

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

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High Food Prices: The What, Who, and How of Proposed Policy Actions

Executive Summary

The complex causes of the current food and agriculture crisis require a comprehensive response. In view of the urgency of assisting people and countries in need, the first set of policy actions an emergency package—consists of steps that can yield immediate impact:

- 1. expand emergency responses and humanitarian assistance to food-insecure people and people threatening government legitimacy,
- 2. eliminate agricultural export bans and export restrictions,
- 3. undertake fast-impact food production programs in key areas, and
- 4. change biofuel policies.

A second set of actions—a resilience package—consists of the following steps:

- 5. calm markets with the use of market-oriented regulation of speculation, shared public grain stocks, strengthened food-import financing, and reliable food aid;
- 6. invest in social protection;
- 7. scale up investments for sustained agricultural growth; and
- 8. complete the Doha Round of World Trade Organization (WTO) negotiations.

Investment in these actions calls for additional resources. Policymakers should consider mobilizing resources from four sources: the winners from the commodity boom among countries; the community of traditional and new donor countries; direct or indirect progressive taxation and reallocation of public expenditures in the affected countries themselves; and mobilization of private sector finance, including through improved outreach of banking to agriculture.

Because of countries' diverse situations, the design of programs must be country driven and country owned. Accountability for sound implementation must also rest with countries. At the same time, a new international architecture for the governance of agriculture, food, and nutrition is needed to effectively implement the initiatives described, and especially their international public goods components. Global and national action is needed, through existing mechanisms, well-coordinated special initiatives, and possibly a special fund.

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¹ The coauthors' titles appear on the last page of this paper. This paper was developed with the help of many colleagues at IFPRI. Bella Nestorova and Tolu Olofinbiyi provided excellent research assistance throughout the development of this paper. We greatly appreciate the input and comments of many IFPRI staff members, especially Ousmane Badiane, Antoine Bouet, Betina Dimaranan, Nick Minot, Siwa Msangi, David Orden, Miguel Robles, and Tingju Zhu. We gratefully acknowledge the peer reviews of an earlier draft of this paper by Sartaj Aziz (Pakistan), Eugenio Diaz-Bonilla (Argentina), Franz Heidhues (Germany), Per Pinstrup-Andersen (USA), and Harris Mule (Kenya), whose comments and critiques were extremely helpful.

I. Introduction

The sharp increase in food prices over the past couple of years has raised serious concerns about the food and nutrition situation of people around the world, especially the poor in developing countries; about inflation; and-in some countries-about civil unrest. Although the relative influence of various factors on global food price inflation remains somewhat open to discussion and debate, the underlying causes are increasingly well understood and noted at the highest policymaking levels. IFPRI drew attention to the problem early on and identified the main actions needed to prevent and mitigate the emerging crisis.² This paper aims to identify more specifically what needs to be done now. The set of policy actions, and in particular their sequencing, scale, adaptation to diverse regional and national conditions, and the arrangements for and governance of their implementation, need frameworks and clarity. Developing- and developed-country governments as well as international organizations have key roles to play in reducing and stabilizing prices by facilitating urgently needed trade and investment actions and in helping poor people cope with higher food bills through social protection. Some of these actions require global coordination in order to be effective.

Nearly every agricultural commodity is part of the rising price trend. Since 2003, world maize and wheat prices have more than doubled (Figure 1). The price of rice has jumped to unprecedented levels and doubled in the past four months alone. Dairy products, meat, poultry, palm oil, and cassava, among other agricultural commodities, have also experienced price hikes. Since the beginning of 2003, the prices of butter and milk have tripled and the price of poultry meat has almost doubled. When adjusted for inflation and the dollar's decline (by reporting in euros, for example), food price increases are smaller but still dramatic. What really matters for the poor, however, is the effect on their purchasing power. Some of this effect is reflected in the declining ratio of wages of unskilled labor to food prices. The high global agricultural prices do not appear likely to fall to their 2000-03 levels, and fluctuations may be even higher, according to the global scenario analysis of the International Food Policy Research Institute (IFPRI).³

The surge in food prices has been transmitted in varying degrees from international to local markets.⁴ For example, in Tanzania, 81 percent of the change in international maize prices between 2003 and 2008 has been captured by local price changes. In Indonesia, on the other hand, the transmission of maize prices is -5 percent in Jakarta and 32 percent in Surabaya. Similarly, in Ghana and the Philippines local rice prices have adjusted to around 50 percent of the world price change. The food price surge also has a direct impact on overall inflation because the weight of food in the consumption baskets is high. In Latin America, where the share of food in the consumer price index ranges from 23 to 50 percent, food inflation has reached double digits. Food price inflation has also picked up in China, where it now contributes to about 90 percent of overall inflation. In India the contribution of food price inflation to overall inflation has been less than 20 percent during 2007-08, yet it has created political concerns in the Parliament. India has used its subsidy, trade, and tariff policies to absorb much of the shock in global food and energy prices. The least-developed countries, however, many of which are in Africa, have fewer resources to respond in a similar manner.

National governments and international actors are taking various steps to try to minimize the effects of higher international prices on domestic prices and to mitigate impacts on particular groups. Some of these actions are likely to help stabilize and reduce food prices, whereas others may help certain groups at the expense of others or actually make food prices more volatile and seriously distort trade. What is needed is more effective and coherent action to help the most vulnerable populations cope with the drastic and immediate hikes in their food bills, to help developing-country farmers swiftly respond to the opportunity posed by the rising demand for their products, and to bring more stability to highly volatile food markets.

