



The Challenge of High and Rising Food Prices

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GLOBAL FOOD PRICES STAND AT levels not seen for almost 35 years. Do these prices foretell a world food crisis? When prices first peaked in mid-2008 there was a surge of news articles asking this question. Food riots erupted in every developing region of the world, including in Haiti, Cameroon, Egypt, Bangladesh, and Indonesia. The World Bank warned that 100 million people were at risk of being thrust back into poverty.¹ UN Secretary General Ban Ki-Moon set up a High-Level Task Force on the Global Food Security Crisis to provide a comprehensive long-term push to empower communities to become food secure. The leaders of the most important economies in the world put the issue on their agenda in G-8 (and later G-20) summit meetings.

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Despite food prices near 2008 levels and in some cases exceeding them, the big issue in 2011 is food price volatility. After collapsing during the global financial crisis, maize, wheat, and sugar prices have doubled or tripled over the last year, continuing a roller coaster of fluctuation that has unnerved farmers, consumers, and governments all over the world. To take one example, maize prices started rising rapidly from late 2006 through the beginning of 2008, collapsed by half or more between July and December 2008, and stayed flat through the recovery of 2009 and early 2010, before recording another spike in the spring of 2011. The price of maize has since fallen by about 10 percent.²

It seems clear that the debate has shifted away from the effects of high prices on hunger and food access toward problems associated with commodity price volatility and market imperfections. According to Google Trends, there has

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been no noticeable uptick in news stories about a food crisis in 2010 or 2011, unlike in 2008. True, there have been some claims that the Arab Spring uprisings were partly instigated by unhappiness over food prices, but the banners in Tahrir Square demanded dignity, fairness, and social justice—not cheap food. It is telling that the report prepared by the major international food agencies on behalf of the G-20 in mid-2011 focused on price volatility and not price levels.³

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The level of food prices and the degree of price volatility are both important issues that should receive attention from policy makers, but they are quite distinct. Food prices are different from other prices because food is a basic necessity of life. For poor households, food represents a sizeable fraction of their total consumption, often two-thirds or more, so high prices are felt acutely. High food prices can increase poverty for groups that are net food consumers, but they have broader effects as well. When people spend more on food, they have less discretionary income to spend on other items, leading to contractionary demand pressure elsewhere in the economy. If governments use subsidies to try to mitigate the impact of high food prices, the fiscal costs can become exorbitant.

The big difference between 2008 and 2011, however, is that developing countries are richer and better able to afford high food prices. The same economic forces that have boosted demand for food appear to have also improved incomes in poor countries. Strong growth in China, India, and other developing countries has contributed to a rise in the prices of many commodities, not just food. This has shifted global economic conditions in their favor, as most developing countries are net exporters of commodities, including food, and net importers of manufactures. Coupled with better domestic economic policies and leadership, the impact has been a large surge in incomes across the developing world.

This line of thinking is supported by data compiled by the International Food Policy Research Institute. In their recent report, “The Global Hunger Index of 2011,” they show a strong negative correlation between the degree of hunger and a developing country’s level of per capita income. Most developing countries have seen a surge in income growth over the last ten years despite the global recession. In 2011, the average purchasing power of an African is one-third higher than it was in 2005, when food prices started to rise. Even more rapid growth was observed in South Asia, the other region of the world where hunger is particularly prevalent. Of course, there are major exceptions: the



tragedy unfolding in the Horn of Africa is a clear reminder of the continuing severity of hunger and the risk of famine in several countries, but the consensus is that the causes of this catastrophe can be traced as much to conflict as to high global food prices. Among the countries that are at most risk of food shortages today are Afghanistan, the Democratic Republic of Congo, Somalia, and North Korea—countries mired in conflict-induced poverty.

Other indicators also suggest that access to food is actually improving, not worsening. The United States Department of Agriculture analyzed food availability in 70 developing countries and estimated that 882 million people should be classified as food insecure in 2010. This number, defined as those unable to afford roughly 2,100 calories per day, decreased by 7.5 percent compared to 2009. Largely, this is because grain production in 2010 in sub-Saharan Africa is estimated to be over 15 percent higher than in 2005. Notwithstanding these improvements, fully half of the region's population still does not have access to enough food.⁴

These trends suggest that the calamitous impact of high food price levels on poverty that many had feared simply did not come to pass, except in specific locations. There remains a large agenda to encourage producers and consumers to adapt to high prices, but the parameters of that agenda are reasonably well known. What is left is to implement the agenda on a large-enough scale to substantially decrease the prevalence of hunger.

