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Продовольственная и
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Organización
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Unidas
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IMPACTS OF THE FINANCIAL CRISIS ON AGRICULTURAL COMMODITY MARKETS

I. Introduction

1. In late 2008, just as international food and fuel prices continued to fall, there was some optimism that the developing countries might be spared from the crisis and recession that started in the advanced economies. However, by spring 2009, international organizations had revised their 2009-10 economic growth projections sharply downward for all parts of the world, including developing countries. By the time of the 67th Session of the CCP in April 2009, there was deep concern that the financial crisis and recession had spread globally. As a consequence, the Committee requested that further assessment and monitoring be presented to its next session. This document, which summarizes and updates analysis provided in the 2009 edition of *The State of Food Insecurity in the World: Economic crises – impacts and lessons learned*, is intended to motivate discussion by Members of the impact of financial crisis and recession in its various dimensions. Any further updates to this evolving issue will be presented at the Session.

II. The recent crisis has been different than past crises

2. In April 2010, the IMF Economic Outlook reported that the recession ended in mid-2009, noting that after shrinking some 0.6 percent in 2009, global recovery has evolved better than expected, although it remained fragile with continued high unemployment, high fiscal deficits in key countries and scarce international financing. While recovery appears better than expected, there has been substantial income lost by lower growth rates. For example, during the “Great Recession”, economic growth in developing countries is estimated to have been only 2.4 percent down from recent annual rates above 6 percent.

3. While developing countries have been hit by many crises in the past, the recent economic turmoil is different in at least three important aspects. First, the crisis has affected large parts of the world simultaneously, and as such, traditional coping mechanisms at national and sub-national levels are likely to have been less effective than in the past. Previous crises that hit the developing

countries tended to be confined to individual countries, or several countries in a particular region. Under such circumstances, developing countries tended to rely on large exchange-rate depreciations to help them adjust to macroeconomic shocks, while remittances (money sent home from family members working in other areas or countries) represented an important coping mechanism, especially for poorer households. During the 2009 crisis, however, remittance inflows declined substantially in many countries. The scope for real exchange-rate depreciation is also more limited in a global crisis, as it is not possible for all developing countries' currencies to depreciate against each other; some must appreciate while others depreciate. This has left developing countries with less room to adjust to the rapidly changing economic conditions. That said however, in the main, developing countries were not as heavily hit by the crisis as developed countries, and certain ones among them have been the first to emerge from recession and lead as an engine for world growth.

4. The second key difference is that the economic crisis comes on the heels of the food and fuel crisis of 2006–08. While food commodity prices in world markets declined substantially in the wake of the financial crisis, they remained high by recent historical standards. This has been arguably due to increased linkage of food commodity prices to energy prices on the supply and demand sides of agricultural production. Energy prices remain well above historical levels. In addition, food prices in domestic markets came down more slowly, partially because the US dollar, in which most imports are priced, appreciated for some time, but, more importantly, because of lags in price transmission from world markets to domestic markets. Even if domestic food prices eventually return to previous levels, months (or years) of unusually high food and fuel prices have stretched the coping mechanisms of many poor families to the brink as they were forced to draw down their assets (financial, physical or human) in not-always successful attempts to avoid large declines in consumption. Higher food prices tend to hurt the poorest of the poor the hardest, especially the landless poor. The higher food prices and reduced incomes and employment mean that, even though aggregate world food availability was relatively good in 2008, 2009 and 2010, access by the poor to that food has been adversely affected. In many countries, the impact of the crisis has been as much about economic distribution as about slower or negative growth; in developed and developing countries alike, the poor have suffered the most.

5. The third key difference is as developing countries have become increasingly more integrated, both financially and commercially, into the world economy, they have become more exposed to shocks in international markets. Figures 1a and 1b show that remittances as a share of gross domestic product (GDP) in 2000–07 were nearly 50 percent larger than they were in the 1990s and that there were important increases in foreign direct investment (i.e. foreign ownership of productive assets, such as factories, mines and land) and exports.

Figure 1a. Increasing commercial and financial integration in developing countries: exports of goods and services (as % of GDP) in low-income countries.