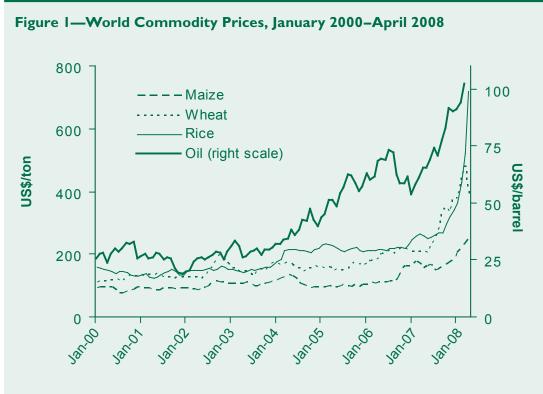
II. Sources and Features of the Price Increases

The combination of new and ongoing forces is driving the world food situation and, in turn, the prices of food commodities. Rising energy prices and subsidized biofuel production, income and population growth, globalization,

² See www.ifpri.org and, for example, Joachim von Braun, Mark W. Rosegrant, Rajul Pandya-Lorch, Marc J. Cohen, Sarah A. Cline, Mary Ashby Brown, and María Soledad Bos, *New Risks and Opportunities for Food Security: Scenario Analyses for 2015 and 2050*, 2020 Discussion Paper 39 (Washington, DC: IFPRI, February 2005); Joachim von Braun, *The World Food Situation: New Driving Forces and Required Actions*, Food Policy Report (Washington, DC: IFPRI, December 2007).

³ IFPRI's global scenario analysis is based on the International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT). This modeling activity is instrumental for IFPRI's outlook. It is directed by Mark W. Rosegrant.

⁴ Certain elements can prevent a perfect transmission of prices from international markets to local markets. Three forces are normally identified: (1) transportation cost and natural market segmentation; (2) domestic policies and discretionary market segmentation; and (3) imperfect transmission related to market structure and the existence of monopolistic/monopsonistic power. As a result the transmission of price changes from international to local markets varies between countries.



Sources: International commodity prices database of the Food and Agriculture Organization of the United Nations (FAO), 2008; International Financial Statistics database of the International Monetary Fund (IMF), April 2008.

Note: Although there is a strong correlation between food price levels and oil price levels, this is not the only forceful relationship. Other factors, such as high demand for food due to economic growth and lack of response in production, play a role in food price increases as well.

and urbanization are among the major forces contributing to surging demand. On the supply side, land and water constraints, underinvestment in rural infrastructure and agricultural innovation, lack of access to inputs, and weather disruptions are impairing productivity growth and the needed production response. Between 2000 and 2007, cereal demand exceeded cereal production, and cereal stocks have consequently declined. Demand for agricultural commodities for food, feed, and fuel is likely to continue to escalate. Climate change risks and rising energy demand could re-accelerate food prices in the future. Ad hoc market and trade policies such as export bans and import subsidies add further volatility in the international food market. It is important to keep in mind that the factors playing a role in the current crisis vary in nature-some are cyclical, some are structural, and some are unique-and can change, as shown by tales of previous commodity booms, like the one in 1974.

2. 1. Energy and biofuels

One key factor behind rising food prices is the greatly increased price of energy. Energy and agricultural prices have become increasingly intertwined (Figure 1). With oil prices at an all-time high of more than US\$120 a barrel in May 2008 and with the U.S. government and the European Union subsidizing agriculture-based energy, farmers have massively shifted their cultivation toward crops for biofuel. In the United States, as much as one third of the maize crop goes to ethanol production, up from 5 percent a decade ago, and biofuel subsidies range between US\$11 billion and US\$13 billion a year. In addition, the large agricultural subsidies in developed countries have for years distorted markets and undercut the competitive advantage of developing-country farmers.

Expanded production of biofuels such as ethanol and biodiesel has a strong effect on prices because biofuel production draws largely on agricultural products. Increased biofuel demand in 2000–07 is estimated to have contributed to 30 percent of the weighted average increase of cereal prices. Incorporating new developments in supply and demand as well as actual biofuel investment plans, IFPRI's IMPACT projects that real prices of maize and oilseeds in 2020 will be 26 and 18 percent higher compared with a scenario that keeps biofuel production at 2007 levels. These are conservative estimates that do not factor in speculation and triggered trade restrictions (export bans). Also, future oil prices will factor heavily in the actual price changes, because a higher oil price will increase demand for biofuels and put a further squeeze on food supplies, unless biofuel policies are changed.

High energy prices have also made agricultural production more expensive by raising the cost of inputs like fertilizers, irrigation, and transport of inputs and outputs. Whereas the share of energy in the cost of crop production is around 4 percent in most developing countries, it is between 8 and 20 percent in some large countries such as Brazil, China, and India.

2. 2. Income and population growth

Many parts of the developing world continue to face high population growth, and an increasing number of countries have experienced high economic growth in recent years. Developing Asia, especially China and India, continues to show strong sustained growth. Real gross domestic product (GDP) in the region increased by more than 9 percent a year between 2005 and 2007. Sub-Saharan Africa also experienced rapid economic growth of more than 6 percent in the same period. Even countries with high incidences and prevalences of hunger reported strong growth rates. With higher incomes, shifting rural-urban populations, and changing preferences, domestic consumer demand for food has increased. At the same time, the growing world population is demanding more and different kinds of food. Food consumption patterns are shifting from grains and other staple crops to vegetables, fruits, meat, and dairy, and this consumption cuts into land and water use for grains.