Even more puzzling and of equal concern to policy makers is why food prices have become so volatile. Even short-term food price spikes and slumps can have severe long-term consequences. For example, food price spikes can compromise the nutritional status of poor people, making them vulnerable to disease. This is especially problematic for pregnant women and very young children. Early childhood malnutrition reduces the returns of schooling because severe undernourishment hinders motor, sensory, and cognitive development, leading to lower educational attainment and lifetime earnings.⁵

Conversely, the possibility of food price slumps is reducing investment in agriculture and making smallholder farmers reluctant to apply fertilizer, irrigate, or otherwise improve their land to raise yields.⁶ In extreme cases, as in India, farmers have been driven to commit suicide when low prices for their crops have left them indebted and unable to support their families.

Although price volatility is an inherent characteristic of the market for food, it seems to have become worse in recent years. Neither food demand nor supply responds much to changes in prices, so large price changes are needed to restore equilibrium in food markets after a shock to either supply or demand.



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Recently, extreme weather conditions in major food-producing countries, including droughts in Russia and China, and floods in Australia and South Africa, have affected global food supply. In addition, the increase in input costs—of, for example, fertilizers and pesticides—linked to higher oil prices also leads to supply shocks. On the demand side, policy decisions such as regulations to increase the biofuel content in gasoline have suddenly increased the demand for maize, sugar, and vegetable oils in unexpected ways.

Government policy has also played a role in exacerbating price volatility. Some food-importing countries panicked when prices started to rise in 2008 and increased their purchases to build domestic stocks and guard against even higher future prices. Other food-surplus countries tried to protect domestic markets by banning food exports. These actions simply exaggerated the global price cycles in the short term.

Food price volatility in the short term can also be explained by factors other than real supply and demand. The depreciation of the U.S. dollar and speculative investment in commodity index funds are financial mechanisms that can affect food spot and futures prices. Careful empirical analysis suggests that the most important determinants of volatility have been financial speculation and ethanol conversion.⁷

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POLICY ISSUES AND RESPONSES

Governments are faced with three important policy issues concerning food. First, they need to make food markets work better so that production can continue to grow to meet the demands of world population growth and high-protein diets. Second, they should try to limit the damage being done to food markets by domestic politics. Third, they should promote mechanisms to strengthen social stability by giving households and farmers more ways to insure themselves against future price shocks.

MARKETS

Food markets stand as an exception in a world that is rapidly globalizing. They are still compartmentalized and segmented into national and local markets. This is partly because of high storage costs and the considerable waste incurred when food markets become global. To some extent, it is also because local foods are fresher and more nutritious. But largely it is because of policy-induced barriers to trade. Average tariffs on agricultural trade are over 20 percent. Non-tariff barriers

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like safety standards, government procurement policies, subsidy policies, and export restrictions further segment food markets and limit their integration.

The evidence suggests that globalized markets actually have less volatility than local markets. For example, the Food and Agriculture Organization looked at food prices in 20 African countries and found that price volatility was lowest for the major internationally traded grains (rice and wheat) compared to domestic, traditional staples like cassava, sorghum, and millet. One reason is that there is little correlation between international food prices and domestic prices. The World Bank estimates that although international food prices rose by 40 percent between June 2010 and January 2011, food prices in developing countries rose by only 7.9 percent and that in most cases the pass-through from international to domestic food prices in Africa (the degree to which domestic traders mark-up their prices when international prices rise) is less than 20 percent. In Kenya and Nigeria, for example, local food prices fell from the start of 2009 to the end of 2010 even while global food prices rose. At other times, local food prices in these countries have risen and fallen while international prices have stagnated.

Markets work best when there is good information about the underlying fundamentals of supply and demand. But in many developing countries, and indeed globally, this information is poor. There are no protocols for reporting on stock levels; many countries do not even collect this information in a rigorous way as most stocks are in the hands of private traders. Nor is there a global early warning system to estimate the risk of large price swings. Although the G-20 countries have agreed to an agricultural market information system to improve the flow of information, it does not seem likely that this will be sufficiently comprehensive and credible to make a large difference in volatility.

