The global food price crisis

In developing countries the poor spend upwards of 50% of their income on food – the poorest spend 80% or more. The increase in food prices has increased not just poverty, but also hunger. Some elements that have influenced the rise in agricultural commodity prices are, among others: scarce water supplies, production costs, droughts and climate change. We need a new food system, a system that respects political, social, cultural, and environmental rights as well as the economic importance of agriculture. Governments need to integrate respect for the universal human right to food in all economic policy planning.

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Starting in 2005 and peaking in July 2008, many agricultural commodity prices on world markets reached their highest levels in 30 years. In some cases the prices set new records. From March 2007 to March 2008, the price of rice went up 74%, and most of that in just a few weeks during March 2008. The price of wheat more than doubled, rising 130% during the same one-year period, March 2007 – March 2008. Then, as oil prices collapsed (from peaks of over USD150 a barrel in June 2008 back to USD 40 a few months later), agricultural commodity prices also fell on world markets. Nonetheless, as FAO and others continue to remind us, food prices have hardly fallen in many developing countries, and they remain higher than they were two or three years ago. In 10 countries the latest prices are the highest on record. FAO reports the persistent high prices are most evident in sub-Saharan Africa, where every country considered is facing rice prices far above those of 12 months before. Prices of maize, millet and sorghum are higher in 85% of African countries compared to a year earlier. Other regions, the article notes, are also affected, especially rice prices in Asia and maize and wheat in Central and South America.

The poor spend upwards of 50% of their income on food, while the poorest spend 80% or more. This makes the recent food prices increases unaffordable. The result is not just increased poverty (no money to spend on health care, education, a business venture or anything else), but also increased hunger, which means decreased productivity; stunted physical and mental development of fetuses, babies and children; and, ultimately, death. None of these deaths are inevitable. Consider that in 1966, one in three people faced chronic hunger. Almost 35% of the global population went hungry, day after day. By 2005, the number was closer to one in seven, at around 15%. This dramatic reduction in the incidence of hunger occurred as world population was growing rapidly – the net effect was to save billions of people from lives compromised by poor health and reduced mental capacity.

Chronic hunger is something we – governments, societies, community organizations, and citizens – can eliminate.

Why did it happen?
Price reflects a relationship between supply and demand; complicated by currency values and speculation on what the future holds. There are supply, demand and institutional factors at work.

Supply shortfalls are a normal part of agriculture. Typically, a supply shortfall triggers increased production through higher prices as more farmers are drawn to plant the crop that is fetching the higher prices. There is generally a lag (crops take time to mature) and often the supply response overwhelms the potential demand, so that there is a common pattern in agriculture whereby price spikes usher in periods of high supply and relative price depression, which last much longer than the price rise. This phenomenon is linked to what economists call ‘inelastic demand’: people must eat to survive, but once fed, look to spend their money elsewhere. The richer the people are, the smaller the share of their income they spend on food. This is also known as Engels’ Law, named for the famous 19th century economist who was the first to write about this behaviour.

In the 21st century, some things are a bit different. Not least, there is a new and theoretically unlimited source of demand for agricultural commodities coming from the biofuels sector, together with mounting stress on the quantity and quality of soil and water available and the uncertainty about how climate change will affect growing conditions. There is disturbing evidence to suggest the past 50 years of steadily improving agricultural productivity might be coming to an end.

These are structural changes that have dramatic implications for public policy to ensure food security and future agricultural production. If the food crisis is about short-term or reversible problems (e.g., a bad law, a need to emergency cash flows, a need to subsidize fertilizers) then governments will do very different things, than if the crisis is understood to be about more profound problems in food and agriculture systems.

The following is a quick review of the causes given for the sudden and dramatic increase in agricultural commodity prices. There is ongoing debate about how important each of these elements was and continues to be.