2. 3. Agricultural production

On the supply side, the global production response to rising demand has been slow. Production has grown only slowly in some traditionally grain-surplus and grain-exporting countries. Output declined in Australia owing to severe drought and stagnated in China, the European Union, India, and the United States. Some recovery is expected in 2008, but overall productivity growth in agriculture along past trends is simply too low to cope with the increase in demand. In most regions that have already reached high levels of production and trade, yields have been growing very slowly.

Typically, global agriculture supply increases by 1 to 2 percent when prices increase by 10 percent.⁵ In the new high-price situation, it is not clear how strongly farmers will

respond. Farmers in Brazil, China, and India may be able to respond quickly owing to relatively strong infrastructure, services, and government capacity. Farmers in Africa, however, may be left further behind. In some regions, such as Central Asia, Eastern Europe, and Russia, the current high grain prices are attracting substantial foreign direct investments combined with technical, management, and marketing assistance in the agricultural sector, but the production response has yet to be seen.

The production response to high prices is impeded by land and water constraints, as well as by underinvestment in agricultural innovation and deficient agricultural banking. Land available for cultivation is limited, and the cost of bringing new land into production (including the environmental cost) can be high.⁶ For instance, focus group discussions with farmers in Bangladesh in April 2008 reveal that even many marginal farmers and landless laborers have leased small pieces of land using cash that they borrowed at annual interest rates as high as 240 percent.7 And some of them borrowed cash from nontraditional moneylenders such as shopkeepers, friends, relatives, and neighbors. Some landless laborers temporarily migrated to cities to earn money as rickshaw pullers to pay for inputs such as irrigation water and fertilizers. The financing of such food security actions by the poor needs further attention, and an expanded role of microfinance for investment as well as for temporary consumption credit should be considered.

Climate change will pose further threats to agricultural production in the long term, and weather conditions are currently an increasingly critical factor for prices and farmer risks. Adverse climate conditions (drought, excessive rain, flood, windstorm, frost, hail, sunburn, snow; pest and disease attack; and fire) can significantly disturb production and deplete farmers' assets. There is a need for an innovative response to the age-old policy problem of how to safeguard smallholders against weather-related income shocks—one example is the new generation of weather insurance systems. Crop insurance schemes increasingly cover high-value agriculture products in some developing countries, but extending these schemes to cereals would stimulate investment in the small-farm sector and stabilize incomes.

Accelerated innovation is needed to address the challenges; research and guaranteed output prices will be of

⁵ Conclusions based on past analyses with data from the 1980s and 1990s must be interpreted cautiously because the elasticities should be expected to be non-linear.

⁶ It is questionable how much arable land is available in practice and at what cost for future agricultural expansion. According to the FAO, twice as much land as that currently farmed is available for rainfed production. Much of the potential land, however, is in practice unavailable (forests, protected areas, human settlements, and infrastructure) or difficult to cultivate. Compared with 1997–99, arable land is projected to increase by 15 percent by 2015 in Sub-Saharan Africa and 10 percent in Latin America and the Caribbean. It is projected to stay constant in East and South Asia (FAO, *World Agriculture: Towards 2015/2030* [Rome: 2003]). In certain developed countries, especially in Europe, if policies regarding "set-aside" lands are changed, a bigger supply response is possible. In certain developing countries, such as India, increased irrigation investments can increase agricultural production by raising cropping intensity.

⁷ Field observations by Akhter Ahmed (IFPRI) and DATA team, Dhaka, Bangladesh, April 2008.

critical importance for increasing yields. The South Asian Green Revolution experience shows that farm yields can double or even triple in a few years if modern seeds, irrigation, and fertilizers are combined with assured output prices. But growth in global public agricultural research and development (R&D) expenditures has slowed around the world and even declined during the 1990s in developed countries.

Favorable weather and rising agricultural production in the coming years could overcome the acute price crisis and allow for some rebuilding of stocks. It is also possible that production could overshoot demand, and policymakers should plan for the stabilization of food markets in this direction as well.

2. 4. Market and trade policy

Many countries are taking ad hoc steps, such as export restrictions and price controls, to try to minimize the effects of higher prices on their populations. As of April 2008, 15 countries,⁸ including major producers, had imposed export restrictions on agricultural commodities. For instance, China has banned rice and maize exports, and India has banned exports of rice and pulses. Argentina has raised export taxes on soybeans, maize, wheat, and beef, and Ethiopia and Tanzania have banned exports of major cereals. Among the countries imposing new or additional price controls are Benin, China, Malaysia, and Senegal.

These steps can add up to policy failures. Policy responses such as export bans or high export tariffs may reduce risks of food shortages in the short term for the relevant country, but they are likely to backfire by making the international market smaller and more volatile. Export restrictions have harmful effects on import-dependent trading partners. For example, export restrictions on rice in India affect Bangladeshi consumers adversely and also dampen the incentives for rice farmers in India to invest in agriculture, which is a long-term driver of growth. In addition, export bans stimulate the formation of cartels, undermine trust in trade, and encourage protectionism. At the country level, price controls can also backfire by reducing farmers' incentives to produce more food and diverting resources away from those who need them most.