Many countries have instead resorted to trade policies to try to stabilize domestic food prices. Typically, this would be an appropriate response: importing more when international prices fall below domestic prices and exporting more when international prices rise above domestic prices. Unfortunately, the actual practice is often the reverse. When international prices rose in 2008, food-surplus countries like Argentina, Russia, and India (in the case of rice) used quantitative trade restrictions to ban exports in order to divert supplies to domestic markets, driving domestic prices further below international prices. Conversely, many food-importing countries chose to lower import tariffs when international prices rose, aggravating the pressure on global supplies. Although there have been many proposals for more coordinated

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trade policy responses to improve the functioning of global food markets, it is unclear if countries would abide by international agreements if their citizenries objected to local price swings. A “beggar-thy-neighbor” attitude still prevails when it comes to food.

POLITICS

Most efforts to develop more coordinated international approaches to global food issues have foundered because of a lack of political will. The Doha Development Round of trade liberalization is perhaps the most obvious example. Although billed as a global effort to make international trade rules more favorable for developing countries, the negotiations have broken down with agricultural issues as a major sticking point.

Indian Commerce Minister Kamal Nath is famously said to have remarked “I can negotiate commerce but not farmers’ livelihood” in explaining his insistence on protecting a large group of special agricultural products and keeping a low threshold trigger, which could be activated to protect Indian farmers from import surges. His concern was that without such protections, global food prices could fall too low to allow for the development of rural India.⁸

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The same concern over low prices affected the U.S. negotiating position, which sought to preserve a high level of domestic subsidies for food crops despite their trade-distorting effects. It seems ironic at a time of global concern over high food prices that it should be worries about prices falling too low that have derailed international trade negotiations. Perhaps the real explanation is that negotiators were not so concerned with technical arguments, but were reacting to the political strength of the rural vote—a constituency that prioritizes policies that sustain high domestic food prices.

These same political pressures can be seen in the emerging programs for biofuel that have been identified as major contributors to higher food prices. Biofuels now account for around 6.5 percent of the world’s grain output and 8 percent of its vegetable oil. These subsidies may be domestically justified on the grounds of reducing energy dependence on imported oil, but the impact is similar to that of other agricultural programs that strive to reward farmers without increasing output, thereby ensuring high crop prices.

In almost every country, rural incomes are considerably lower than urban incomes, and governments look for ways to address this inequality. Supporting farm-gate crop prices is one of the easiest programs to narrow the rural–urban gap. In developing countries, such measures are politically appealing because



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they affect the large numbers of voters that continue to live in rural areas. In advanced countries, the appeal comes from the fact that the benefits to farmers are considerable while the costs to urban consumers are small, as food is a small share of household budgets. It is no wonder that the G-20 agriculture ministers could not reach agreement on any politically important topics when discussing what to do about the global food crisis. No action on biofuels, on trade, or on resources for increasing agricultural productivity was agreed upon.

SOCIAL STABILITY

Governments are now recognizing that the best way to address food security and hunger is not just through interventions in food markets, but also through long-term development. Hunger has more to do with conflict, lack of income, intrahousehold inequality, and lack of nutritional education than with food availability.

As countries develop, food security improves. That much is clear from self-reported data on food security collected by the Gallup World Poll. Gallup asked representative samples of over 1,000 people in each of 70 developing countries whether they have been unable to afford enough food or gone hungry in the past 12 months. It finds a large decrease in the number of people reporting themselves to be food insecure between 2005 and 2008, mostly in large countries like China and India. The reason seems to be that average income levels have risen substantially in these countries.⁹

In countries where growth has stagnated, governments have turned to other interventions. Cheap food has long been a central policy in Arab economies where subsidies have been institutionalized, but the cost of these has become unsustainable. Arab countries import over half their caloric intake, partly because of the waste induced by generalized food subsidies. In Egypt, it is estimated that 28 percent of food subsidies never reach their intended beneficiaries; the food is either resold on the black market or used as animal or fish feed. Untargeted subsidies like this benefit the rich far more than the poor.

Some developing countries have targeted safety nets that can be expanded when food prices rise. The most efficient way is to use cash transfers to affected households. But there are few such programs in the lowest-income countries or in rural areas. To be useful, the programs must be administered well enough to handle an increased scale, often with adjustments to the target population. They also should have good-enough financial accounts to manage cash transfers without corruption. And of course, households must be able to purchase food with



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the money they get; sometimes there is simply no food for sale in the market.