First, supply:

Water
Irrigated agriculture accounts for almost 70% of world water use. Irrigated agriculture produces 40% of global food on 20% of the world’s agricultural land. It is highly productive but the amount of water used is 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 developed countries and increasingly common in much of the global South, puts a lot more stress on the world’s water supply than a diet based on vegetable protein.

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 low stocks at home could be compensated for by access to a global market under liberalized trade agreements, 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 fast.

There is some discussion as to whether low stock levels were all that important. For instance, David Dawe at FAO suggests much of the drop was the result of China alone, which decided to run down its very considerable stocks to a more manageable level. Yet, it is possible to argue that the more China (which is home to more than 15% of the world’s population) depends on world markets, the more important a strong reserve becomes, because China alone needs so much food to maintain domestic food security. Dawe also points out that stocks of some crops, such as wheat, have been on a downward trend for decades. Here, too, though the question

1 The price increases were far more dramatic in nominal US dollars than in other currencies. Since 2002, world maize prices have risen 143% in nominal dollars, but only 37% in real (i.e., constant) Euros. The many developing countries that buy their food imports in a currency linked to the US dollar have seen prices jump much more than those that are more independent, or whose currencies are linked to the Euro instead.

Falling Climate change is affecting rainfall and temperature - less supply in world markets. Exporters, including Australia, Argentina and the US suffered weather-related crop problems. The result: Exporters, including Australia, Argentina and the US suffered weather-related crop problems. The result: Higher input costs make it more expensive to produce food and reduce net farm incomes in rural areas that depend on external inputs for their agriculture.

Drought

Droughts appear to be more frequent and more widespread today than at any time in recent history, exacerbated by desertification and deforestation, poor urban planning, and the overuse of groundwater supplies. In 2007, most of the major wheat exporters, including Australia, Argentina and the US suffered weather-related crop problems. The result was less supply in world markets.

Climate change

Climate change is affecting rainfall and temperature, both vital to agricultural productivity. Even a 1°C-2°C change (a threshold most experts expect us to exceed) 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 Organisation estimates 65 countries – home to roughly half the world’s people – will see cereal production fall due to climate change.6

Then, demand:

Population

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

Diet

More importantly, what people eat is changing. Each year, more people eat like rich Westerners. In other words, they eat too many calories, especially fat and sugar, and, they eat foods raised, processed and transported using too much water and energy. In developed countries, an estimated one half of food is wasted, much of it thrown out in the household, by supermarkets or in restaurants whose portions are too large.4 Western diets create degraded ecosystems and result in bad health. The change in what the rich eat 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. Considerable acreage has also been given to jatropha plantations, which is a plant rich in oil that can be used to make biodiesel. Since 2006, both demand and supply of biofuels have grown exponentially. Biofuels are thought to have consumed over 7% of the global oil seed supply and about 4.5% of the global cereal crop in 2007. Estimates of how this demand has affected world food prices ranges from 10% to more than 70%. The results depend on assumptions. 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 land, such as peat bogs in Indonesia and the Cerrado of Brazil.

Finally, a third element to consider is markets, which mediate the relationship between supply and demand. The governance of markets has changed considerably in the past 20 years. New trade, investment, and commodity exchange regulations have played their part in the food price crisis.

Speculation

Most agricultural commodities are traded on international exchanges. Until recently, commodity exchanges (most of which are based in the US or UK) were governed by laws that limited the participation of actors that did not intend to buy or sell physical commodities, but were only interested in price speculation. The laws thereby controlled the level of speculative activity. The laws were gradually changed starting in the late 1980s. In the grain exchange, for example, speculators had been limited to 11 million bushels of grains. In 2008, the two largest index funds had a combined position of more than 1.5 billion bushels. As regulations were relaxed, investment from speculators grew very fast, from USD13 billion in 2003 to USD260 billion in March 2008. Commodity market prices directly affect how much food governments can afford to import and whether people get enough to eat.