Other countries have contributed to the expansion of global food demand. Some net food-importing developing countries, for example, have reduced import barriers—in principle a welcome move toward more open trade but in practice a factor in the upward pressure on prices. Morocco has cut tariffs on wheat imports from 130 to 2.5 percent, Nigeria has slashed duties on rice imports from 100 to 2.7

percent, Peru has removed import taxes on wheat and maize, and Senegal has waived duties on cereal imports.

The increases in food prices now have a dominant role in increasing inflation in many countries. It would be inappropriate to address these specific inflation causes with general macroeconomic instruments such as monetary and interest rate policies, which have the potential to trigger a general slowdown and make the economic situation even worse. But the restrictive agricultural trade policies adopted by several developing countries also undermine the benefits of global integration, adding to the distortions already created by rich countries' longstanding trade policies. Agricultural globalization is put in "reverse gear," with adverse effects for the poorest nations. The WTO Doha Round still needs to be completed, and it would be a damaging side effect if the current crisis were to divert attention from that goal. Rulebased, fair, and free international trade is particularly needed in times of crisis, as the export ban problems underline.

2. 5. Speculation and market fundamentals

Formation of the actual food commodity prices is a result of real market conditions of supply relative to demand, expectations of future prices, and speculative participation in the market (including manipulative interventions). Thus there are three categories of "speculators"-(1) governments, farmers, households, small traders, and others whose speculation is not a major factor under normal conditions, but whose actions can add up to have large effects in a price crisis; (2) commercial traders who are hedging in futures markets and providing a useful risk management function; and (3) noncommercial traders who are seeking profits through speculation. Supply and demand fundamentals do not fully explain the recent drastic increase in food prices. Rising expectations, speculation, hoarding, and hysteria are among the additional factors that have played a role in the increasing level and volatility of food prices.

Yet speculation is mainly a symptom, not a major source of the current price crisis. The so-called speculators, as broadly defined here, actually include governments that react in excessively precautionary ways, small and large traders, farmers, and consumers that hedge informally and build up some storage. In Bangladesh, for instance, rice traders started releasing their speculative paddy (unhusked rice) and rice stocks in April 2008 in the market mainly in anticipation of a very good upcoming Boro paddy harvest and in response to the government's plans to build up its stocks by procuring a large quantity of Boro rice as it is harvested and as rice imports arrive.⁹

⁸ Argentina, Bangladesh, Bolivia, Cambodia, China, Egypt, Ethiopia, India, Kazakhstan, Malaysia, Pakistan, Russia, Tanzania, Vietnam, and Zambia.

⁹ Although India promised to export rice to Bangladesh earlier in 2008 despite its recently imposed ban on rice exports, the imports from India have yet to arrive.

The flow of speculative capital from financial investors into agricultural commodity markets has been a factor too. In the first quarter of 2008, the volume of globally traded grain futures and options increased by 32 percent compared with the same period in 2007.¹⁰ The possibility cannot be excluded that "hot money" from the collapsing housing market has found its way into commodity markets, including the market for food futures. But there is no precise information on or analysis of the impact of speculative funds on food prices.

Low levels of stocks and ill-designed public policies foster speculation by many actors. Excessive speculation in the commodity futures market could, in principle, push up futures prices and spot prices (through arbitrage opportunities) above levels justified by fundamentals. Speculation is sometimes confused with hedging against risks, however, which stem from genuine concern about future supply and demand. Although commercial traders mainly enter into future markets for hedging purposes, noncommercial traders mainly speculate in search of financial profits.¹¹ The latter is not necessarily harmful because it indicates some investment opportunities in the agricultural sector. The countries imposing export controls, however, are indirectly harming the operational efficiency of the futures markets. In addition, in some countries, such as India, political forces are demanding that several agricultural commodities be suspended from futures trading.

Grain reserves could be used to prevent speculative attacks and correct for the misalignment between the underlying physical market and the futures market. Global cereal stocks, however—especially wheat—are at their lowest levels since the early 1980s.

III. The Impacts of High Food Prices on the Poor

Higher food prices have radically different effects across countries and population groups. At the country level, countries that are net food exporters benefit from improved terms of trade, although some of them are missing out on this opportunity by banning exports to protect consumers. Net food importers, however, struggle to meet domestic food demand. Given that most countries in Africa are net importers of cereals, they are hard hit by rising prices. At the household level, surging and volatile food prices hit hardest those who can afford it the least—the poor, including the 160 million ultra poor, who have incomes of less than half a dollar a day, and the food and nutrition insecure. The few poor households that are net sellers of food benefit from higher prices, but households that are net buyers of food are harmed. The net food buyers represent most of the world's poor and include the overwhelming majority of the urban poor. Adjustments in the rural economy through wages and capital inflows, which can create new income opportunities, will take time to reach the poor and vulnerable. Also, there is a real risk that large numbers of vulnerable people who had managed to escape absolute poverty in recent years will be unable to cope with the shock of rapidly rising food prices and will fall back into poverty.

Progress toward achieving the poverty and hunger Millennium Development Goal is compromised for some time to come. Progress on the goal of cutting hunger in half was disappointing even before the price increases set in. Three malign effects are of particular concern: (1) deterioration of the nutritional status of pregnant and lactating women and of preschool children; (2) the withdrawal of children, especially girls, from school; and (3) the distress sale of productive assets. All three have potentially irreversible consequences and compromise the future ability of individuals and households to escape poverty. For example, malnutrition that leads to stunting in preschool children directly affects their ability to learn in school and thus their ability to earn income as adults.