Where these conditions are not met, free food distribution along with other social services may make for a better safety net. The Vulnerable Group Development Program in Bangladesh is one such example, operating on a large scale where impoverished women can receive an allocation of wheat as long as they participate in training courses to improve their literacy, mathematical, and financial skills. Food-for-work and food-for-education (school meals) programs are other options that can be scaled easily. Ethiopia's Productive Safety Net workfare program reaches over 8 million rural residents and has been credited with avoiding the famine and deaths seen in neighboring Somalia as a result of drought.¹⁰

The issue with safety nets always comes down to money and organization, which many developing countries lack. Effectively targeting beneficiaries demands a good understanding of who is poor. Corruption can only be avoided with functioning payment systems. Administrative delays are inevitable without clear leadership and lines of accountability. Short-term safety nets can be provided to compensate for food price spikes, but in practice they are hard to put in place in many low-income countries.

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International financial institutions can help, but there is only so much they can do. The Global Food Crisis Response Program was established in May 2008 with \$1.2 billion from the World Bank Group, but those funds are now exhausted. Half the projects were small, totaling \$10 million or less.¹¹

A FORWARD-LOOKING ACTION AGENDA

What more can be done? Global cooperation on food is likely to remain limited and modest in scope for the near future, partly because food policy tends to be determined by domestic rather than international interests in rich and poor countries alike. Equally, safety nets can and should be expanded in developing countries, but the challenges of implementation are daunting. That leaves improving the market as the most promising path to pursue.

First and foremost, investments are needed to increase agricultural productivity, especially for smallholder farmers who serve local markets. Eighty-six percent of rural people worldwide depend on agriculture as a source of livelihood.¹² Estimates from the Food and Agriculture Organization reveal that in the developing world, agricultural production needs to grow by 100 percent to feed the growing population. Around \$83 billion is needed in developing countries to increase agricultural production, not including investments in roads



or electrification needed to increase production and get food to markets.¹³

Recognizing the importance of increasing productivity, a U.S.-led international fund, the Global Agriculture and Food Security Program, was launched in April 2010 to promote investments in agriculture. Unfortunately, few donor countries have lived up to their commitments. The fund is now struggling to find a few hundred million dollars after starting with a goal of mobilizing \$20 billion.¹⁴ It should be fully funded.

In too many developing countries, investment in agriculture is inadequate, market infrastructure is deteriorating, and little or no money is allocated for research and development. African agricultural productivity is only half that of India, a quarter that of China, and a fifth that of the United States. Ninety percent of African agricultural land is rain-fed rather than irrigated, so optimizing water intake cannot raise crop yields. Investments in mechanized power to till the soil would do wonders to raise yields, as would the application of fertilizer and better seed. Malawi is an example of a country that has achieved dramatic results by adopting such policies.¹⁵

Second, the link between food prices and oil prices needs to be broken. While oil prices were low and stable, food production became concentrated in a few major locations with yields boosted by petroleum-based fertilizers and pesticides. Crops could be easily transported to meet demand anywhere in the world. But with oil prices as high as they are now, transport, spoilage, and waste have become far more costly at the same time as production costs have risen. The food system needs to adapt to the new economics of energy by becoming more diversified and more localized. This would be efficient and potentially have significant nutritional benefits as well. Surprisingly, the organic, slow-food, go-local cooperative movement may find that market forces are its new best friend.

Third, international financial institutions must think about interventions that can be scaled up. There are still 3.1 billion people living in rural areas in developing countries—these are the most food insecure people. They are vulnerable to shocks from climate change, degraded natural resources, depleting common resources, land grabbing, and ill health. Their strategies revolve around diversifying what they grow and where family members work, and, to the extent possible, saving for a proverbial rainy day. Project-sized interventions cannot be expected to reach them all; systemic change is necessary.

To achieve this, smallholder farmers should be treated and supported like small businesses. They need to be integrated into producer supply chains

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to take full advantage of market opportunities and get the highest price for their products. They need new risk products such as weather index insurance and up-to-date information on local market prices transmitted through local and regional commodity exchanges. Farmer organizations can participate in research, innovate, understand modern scientific advances, educate members on best-practice growing techniques, and push for formal land rights and better local infrastructure.

The common thread through all these interventions is that, while food price volatility may be inevitable, food insecurity is not. There is a clear action plan to integrate more farmers into food markets and equip them with the resources and capacity to respond to price signals. It now needs to be implemented at a much larger scale. If markets instead of governments are allowed to smooth shocks across countries and over time, food price volatility does not have to be a concern for most people. The danger is that populist governments will take the opposite approach and try to regulate and restrict food markets. We would then continue to suffer both food price volatility and food insecurity, as we do today. 

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