

Global Affairs Commentary

Is the United States a Pollution Haven?

By Frank Ackerman

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Free trade, according to its critics, runs the risk of creating pollution havens—countries where lax environmental standards allow dirty industries to expand. Poor countries are the usual suspects; perhaps poverty drives them to desperate strategies, such as specializing in the most polluting industries.

But could the United States be a pollution haven?

The question arises from a look at agriculture under NAFTA, particularly the trade in corn. In narrow economic terms, the United States is winning in the market for corn. Exports to Mexico have doubled since NAFTA's first year, 1994, to more than five million tons annually. Cheap U.S. corn is undermining traditional production in Mexico; prices there have dropped 27% in just a few years, and a quarter of the corn consumed in Mexico is now made in the United States. But in environmental terms, the U.S. victory comes at a great cost. Corn production is moving from Mexico, where it was more sustainable, to the United States, where it involves serious environmental impacts.

You won't hear this, or any other discouraging words, from the advocates of trade promotion authority (fast track) and the Free Trade Area of the Americas, when the issues return to the political agenda in the coming months. In the official story, ever-freer trade creates rising economic tides that will lift all boats. And since richer people pay more attention to pollution,

everyone's environment will get cleaner, too. It's supposed to be a win-win story all around.

In reality, free trade creates losers as well as winners within each country. U.S. industrial workers and Mexican peasant farmers are economically worse off as a result of NAFTA. When it comes to the environment, free trade can lead to lose-lose outcomes, as in the case of corn.

How bad could it be for the United States to win the corn war? Mainstream commentary on the outcome ranges from calmly positive to positively gloating. Yet there are ominous environmental costs to the U.S. style of growing corn. The growing sales to Mexico bring more of these costs to the Corn Belt and the nation.

Corn is a highly chemical-intensive crop, using significantly more chemicals per acre than wheat or soybeans, the other two leading field crops. Runoff of excess nitrogen fertilizer is a major cause of water pollution, leading to the huge "dead zone" in the Gulf of Mexico around the mouth of the Mississippi River. Intensive application of toxic herbicides and insecticides threatens the health of farm workers, farming communities, and consumers. Genetically modified corn, which now accounts for about one-fifth of U.S. production, poses unknown long-term risks to consumers and to ecosystems.

Additional problems result from growing corn in very dry areas, where irrigation is required. The traditional Corn Belt states, such as Iowa,

Illinois, Minnesota, and Indiana, have ample rainfall and do not need irrigation. However, 15% of U.S. corn acreage is now irrigated—almost all of it in Nebraska, Kansas, the Texas panhandle, and eastern Colorado. These areas are all drawing water from the Ogallala aquifer, a gigantic underground reservoir that contains as much fresh water as Lake Huron. Water is being taken out of the aquifer, for irrigation and other uses, much faster than the aquifer naturally refills. If present rates of overuse continue, the Ogallala aquifer will be drained down to unusable levels within a few decades, causing a crisis for the huge areas of the plains states that depend on it for water supplies. Government subsidies, in years past, helped farmers buy the equipment needed to pump water out of the Ogallala, contributing to the impending crisis.

Moreover, the corn borer, the leading insect pest that likes to eat corn plants, flourishes best in dry climates. Thus the “irrigation states,” particularly Texas and Colorado, are the hardest hit by corn borers. Corn growers in dry states have the greatest need for insecticides; they also have the greatest motivation to use genetically modified corn, which is designed to repel corn borers.

Corn prices are low in the United States and overall sales are not growing, suggesting that the country now produces a surplus of corn. Incentives to produce less, not more, would be environmentally beneficial, especially if the reductions could be concentrated in the irrigated areas. But “success” under NAFTA pushes production in the opposite direction.

Sales to Mexico are particularly important to the United States because many countries are refusing to accept genetically modified corn. Europe no longer imports U.S. corn for this reason, and Japan and several East Asian countries may follow suit. Mexico prohibits the growing of genetically modified corn, but still allows it to be imported; it is one of the largest remaining markets where U.S. exports are not challenged on this issue.

Despite Mexico’s ban, genetically modified corn was recently found growing in a remote rural area of Oaxaca. As the ancestral home of corn, Mexico possesses a unique and irreplaceable genetic diversity. Although the extent of the problem is still uncertain, the unplanned and uncontrolled spread of artificially engineered plants from the United States could potentially contaminate

Mexico’s numerous naturally occurring corn varieties.

An even greater threat is the economic impact of cheap U.S. imports on peasant farmers and rural communities. Traditional farming practices, evolved over thousands of years, use combinations of different natural varieties of corn carefully matched to local conditions. Lose these traditions, and we will lose a living reservoir of biodiversity in the country of origin of one of the world’s most important food grains.

The United States has won the gold medal in the corn trade. But the prize looks tarnished when viewed through the lens of the U.S. environment, or of Mexico’s biodiversity. Pollution havens don’t always have to be poor.

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Recommended citation:

Frank Ackerman, “Is the United States a Pollution Haven?” Americas Program Commentary (Silver City, NM: Interhemispheric Resource Center, March 1, 2002).

Web location:

<http://www.fpiif.org/americas/commentary/2002/0203corn.html>