The food security and nutrition of the poor are at risk when they are not shielded from the price rises. Higher food prices lead poor people to limit their food consumption and shift to even less-balanced diets, with potentially harmful effects on their nutritional status and health in the short and long run. At the household level, it is common for the poor in developing countries to spend 50 to 70 percent of their budget on food, and a large proportion of the food budget on staple foods. Further, the poor tend to have remarkably monotonous diets, getting the vast majority of their caloric intake from staple crops and consuming little in the way of animal-source foods, fruits, or vegetables, which are rich in essential micronutrients.

Because of their economic circumstances, poor households are more responsive to changes in food prices than the wealthy, but there are variations across countries in the magnitude of this sensitivity. In Bangladesh rice accounts for 30 percent of total household expenditures and 48 percent of total food expenditures of the poor, which gives few options to adjust. In Vietnam the majority of the poor are found in rural areas, but because land holdings are relatively equitable, the adverse effects of higher rice prices in rural Vietnam are largely offset by the increased incomes these households receive for their rice production. By contrast, in Malawi,

¹⁰ Chicago Board of Trade (CBOT), A Global Trading Summary of Grain and Oilseed Markets (Chicago: March 2008).

¹¹ In the past six months, the total number of long positions (that is, obligations to buy) by noncommercial traders as a fraction of the total reportable long positions by commercial and noncommercial traders for maize, wheat, soybeans, and rice has significantly increased, suggesting the possibility of a price bubble above what is justifiable by market fundamentals.

Zambia, and most Central American countries, higher maize prices adversely affect the poor in both urban and rural areas because even in rural areas, the poor tend to be net consumers of maize. In Nigeria poor or even lower-middleincome households are consuming less meat, rice, and maize and more cassava and yam as a response to the current food price increase. Overall, as prices continue to rise, the poor will experience a worsening of dietary quality and micronutrient intake, and the very poor will also experience decreased caloric intake.

Higher food prices not only lead to the deterioration of diets, but also significantly erode households' purchasing power. This loss affects the purchase of other goods and services essential for the health and welfare of household members, including heating, lighting, water, sanitation, education, and health care, all of which are important inputs into nutrition. The choices of coping mechanisms that poor households make will ultimately determine the severity of the impact of high food prices on their livelihoods and on the well-being of their members in the short, medium, and long term. Similarly, their access to social safety nets and other social protection schemes will also be a key determinant of the level of suffering they will experience. Productive safety nets that combine social transfers with production, such as public works, in many countries still reach only a small proportion of the poorest population. Ethiopia's safety net program, for example, which reaches 8 million people, covers approximately 25 percent of the poor. In Bangladesh-a country where 25 percent of the population is ultra poorroughly 7 percent of the population has access to social protection or safety net programs.

People not only passively respond to food price inflation, but also increasingly turn to street protests and riots. The poorest suffer silently for a while, but the middle class typically has the ability to organize, lobby, and protest early on. Between early 2007 and May 2008, social unrest related to high food prices occurred in 30 countries.¹² Food price inflation has become a sensitive political and security issue.

IV. Proposed Policy Actions

The complex causes of the food and agriculture crisis require a comprehensive response. This situation calls for an international pact to achieve food and nutrition security with elements of global, regional, and national actions, all of which have shorter- and longer-term dimensions and need adequate sequencing. The actions proposed here are derived from the preceding analyses of the causes and consequences of the price increases and thus aim to address the acute human consequences of suffering among the poor and the current and past policy deficiencies that created and accelerated the crisis.

The obvious signals of the crisis are the drastic price increases and riots. That "information" is not enough, however, to point the way to sound policy actions. Governments and affected people need to be informed about the causes and implications of the current and emerging situation. The current developments have brought to the forefront the importance of food information systems. Appropriate monitoring mechanisms at the global, regional, and national levels will facilitate better responses. Such information must be available for decisionmakers on a regular basis and not only when a perceived problem has actually become acute. Although the urgency of the current food situation does not permit decisionmakers to wait for comprehensive information systems to be established before acting, coordinated information collection and sharing is needed to facilitate action.¹³

Although the current situation poses policy challenges on several fronts, there are effective and coherent actions that can be taken to help vulnerable people through humanitarian aid, trade, investment, and social protection policies. Some of these actions require international coordination, including the attention of the G8+5,¹⁴ to work.

In view of the urgency of assisting people and countries in need, the policy actions suggested here are listed in two sets: an emergency package of actions to take immediately and a resilience package of actions to phase in now but whose impacts may take time. These actions do not mix general development policy agendas with the needed response to the current food price crisis, but actions that promise longer-term impact are nevertheless highly relevant. A focus on short-term crisis mitigation alone would fail to address the root problems and to bring the needed resilience into the food system.

This approach leads to eight major actions, all of which require immediate attention but whose impacts on the poor, on agriculture, and on the economy as a whole will differ

¹² Argentina, Bangladesh, Burkina Faso, Cameroon, China, Côte d'Ivoire, Egypt, Ethiopia, Guinea, Haiti, Honduras, India, Indonesia, Italy, Jordan, Madagascar, Malaysia, Mauritania, Mexico, Morocco, Mozambique, Pakistan, Philippines, Senegal, Somalia, South Africa, Trinidad and Tobago, United Kingdom, Uzbekistan, and Yemen.

¹³ Such monitoring systems would include basic food consumption information, such as the prevalence of people forced to move from three meals a day to two or one; standardized household accounts (by rural and urban household groups and income classes) that can be used to assess price and income shocks; child weight-for-height information, which can indicate already acute problems; and expected crop production and changes in stocks.