Investment

Governments worldwide have liberalized investment laws considerably since the advent of structural adjustment programmes and the proliferation of regional and bilateral trade agreements. Many countries have reduced or eliminated laws that prohibited foreign ownership of land; others have reduced demands on foreign companies to reinvest profits in the host country, reducing the potential benefit of the investment for the host country economy. Recently, there has been a pronounced increase in the lease or purchase of land abroad to grow food or fuel for re-export to the investing country or, where private firms are involved, for export to wherever demand dictates. For example, a London-based firm (Central African Mining and Exploration Company) has leased 30,000 hectares in Mozambique to grow sugarcane. In Kenya, the Government has signed a deal with Qatar to lease 40,000 hectares to grow fresh fruit and vegetables for export to Qatar. These deals increase pressure on land, water and infrastructure, and risk crowding out food production for local markets.

Trade

Global and regional trade agreements have changed the way world prices interact with domestic food markets. As trade barriers are reduced, world prices are more and more directly connected to national prices – they are not necessarily (or even often) the same, but they have a greater impact on domestic prices. Global markets are often promoted as providing access to a global supply pool. The unexamined participation of actors that did not intend to buy or sell physical commodities, but were only interested in price speculation. The laws thereby controlled the level of speculative activity. The laws were gradually changed starting in the late 1980s. In the grain exchange, for example, speculators had been limited to 11 million bushels of grains. In 2008, the two largest index funds had a combined position of more than 1.5 billion bushels. As regulations were relaxed, investment from speculators grew very fast, from USD13 billion in 2003 to USD260 billion in March 2008. Commodity market prices directly affect how much food governments can afford to import and whether people get enough to eat.

69% of Sudanese are living under the line of poverty, especially women at the grassroots level.

Niemat Kuku (Gender Research and Training Center, Sudan)
Structural causes
It is worth looking further at some of the issues that underlie the crisis. For example, there is widespread agreement on the need to invest on increased productive capacity. The proportion of Official Development Assistance flowing to support agriculture in developing countries dropped from 11.5% in the 1980s to about 3% in recent years. Domestic investment fell, too, especially in developing countries. This trend needs to be reversed and there are promising signs that is happening. But then the question remains: investment in what kind of productive technologies and systems? The U.S. Government, the Gates Foundation and a number of think tanks and private firms are pushing biotechnology as the way to increase output in developing countries. The slogan they have coined is: ‘A New Green Revolution for Africa.’ Yet the green revolution has already been tried in Africa. It failed. If the problem is seen as only one of technology and inputs, then the new efforts are doomed to fail as well.

The World Bank, among others, has been encouraging countries to liberalize fertilizer markets and even to subsidize (through national and donor resources) access to fertilizer and pesticides. This is not a model for sustainability. The policy also makes small producers dependent on purchased (and often imported) inputs, increasing their dependence on a cash economy and reducing their market power.

There are alternatives. For example, the potential for agro-ecology is enormous, and increasingly well-documented as well. In 1988, floods affected an area northwest of Dhaka in Bangladesh called Tangail. The Bangladeshi NGO Unnayan Bikalper Nitinirdharoni Gobeshona (UBINIG) [Policy Research for Development Alternatives], already working with weavers in the district, offered their help. UBINIG staff met women who complained that the pesticides used in agriculture were damaging their health and that of their children, and killing the uncultivated leafy greens and fish that they relied on for food. The villagers started work on a project to develop an agricultural production system that did not use chemical inputs. The project has grown and is now called “Nayakrishri Andolon,” which means New Agriculture Movement in Bengali. The movement involves over 170,000 farm households in fifteen different districts across Bangladesh. Some local governments have now declared their jurisdictions pesticide-free.5

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD), a four-year project that involved over 170,000 farm households in diverse ecosystems and to science and technology) must address the needs of small-scale farms in diverse ecosystems and to create realistic opportunities for their development where the potential for improved area productivity is low and where climate change may have its most adverse consequences.16

