

Institute for Agriculture and Trade Policy

The Global Food Price Crisis

Prices Skyrocket

Since 2005, global agricultural commodity prices on world markets have reached their highest levels in 30 years, and in some cases have set new records. From March 2007 to March 2008, the price of rice went up 74 percent (most of that in a few weeks); the price of wheat more than doubled, rising 130 percent during the same period.

These are global numbers. Of course, consumers shop in local markets, where the price increases have been huge but also widely varied. Since June 2007, rice is up 58 percent in Bangladesh, but has doubled in Vietnam and Guyana, and nearly tripled in Ethiopia. The price of wheat is up 51 percent in Bangladesh and 56 percent in Guyana, but 229 percent in Ethiopia. The price of maize doubled in Kenya but soared by 214 percent in Ethiopia. Ethiopia is obviously more vulnerable. Why? Two big reasons are because its own harvests have failed and because it has no reserves. Countries like Ethiopia, Haiti, and others with little money to spend, high dependence on food imports and food aid, and a long history of disrupted domestic production are the most at risk when global prices start to climb.

The crisis is much more dramatic in nominal U.S. dollars than in other currencies. Since 2002, world corn prices have risen 143 percent in nominal dollars, but only 37 percent in real (i.e. constant) Euros. The many developing countries that buy their food imports in a currency linked to the U.S. dollar have seen prices jump much more than those that are more independent, or whose currencies are linked to the Euro instead.

What happened?

Price reflects a relationship between supply and demand, complicated by currency values and speculation on what the future holds. There are both supply and demand factors at work here.

Supply shortfalls are a normal part of agriculture. Historically, a supply shortfall triggers increased production through higher prices. The unique elements this time include a new demand on agricultural commodities from the biofuels sector, mounting stress on the quantity and quality of soil and water available, and the uncertainty of how climate change will affect growing conditions. There is also disturbing evidence to suggest that the past 50 years of steadily improving agricultural productivity might be coming to an end.

Important causes of the supply shortfall, from short- to longer-term, include:

Stocks: World food stocks have halved since 2002. The world is now estimated to have roughly two months reserve, which is the minimum cushion recommended by the FAO in case of supply disruption. Low reserves mean small changes in supply have a big effect on prices. Stocks-to-use ratios for grains have not been this low since 1972-1973; wheat reserves in particular have never been this low. Governments and private firms trusted that access to a global market under liberalized market access agreements could compensate for low stocks at home, so falling reserves did not immediately trigger higher prices, as they would once have done. When bad weather hit several of the major global suppliers simultaneously (and several years running), no one was prepared with an adequate cushion and prices started to climb—belatedly, but very quickly.



Drought: The World Food Program says drought is now the number one cause of food shortages worldwide. Last year, most of the major wheat exporters, including Australia, Argentina and the U.S., suffered weather-related crop problems.

Water: Irrigated agriculture accounts for almost 70 percent of world water use. Irrigated agriculture produces 40 percent of global food on 20 percent of the world's agricultural land. It is highly productive but often unsustainable. An estimated 1.4 billion people live in areas with scarce water supplies. A diet rich in meat and dairy products, common in most Westernized countries, puts a lot more stress on the world's water supply than a diet based on vegetable protein.

Climate changes: Climate change is affecting rainfall and temperatures—both vital to agricultural productivity. Even a 1-2° C change (a threshold most experts expect us to pass) will reduce food production in tropical and sub-tropical regions. Experts predict 75-250 million people in Africa will be affected by climate change, with agricultural production in some rain-fed regions losing half their potential by 2020. In Central, South and Southeast Asia, falling river levels will reduce irrigation and therefore output. The UN's Food and Agriculture Organization (FAO) estimates 65 countries—home to roughly half the world's people—will see cereal production fall due to climate change.

Production costs: Fertilizer, oil, pesticides and seeds are all getting more expensive. Fertilizer prices have risen more than any other commodity group (including oil) since 2007 and 2000 (i.e. in both the long and short-term). Oil price increases are behind much of the food inflation in developed countries and are hitting poor countries hard, too. Industrial agriculture is heavily dependent on oil, both on the farm and upstream, in globalized processing and distribution systems. Higher input costs have two big effects on hunger: they make it more expensive to produce food when it is urgently needed, and they exacerbate poverty in rural areas that are pursuing industrial agriculture by making it harder to improve net farm incomes.

Demand factors are also in flux, shifting the whole structure of agriculture with the widespread expectation that prices will stay higher, though likely not at their 2008 peak, for the foreseeable future.

Population: Each year, another 78 million people are added to the total population. Growth is tapering off, but the earth's population is expected to reach approximately 9 billion people before stabilizing in 2050.

Diet: More importantly, diets are changing. Each year, more people eat like rich Westerners. In other words, they eat too many calories (especially fat and sugar) and too many foods raised, processed and transported using too much water and energy. In developed countries, an estimated one-third to one-half of food is wasted, much of it thrown out in the household, by supermarkets or in restaurants whose portions are too large. Western diets create degraded ecosystems and result in bad health. The change in diet by the rich also makes the diet of the poor more expensive by reducing the land available for traditional staples, such as cassava, millet, wheat and local vegetables.