¹⁴ These are the Group of Eight countries (Canada, France, Germany, Italy, Japan, Russia, the United Kingdom, and the United States), plus the five leading emerging economies (Brazil, China, India, Mexico, and South Africa).

over time, ranging from immediate to future impacts. The first set of actions—the emergency package—will address immediate needs for food assistance and increased food availability. The second set of actions—the resilience package—will address the need to build a more resilient food system that can meet ongoing and future challenges.

The eight policy actions proposed are the following:

A. The emergency package

1. Expand emergency responses and humanitarian assistance. An urgent global response must include increased resources for humanitarian agencies. World preparedness to take action on food price crises must be improved. National emergency agencies typically respond to natural disasters and complex humanitarian emergencies but not to slow-onset disasters like this price crisis. This pattern must change. Emergency agencies need to adopt triggers that will activate them under crises like the current one. They need to invest more in preparedness and mobilize their often strong capabilities to monitor and assist the population groups that need to be targeted. National emergency agencies also need to collaborate with organizations that deal with chronic food, agriculture, and nutrition issues at the national level, similar to the effort now being pursued by the United Nations to improve global cooperation on food issues, with an important role for the World Food Programme (WFP). Given the nature of the price crisis, decisionmakers must give due attention to the urban poor. Food or cash transfers should be expanded and should target the poorest people, with a focus on early childhood nutrition, regions in distress, school feeding with take-home rations, and food and cash for work. Nongovernmental organizations (NGOs) and civil society organizations have an important role to play in the related actions.

What could be expected from these measures? Targeted transfers will protect the food consumption levels of people served by existing programs. Increased funding would prevent further deterioration of food and nutrition security and increase

Who would be the key actors? The UN, donors (for financing), humanitarian agencies, NGOs, and civil society organizations.

emergency preparedness.

Where is this action most relevant? Sub-Saharan Africa, Asia, and Central America and the Caribbean.

2. Eliminate agricultural export bans. The export bans among developing countries have created a new trade policy theater (see Section 2.4). Governments have a legitimate interest in caring for their citizens first. Hence there should be no illusion: the problem of export bans cannot be addressed country by country. Although the new wave of export restrictions requires urgent international attention, this issue should not be added to the WTO Doha Round. Instead, it should be addressed by an ad hoc forum of global players negotiating according to a code of conduct and in a spirit of mutual trust building. At the very least, export trade for humanitarian purposes should be reopened now even before a forum is convened.

What could be expected from these measures? The elimination of export bans will stabilize grain price fluctuations, reduce price levels by as much as 30 percent,¹⁵ and enhance the efficiency of agricultural production.

Who would be the key actors? G8+5 and subregional organizations.

Where is this action most relevant? Global impact; Asia, Sub-Saharan Africa, and Central America.

3. Undertake fast-impact food production programs in key areas. Short-term action to promote agricultural growth requires access to seeds, fertilizers, and credit for the small farm sector—in other words. the traditional "Green Revolution" package (see Section 2.3). Today, good seeds for rainfed agriculture, especially in Africa, are essential for expanding production. Also, small farmers should have access to procurement programs for their agricultural products at guaranteed minimum prices that reflect long-term international market prices.¹⁶ Carefully subsidized programs for seeds, fertilizers, irrigation, electricity, and water should involve the private sector from the beginning and facilitate a transition from initial "crash programs" to marketbased arrangements. Such subsidized programs should be focused on and limited to least-developed countries. The timing of these actions is crucial for

¹⁵ These IFPRI modeling results from the MIRAGE model should be taken as a conservative estimate. IFPRI models factor in neither speculation over and above market fundamentals nor the increased price impacts of any quantity change in the much narrower international market.

¹⁶ This procurement should not involve support pricing of a protectionist nature, but rather assurance of stable output prices.

achieving a rapid production stimulus for smallholder agriculture and the small business sector serving agriculture. Banking and finance are also critical for success. These short-term programs should have clearly defined and communicated exit strategies.

Even though the production response should be quick, it needs to be driven largely by higher yields rather than area expansion (see Section 2.3). Programs that set aside agricultural resources in industrialized countries, except in well-defined conservation areas, should be terminated where this has not already been done.

What could be expected from these measures?

Fast-impact production programs would jump-start agricultural growth in the short term, create incomeearning opportunities in the crisis, and lower prices.

Who would be the key actors? Donors, regional organizations such as the African Union and the New Partnership for Africa's Development (NEPAD), NGOs, and civil society organizations.

Where is this action most relevant? Sub-Saharan Africa and some selected Asian countries.

4. Change biofuel policies. A range of measures should be considered to make more grains and oilseeds currently used for fuel available for food and feed. These measures include freezing biofuel production at current levels, reducing it, or imposing a moratorium for biofuels based on grains and oilseeds (that is, temporarily suspending the use of grains and oilseeds for biofuel production) until prices come down to reasonable levels according to long-run supply and demand. Such a moratorium is not costless; it might require compensating investors that were led into this fast-expanding sector as a result of current policies. At the same time, more support should go toward developing bioenergy technologies that do not compete with food.

What could be expected from these measures? A grain-based biofuels moratorium would quickly unlock grains and oilseeds for food. This measure might bring maize prices down by about 20 percent and, as a consequence, decrease wheat prices by about 10 percent.¹⁷ Price reductions could also be generated by removing blending mandates, import tariffs, and

biofuel blending subsidies in the United States and Europe.

