

# WORLD FACING HUGE NEW CHALLENGE ON FOOD FRONT

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Lester R. Brown, President of the Earth Policy Institute

A fast-unfolding food shortage is engulfing the entire world, driving food prices to record highs. Over the past half-century grain prices have spiked from time to time because of weather-related events, such as the 1972 Soviet crop failure that led to a doubling of world wheat, rice, and corn prices. The situation today is entirely different, however. The current doubling of grain prices is trend-driven, the cumulative effect of some trends that are accelerating growth in demand and other trends that are slowing the growth in supply.

The world has not experienced anything quite like this before. In the face of rising food prices and spreading hunger, the social order is beginning to break down in some countries. In several provinces in Thailand, for instance, rustlers steal rice by harvesting fields during the night. In response, Thai villagers with distant fields have taken to guarding ripe rice fields at night with loaded shotguns.

In Sudan, the U.N. World Food Programme (WFP), which is responsible for supplying grain to 2 million people in Darfur refugee camps, is facing a difficult mission to say the least. During the first three months of this year, 56 grain-laden trucks were hijacked. Thus far, only 20 of the trucks have been recovered and some 24 drivers are still unaccounted for. This threat to U.N.-supplied food to the Darfur camps has reduced the flow of food into the region by half, raising the specter of starvation if supply lines cannot be secured.

In Pakistan, where flour prices have doubled, food insecurity is a national concern. Thousands of armed Pakistani troops have been assigned to guard grain elevators and to accompany the trucks that transport grain.

Food riots are now becoming commonplace. In Egypt, the bread lines at bakeries that distribute state-subsidized bread are often the scene of fights. In Morocco, 34 food rioters were jailed. In Yemen, food riots turned deadly, taking at least a dozen lives. In Cameroon, dozens of people have died in food riots and hundreds have been arrested. Other countries with food riots include Ethiopia, Haiti, Indonesia, Mexico, the Philippines, and Senegal. (See additional examples of food price unrest at [www.earthpolicy.org/Updates/2008/Update72\\_data.htm](http://www.earthpolicy.org/Updates/2008/Update72_data.htm).)

The doubling of world wheat, rice, and corn prices has sharply reduced the availability of food aid, putting the 37 countries that depend on the WFP's emergency food assistance at risk. In March, the WFP issued an urgent appeal for \$500 million of additional funds.

Around the world, a politics of food scarcity is emerging. Most fundamentally, it involves the restriction of grain exports by countries that want to check the rise in their domestic food prices. Russia, the Ukraine, and Argentina are among the governments that are currently restricting wheat exports. Countries restricting rice exports include Viet Nam, Cambodia, and Egypt. These export restrictions simply drive prices higher in the world market.

The chronically tight food supply the world is now facing is driven by the cumulative effect of several well established trends that are affecting both global demand and supply. On the demand side, the trends include the continuing addition of 70 million people per year to the earth's population, the desire of some 4 billion people to move up the food chain and consume more grain-intensive livestock products, and the recent sharp acceleration in the U.S. use of grain to produce ethanol for cars. Since 2005, this last source of demand has raised the annual growth in world grain consumption from roughly 20 million tons to 50 million tons.

Meanwhile, on the supply side, there is little new land to be brought under the plow unless it comes from clearing tropical rainforests in the Amazon and Congo basins and in Indonesia, or from clearing land in the Brazilian cerrado, a savannah-like region south of the Amazon rainforest. Unfortunately, this has heavy environmental costs: the release of sequestered carbon, the loss of plant and animal species, and increased rainfall runoff and soil erosion. And in scores of countries prime cropland is being lost to both industrial and residential

construction and to the paving of land for roads, highways, and parking lots for fast-growing automobile fleets.

New sources of irrigation water are even more scarce than new land to plow. During the last half of the twentieth century, world irrigated area nearly tripled, expanding from 94 million hectares in 1950 to 276 million hectares in 2000. In the years since then there has been little, if any, growth. As a result, irrigated area per person is shrinking by 1 percent a year.

Meanwhile, the backlog of agricultural technology that can be used to raise cropland productivity is dwindling. Between 1950 and 1990 the world's farmers raised grainland productivity by 2.1 percent a year, but from 1990 until 2007 this growth rate slowed to 1.2 percent a year. And the rising price of oil is boosting the costs of both food production and transport while at the same time making it more profitable to convert grain into fuel for cars.

Beyond this, climate change presents new risks. Crop-withering heat waves, more-destructive storms, and the melting of the Asian mountain glaciers that sustain the dry-season flow of that region's major rivers, are combining to make harvest expansion more difficult. In the past the negative effect of unusual weather events was always temporary; within a year or two things would return to normal. But with climate in flux, there is no norm to return to.

The collective effect of these trends makes it more and more difficult for farmers to keep pace with the growth in demand. During seven of the last eight years, grain consumption exceeded production. After seven years of drawing down stocks, world grain carryover stocks in 2008 have fallen to 55 days of world consumption, the lowest on record. The result is a new era of tightening food supplies, rising food prices, and political instability. With grain stocks at an all-time low, the world is only one poor harvest away from total chaos in world grain markets.

Business-as-usual is no longer a viable option. Food security will deteriorate further unless leading countries can collectively mobilize to stabilize population, restrict the use of grain to produce automotive fuel, stabilize climate, stabilize water tables and aquifers, protect cropland, and conserve soils. Stabilizing population is not simply a matter of providing reproductive health care and family planning services. It requires a worldwide effort to eradicate poverty. Eliminating water shortages depends on a global attempt to raise water productivity similar to the effort launched a half-century ago to raise land productivity, an initiative that has nearly tripled the world grain yield per hectare. None of these goals can be achieved quickly, but progress toward all is essential to restoring a semblance of food security.

This troubling situation is unlike any the world has faced before. The challenge is not simply to deal with a temporary rise in grain prices, as in the past, but rather to quickly alter those trends whose cumulative effects collectively threaten the food security that is a hallmark of civilization. If food security cannot be restored quickly, social unrest and political instability will spread and the number of failing states will likely increase dramatically, threatening the very stability of civilization itself.

<http://www.earthpolicy.org/Updates/2008/Update72.htm>