Oil and biofuels
Understanding the importance of oil as a central component of industrial agriculture helps to understand the deeper structural causes of the food crisis. In effect, the Green Revolution used plant breeding and technology to augment photosynthesis – the solar powered agricultural system that has fed humanity, and every other living thing on the planet, for all time – with fossil fuels. The Green Revolution relied on seeds bred to respond to higher levels of inorganic fertilizer and water. And it achieved extraordinary results, with significantly increased yields per plant. An earlier technological revolution had already replaced human and animal labour on farms with oil-driven machines. With the Green Revolution, fossil fuels also started to provide fertilizers, pesticides and electricity for irrigation pumps.

One implication of the growth in oil as a vital ingredient of food production is that agriculture has become a major source of greenhouse gas emissions. Another is that agriculture has become dependent on a finite resource. A third is that on-farm economics have been transformed with the replacement of inputs generated on farm (energy, seeds, fertilizers, pest control) with inputs that must be purchased. For many farmers, North and South, the purchased inputs are imported, making their price less predictable.

Recent numbers from the United States show increases in farm costs in 2007 and 2008 were the largest ever-year-over-year increases on record: USD 20.5 billion in 2007 and USD 36.2 billion in 2008. They are expected to fall to USD 22.7 billion in 2009, but is still 9% higher than in 2007. Fuel, feed and fertilizer prices all contributed to the significantly higher costs.

There is still a debate raging about the role of biofuels in the food crisis. No one denies that biofuels demand played a role in higher food prices, but how much and to what effect is still contentious. Higher prices for most farmers are a necessity. At the same time, the interests of poor consumers, including small farmers who are often net consumers of food, must be protected. But higher prices for farmers are only a part of the answer. The challenge is how to ensure a more equitable division of the value of commodities among farmers, processors and retailers. The challenge for policy-makers is to redress the disproportionate market power of food corporations.

Investments in land abroad
The food crisis has triggered a worrying phenomenon: an explosion of interest among investors in land purchases or leases abroad. The press has dubbed the phenomenon a land grab. The Barcelona-based NGO, GRAIN, listed in October 2008 some 180 proposed deals in their on-line review of the issue entitled, Seized! The 2008 land grab for food and financial security. International Food Policy Research Institute (IFPRI)’s report on the issue, published in April 2009, estimates 20 million hectares of land have been sold since 2006 in some fifty deals, mainly in Africa.7

The two big drivers are food security concerns and demand for biofuels. Net-food importing countries, such as Saudi Arabia and South Korea, do not trust that world markets are a sufficient guarantee of supply. Meanwhile, the mandates and targets for minimum incorporation of biofuels into energy policy, particularly in the EU and the United States, but also in countries around the world, has created a big interest among private investors in growing biofuel feedstocks (including soybeans, palm oil, jatropha for biodiesel; and, sugar cane and maize for bioethanol).

The deals are troubling from a number of angles. The power relationships are asymmetrical, with big firms and (mostly) richer countries dealing with small and often highly impoverished countries, many with weak institutions of governance. The host countries include Sudan, Pakistan, Ethiopia, Madagascar, and Zimbabwe. Some of the countries targeted for investment receive food aid from the World Food Programme, including Cambodia, Niger, Tanzania, Ethiopia, and Burma.10

The right to food
The General Comment on the Right to Food says: “the roots of the problem of hunger and malnutrition are not lack of food but lack of access to available food”.13 As a recent Institute for Agriculture and Trade Policy (IATP) report says, “The United States is food secure, but the Government fails to protect its people’s right to food. The US Department of Agriculture reports that some 11% of US households (and 18% of US children) lack access to adequate food at some point in the year. That statistic represents 12.6 million people. Yet, even after exports, the domestic supply of food in the US could feed everyone in the country twice over.”14

The report goes on to contrast the United States with Nepal, one of the world’s poorest countries, “Nepal is … taking steps to realize the right to food.