Who would be the key actors? Countries in the Organization for Economic Cooperation and Development (OECD) and others that have moved heavily into grain- and oilseed-based biofuels.

Where is this action most relevant? Global impact; Asia, Sub-Saharan Africa, and Central America.

B. The resilience package

5. Calm markets with market-oriented regulation of speculation, shared public grain stocks, strengthened food import financing, and reliable food aid. Speculation is mainly a consequence, not a cause, of the price crisis, so overregulation and market policing would be inappropriate responses. Surveillance and regulatory measures, however, such as monitoring speculative capital or limiting futures trading,¹⁸ should be taken to curb excessive speculation in agricultural commodity markets.

Under the current tight market conditions, it is infeasible to accumulate a global stock of grain that would bring the desired calming effect into the markets. The needed incremental supply is missing. Agreements on joint pooling of fixed portions of national stocks at the regional or global level would seem feasible, however. A coordinated set of pledges for a modest grain reserve to be made by the main grain-producing countries (including coordinated releases from the reserve for regional emergencies when prices increase excessively over what market fundamentals indicate) should be established at global or regional levels. A global intelligence network should inform the management of these international coordinated reserves.

The Food Aid Convention should be renegotiated and reformed, while current grain delivery and cash commitments should be expanded. An accompanying option could be a finance facility, provided by the International Monetary Fund (IMF), for imports by countries in food emergencies.

What could be expected from this initiative? The pooling of global or regional public stocks, complemented by an import-financing facility, would allow countries with greater food deficits in a particular

¹⁷ These are conservative estimates; in a tight market the price decrease will be greater.

¹⁸ Policymakers could set maximum limits on trading positions, increasing the margin deposit requirements to minimize speculative capital.

region to gain access to food supplies at reasonable and stable prices in times of crisis. It would also help contain the speculative expectations that fuel further price rises during the upswing. But such reserves have costs, depending upon their size, which need to be carefully weighed against potential benefits.

Who are the key actors? The IMF, OECD countries, subregional organizations, and commodity exchanges.

Where is this action most relevant? Asia (for rice), Latin America, Sub-Saharan Africa, North Africa, and the Middle East.

6. Invest in social protection. Comprehensive social protection initiatives are required to address the risks facing the poor due to reduced access to food as a consequence of high prices (see Section III). A hierarchy of appropriate social protection interventions includes both protective actions to mitigate short-term risks and preventative actions to preclude long-term negative consequences. Introducing or scaling up these interventions is complex, associated with substantial costs, and dependent on knowledge base and capacity.

At the core of the protective actions are conditional cash transfer programs, pension systems, and employment programs. These programs exist in many low-income countries and should be scaled up. Where such interventions do not exist, targeted cash transfer programs should be introduced in the short term. If food markets function poorly or are absent, however, providing food is a better option than providing cash.

Microfinance, which includes both credit and savings, is also advisable to permit the poor to avoid drastic actions such as distress sales of productive assets that can permanently damage their future earning potential. The large global networks of microfinance institutions should consider responding to the price crisis by temporarily loosening repayment conditions, as the poor need access to food consumption credit and debt relief.

Preventative health and nutrition programs targeted to vulnerable population groups (such as mothers, young children, and people living with HIV/AIDS) should be strengthened and scaled up to ensure universal coverage. This measure is essential to prevent the long-term consequences of malnutrition on lifelong health and economic productivity. In addition, school feeding programs can play an important role in increasing school enrollment, retaining children in school, and enhancing their academic achievement. Interventions should be coordinated with the emergency actions already mentioned (action 1). Many of these actions must take place at the national level, but many countries lack the resources to implement them. Donors should expand support for such programs in conjunction with sound public expenditure reviews.

What could be expected from these measures? These steps can prevent the long-term adverse consequences of early childhood malnutrition, protect the assets of the poor, and maintain school participation rates.

Who would be the key actors? The UN, national governments, donors, NGOs, and civil society organizations.

Where is this action most relevant? Asia, Latin America, Sub-Saharan Africa, North Africa, and the Middle East.

7. Scale up investments for sustained agricultural growth. To transform the crisis into an opportunity for farmers and to build resilience to future food crises, a transition to viable long-term investments in support of sustained agricultural growth is urgently needed. Such investments are particularly needed in view of the emerging stress factors for agriculture from climate change that threaten to perpetuate the current crisis. Investments for sustained agricultural growth include expanded public spending for rural infrastructure, services, agricultural research, science, and technology.

New and innovative crop insurance mechanisms should be introduced and tested at a larger scale. Information technology, improved weather data, and the expected high returns to insurance make innovation in this field now much more feasible.

Developed countries should facilitate the sharing of agricultural innovation and research that are relevant to enhancing productivity and transforming small-farm agriculture. A scaled-up Consultative Group on International Research (CGIAR) has a key role to play in expanding global and national agricultural research systems geared to poor smallscale farmers.

The recently expanded investments in agriculture in, for instance, China and India must be sustained at high levels. Also, African leaders must implement their commitment to allocate 10 percent of their budgets to agriculture as soon as possible in order to achieve much-needed agricultural growth to meet poverty and hunger reduction targets. The needed supply response is not just a matter of the farm-level expansion of production, but must comprise the whole food value chain, with private sector actors in the food-processing and retail industries playing key roles. New—and much broader—concepts of corporate social responsibility are called for.

