary infrastructure to make this possible, Michael Larindi, a seed production officer at FAO, told The Scientist.

The solution, Warburton said, is to set aside protected land where the wild varieties can grow, and to ensure seeds of old varieties are safely banked. While Iraq's ancient seed stores have been decimated, the Consultative Group on International Agricultural Research is holding some Iraqi seeds in gene banks in Syria and Mexico City.

More immediate threats to Iraq's wheat heritage include the danger that Iraqi farmers will toss out their old seed in favor of new varieties, or that areas where wild wheat grows will be paved over or otherwise developed, said Marilyn Warburton, a molecular biologist at the International Maize and Wheat Improvement Center in Mexico City, better known by its Spanish acronym, CIMMYT.

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But officials on the ground in Iraq say such worries are overblown. "I don't think there is anybody trying to push genetically modified crops onto Iraqis."

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