Biofuels: Biofuels (also called agrofuels) are liquid fuels made from plant matter. Most commercial biofuel today is made from sugarcane, corn, canola, palm oil or soy oil. Since 2006, demand for and supply of biofuels have both grown exponentially. In 2007, biofuels are thought to have consumed over seven percent of the global oil seed supply and about 4.5 percent of the global cereal crop. Estimates of how this demand has affected world food prices range from just a few percent to more than 70 percent. It is impossible to give an accurate number. Nonetheless, the expectation of continued growth in biofuel demand, supported by ambitious targets for use in the European Union and the United States, has triggered higher speculative prices in futures markets and expanded production of biofuel feedstocks, including on environmentally sensitive lands, such as peat bogs in Indonesia.



Markets mediate the relationship between supply and demand. The governance of markets has also been changing over the past 20 years. New trade, investment and commodity exchange regulations have played their part in the food price crisis.

Speculation: Agricultural commodities are traded on an exchange. Until recently, commodity exchanges (most of which are based in the U.S. or U.K.) were governed by laws that limited participation on the exchange to actors that actually needed to sell or buy commodities. This limited the level of speculative activity (when traders buy or sell trying to make a profit on the contract without any expectation of providing or taking delivery of any actual good). The laws now allow other traders. And commodity prices have been rising, attracting very large sums of capital from funds that are only interested in making money on the trades. In addition, markets tend to overshoot, rising higher and falling lower than actual supply and demand would warrant. The lack of stocks makes the markets more volatile. Commodity market prices directly affect how much food governments can afford to import and whether people get enough to eat.

Investment: Governments around the world have been liberalizing their investment laws. Many have reduced or eliminated laws that prohibit foreign ownership of land, for instance. Others have reduced demands on foreign companies to keep profits in the country, making it more attractive for foreign companies to invest. This has encouraged an increase in the use of agricultural land for export production. For example, European supermarkets fund suppliers to grow fresh horticultural products or feed, or to raise livestock to specific specifications in developing countries. This is in direct competition with the use of land for food for local markets.

Trade: Similarly, global and regional trade agreements have changed the way world prices affect domestic food markets. As trade barriers are reduced, world prices are more and more directly connected to national prices, although the two prices are not necessarily (or even often) the same. While global markets are often promoted as providing access to a global supply pool, they also create more global competition among consumers. Poor consumers inevitably lose the fight, allowing global forces to pull more and more land into producing fuel and feed rather than food.

What can be done?

A lack of global commitment. At the World Food Conference in 1974, governments pledged to eradicate child hunger in a decade. At the World Food Summit in 1996, governments settled for halving the number of people living with hunger by 2015. In 2000, governments made halving hunger one of the Millennium Development Goals. In 2008, not only are the world's governments failing to make headway on this objective, but the goal of halving the number of people living with hunger is now a lot harder because the food crisis revealed the fragility of the global food system. The proportion of Official Development Assistance flowing to support agriculture in developing countries dropped from 11.5 percent in the 1980s to about 3 percent in recent years.

We can and must do better. The failures are the result of political choices. We know how to practice more sustainable agriculture. We know how to better regulate markets. We know that food security must be built from a strong local base. We need a new food system, a system that respects the political, social, cultural and environmental—as well as the economic—importance of agriculture. A system premised on respect for the universal human right to food. A system that promotes environmental integrity, democratic sovereignty, and extra-territorial responsibility, and that gives priority to local needs and protects equity and justice in market exchanges. Change is already happening in communities from Bangladesh to Mexico to the Philippines to the United States. It is up to us to build on this change, calling for international and national policy that takes into account the needs of everyone on the planet, and that respects the limits of our ecosystems. Everyone has a stake in creating a fair, healthy and sustainable food system. Let's make the food crisis our opportunity to build a better world.

Further Reading

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- ♦ Global Policy Forum, "A New Era of World Hunger? The Global Food Crisis Analyzed," July 2008 http://www.globalpolicy.org.
- ♦ IFAD, "Soaring Food Prices and the Rural Poor: Feedback From the Field," Rome, 2008 http://www.ifad.org/operations/food/food.htm.
- ♦ Institute for Agriculture and Trade Policy, "The Real Tragedy Behind the Global Food Crisis," USA, May 2008 http://www.iatp.org/iatp/commentaries.cfm?refid=102865>.
- ♦ International Food Policy Research Institute (IFPRI) has produced a series of papers on diverse aspects of the food crisis. <www.ifpri.org>.
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- ♦ Santarius, T. & Sachs, W. "Slow Trade Sound Farming, a Report From the EcoFair Trade Expert Panel." Heinrich Böll Foundation and Misereor, Germany, 2007 http://www.ecofair-trade.org/>.
- ♦ Sharma, R. and Konandreas, P. "WTO Provisions in the Context of Responding to Soaring Food Prices," FAO Commodity and Trade Policy research Working Paper No. 25. FAO, Rome, July 2008 http://www.fao.org/es/esc/common/ecg/555/en/ESC-WP25.pdf>.
- ♦ The UN Secretary-General's High-Level Task Force on the Global Food Security Crisis, "Comprehensive Framework for Action," July 2008 http://www.un.org/issues/food/taskforce/docs.shtml.
- ♦ UN Food and Agriculture Organization (FAO), "World Food Situation: High Food Prices," http://www.fao.org/worldfoodsituation/wfs-home/en/.

For more on the food crisis, go to IATP's Trade Observatory at www.tradeobservatory.org.

This fact sheet was authored by Sophia Murphy, Senior Advisor, Institute for Agriculture and Trade Policy. ©2008