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12 Cotula, L., Dyer, N. and Vermeulen, S. (op. cit.).
A new Government, formed after the end of a decade of civil war, included the right to food sovereignty in their interim constitution. On 25 September 2008, the Supreme Court of Nepal, recognizing this right, ordered the Government of Nepal to immediately supply food to 32 food-short districts."

**What is the international community doing?**

In April 2008, UN Secretary-General Ban Ki-moon created a High-Level Task Force on the Food Crisis (HLTF). The stated purpose was to “promote a unified response to the challenge of achieving global food security.” The task force was meant to coordinate the UN and Bretton Woods agencies to create a collective response to the food crisis. The task force includes some 15 UN agencies, offices and programmes, as well as the World Bank, IMF and WTO. It lacks resources and it is not yet clear what role it can play.

The HLTF did produce the Comprehensive Framework for Action (CFA) in July 2008. The document reflects the strengths and weaknesses of its complicated composition: it does a good job of setting down the multiple causes that contributed to the crisis, and also makes some important recommendations. On the other hand, it also promotes macroeconomic policies that undermine its own recommendations. For example, it highlights the importance of investing in small-scale farmers. Indeed, if there is one lesson from the food crisis, starting with the World Bank’s *World Development Report* of 2008, it is the acceptance in multilateral discourse of the importance of a political voice for small farmers. The HLTF underlined this point. Yet it went on to urge governments to complete the Doha Round of multilateral trade negotiations, and supported more Aid for Trade funding. The Doha Agenda has virtually nothing to offer countries facing a food price crisis. The agenda is the product of another time, however recent, and looks increasingly out of place in the changed reality of tight commodity supplies, ambivalence about trade among major food exporters, and a serious credit crunch that is contributing to what the WTO expects will be the biggest contraction in global trade volumes since the Second World War.17

French President Nicolas Sarkozy came up with another idea, that of a ‘Global Partnership for Agriculture and Food Security.’ First aired during the June 2008 FAO summit on the food crisis, the idea was taken up by the G8 members in subsequent months and given a boost by the Government of Spain, which circulated a document called ‘The Madrid Process: Towards an Inclusive Global Partnership on Agriculture and Food Security’ just before the High Level Meeting on Food Security for All in Madrid in January 2009. This outlined a multi-stakeholder effort to increase the efficiency of the fight against hunger at both local and global levels.

The Global Partnership initiative has potential, but its direction remains unclear. The initial proposal by Sarkozy envisioned a far-reaching policy-oriented initiative which, in addition to generating new funding, would provide a space for governments to design a global strategy for food security based on guidance by an authoritative group of international experts. Discussions about this have tended to focus on increasing donor coordination while sideling the policy discussions. There is also disagreement about whether it would be taken forward primarily by the G8 or within the UN. To date, no corresponding calendar or indication of available financial support to facilitate the process have been identified.

**What more could be done?**

The failure to eradicate hunger is 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. New agricultural and food systems should promote environmental integrity, democratic sovereignty, extra-territorial responsibility; they should give priority to local needs; and they should protect equity as well as efficiency in market exchanges.18 There is no simple, single path to ending the food crisis and transforming the agricultural sector to protect people from hunger. Short, medium and long-term measures are all needed. Actions need to include a wide range of stakeholders. They need to look at a number of sectors, including agriculture, energy, finance, trade, the environment, and research and development. For quick results, controlling the pressure generated by the demand for biofuels (e.g., by ending biofuel targets or insisting on far tighter criteria where they receive public support), more and better humanitarian aid that gives priority to investment in local and regional productive capacity, regulating speculative demand in agricultural commodities futures markets, reviewing domestic restrictions on agricultural trade, and increasing agricultural production are all important possible actions.

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13 See: <www.un.org/issues/food/taskforce/).


15 For a critical perspective on the CFA, see also Foodfirst Information & Action Network (2008).