What could be expected from these measures? These investments would have high returns not only in terms of agricultural growth, but also in terms of poverty reduction in both rural and urban areas through increased production and employment and lower food prices.

Who would be the key actors? Donors, regional organizations, OECD countries, foundations, and the private sector.

Where is this action most relevant? Asia, Sub-Saharan Africa, and Latin America.

8. Complete the WTO Doha Round. The completion of the WTO Doha Round is even more relevant in times of high food prices in order to strengthen rule-based trade. A world short in supply and facing regional and country-specific fluctuations needs more options to trade, not less.

It should be easier for countries to agree to lower agricultural tariffs when market prices, especially for sensitive commodities, are high. With high global food prices, there may be no need to provide large domestic support or export subsidies to farmers in developed countries. The EU has already eliminated its applied tariffs on cereals, but it has not yet decreased its bound tariffs, which means that there is no certainty about these levels in the long term. Similarly, U.S. farmers are holding tight to low loan rates and countercyclical payment programs despite the fact that they are projected to benefit little from them in the coming years. Policymakers in developed countries want to keep their options open in case prices fall. The current food situation should be viewed, however, as an opportunity to introduce major changes in the agriculture negotiations pertaining to market access, domestic support, and export subsidies.

What could be expected from these measures? If these opportunities are realized, they would lead to more fair and open trade, more efficient resource use, and higher welfare for people in developing countries. They would also have a stabilizing effect on agricultural prices and help prevent future crises.

Who would be the key actors? The WTO and OECD countries.

Where is this action most relevant? Global impact; Asia, Sub-Saharan Africa, and Latin America.

V. Resource Mobilization and Implementation

The humanitarian, economic, political, and security benefits of the proposed actions are huge and can hardly be calculated in monetary terms. This brief therefore makes no attempt to compile the costs of these needed actions. The pledges so far made by international agencies, however—as significant and important as they are—seem far below the needs, especially for the actions outlined under the "resilience package."

Investment in these actions calls for additional international resources and reallocation of resources at the national level. More international development assistance is needed to implement actions in low-income countries that lack both strong implementation capacity and resources for transfers to the poor and for investment. And where should these additional resources come from? Four domains should be considered for resource mobilization:

- 1. The countries that are large winners from the commodity boom should be confronted with the ethical call to share their new wealth with the poorest. Although such a step is partly a call for charity, it is also a sound use of capital for long run investment. These winners include not only oil- and mineral-rich countries, but also countries rich in agricultural export potential.
- 2. The community of wealthy donor countries—traditional and new—should expand their development assistance for agriculture, food, and nutrition along the action agenda described.
- 3. Within the affected countries—even low-income countries—budget reallocation and appropriate direct or indirect progressive taxation is needed to finance the mitigation of the impacts of the price crisis on the poor.
- 4. Most of the investment needs in agriculture will require mobilizing private sector finance, including through improved outreach of banking in rural areas, which requires additional support by public finance.

Implementation of the proposed actions requires global and regional cooperation. The ultimate responsibility for responding to high prices rests at the national level. Because of countries' diverse situations, the design of programs must be country driven and country owned, and accountability for sound implementation must also rest with countries. Especially at the country level, prioritization and sequencing are crucial for successful implementation of these eight action points.

The current organizational setup for agriculture, food, and nutrition at the international level has failed to prevent the crisis. A new international architecture for governance of agriculture, food, and nutrition is needed in order to effectively implement these initiatives, and especially their international public goods components.¹⁹ Such a new architecture needs to explicitly engage the new players in the global food system—the private sector and civil society, including large foundations—together with national governments and international organizations such as the UN agencies. One approach might be to establish a superstructure (for example, a panel appointed by the UN leadership) to guide changes across the existing specialized institutions and organizations and their partners.

Countries with leading roles in the global agricultural system—which now go beyond the United States and European countries to include Brazil, China, India, and others—must be involved. Indeed, leadership could well come from the developing countries, and not just the largest ones.

Within governments, more structured networks could be created between institutions. Such steps are beginning to be taken in some fields, such as public health, but not much yet in the areas of food, agriculture, and nutrition. There is scope to form innovative government networks and strengthen government-to-government systems for decisionmaking in agriculture, food, and nutrition.

Although governance reform for agriculture, food, and nutrition needs to be on the agenda as part of the described "resilience package," the acute situation does not permit decisionmakers to wait for such reform. Global and national action is needed now, through existing mechanisms, wellcoordinated special initiatives, and possibly a special fund.

VI. Outlook

Continued population growth, expanding demand due to income growth, and emerging climate change point to the future challenges for agriculture production. Without deep action now, the current food price crisis merely foreshadows the events of coming decades. The high agricultural prices imply a fundamental revaluation of agricultural production and the natural resources it depends on, especially land and water. The challenge is to soundly manage the transition to the new economics of agriculture and the food system and to facilitate stable supplies and prices that offer long-tem incentives for agricultural production and help protect the poor. Science plays a key role in this transition in the long run. Although long-term price trends should be allowed to govern resource allocation, steps should also be taken to reduce short-term cyclical volatility. All of these goals make up a complex long-term agenda. When the current crisis ends, policy must not return to business as usual. If it does, the next crisis will hit even harder.

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¹⁹ See Joachim von Braun and Nurul Islam, "Toward a New Global Governance System for Agriculture, Food, and Nutrition: What Are the Options?" in *IFPRI Forum*, March 2008.

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