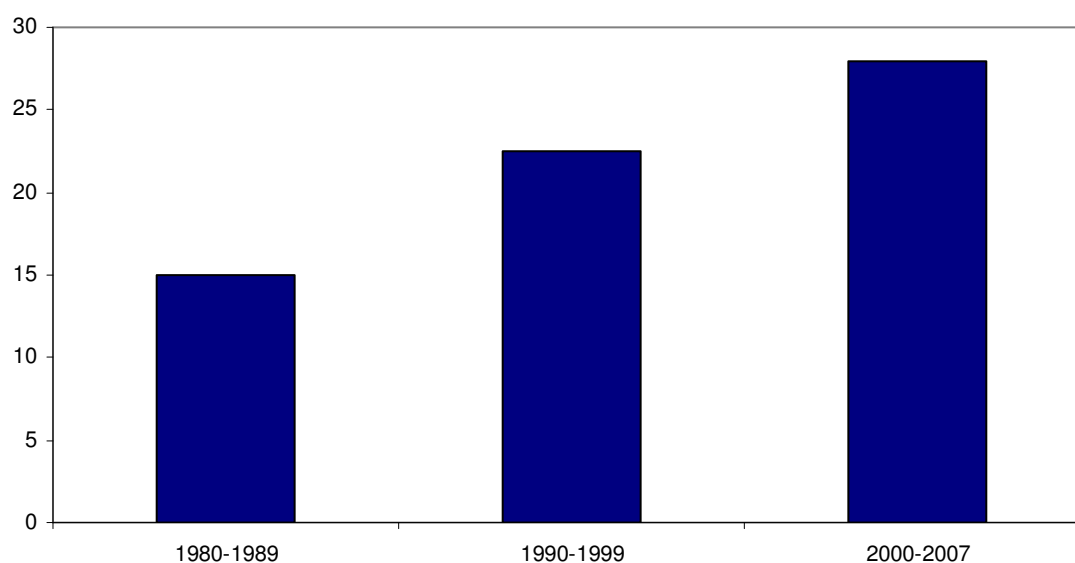
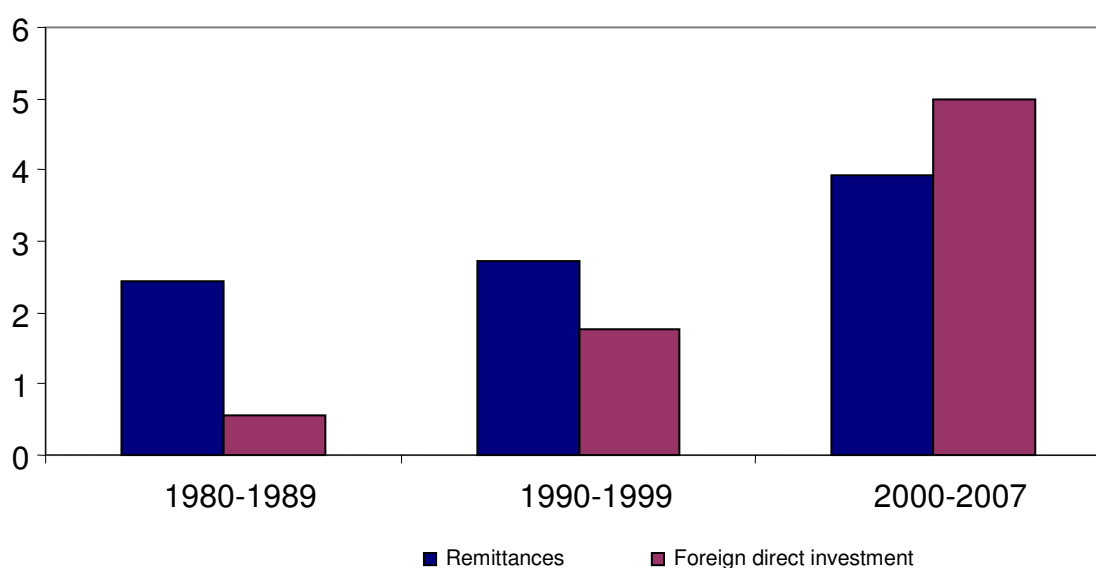


Figure 1b. Workers' remittances and foreign direct investment (% of GDP) in low-income countries



III. Transmission of the economic crisis to the agricultural sector of developing countries

6. Economic crises can have severe impacts on poverty and income levels, which in turn affect food security. An FAO analysis of six developing countries shows that, in the wake of the 1995 Mexican peso crisis and the Asian crisis of 1997–98, poverty rates increased by up to 24 percentage points (e.g. from 35 to 59 percent), with an average of 12 percent. It took the affected countries five to eight years to recover to pre-crisis poverty rates. Furthermore, given today's greater global integration, it is easy for economic crises in one country or region to be transmitted to others. For example, after the 1997–98 Asian crisis, GDP fell in 12 of the 17 largest Latin American economies, with a median drop of 5.4 percent in real per capita GDP, and it took, on average, 5 years for countries to restore pre-crisis income levels. Unemployment increased in

15 of the 17 countries, with a median increase of 4 percentage points, and it took countries, on average, 8 years to recover to pre-crisis employment rates.

Countries with large current account deficits and adverse movements in the terms of trade are most vulnerable. Countries are affected by economic crises that started elsewhere in the world based on their degree of integration with international markets for goods and services, including financial products. Countries that have large current account deficits and low levels of foreign reserves are particularly at risk, because these deficits are paid for with inflows of private or public capital, such as foreign direct investment, remittances, foreign aid and borrowing. But these financial inflows can end abruptly: the 17 largest economies of Latin America received USD184 billion in 2007, which was roughly halved to USD89 billion in 2008. A reduction in capital inflows will mean that consumption must be reduced. For some low-income food-deficit countries (LIFDCs), adjusting consumption may mean reducing badly needed food imports as well as other imported welfare-related items, such as health-care equipment and medicines.

8. Since commodity trade is important for many low-income food-deficit countries, changing terms of trade can create serious hardships. As the economic crisis took hold, world commodity prices plunged across the board. The decline for metals, fuel and fertilizers was particularly sharp. World food prices also fell, but not by as much. World prices for beverages (cocoa, coffee, tea) relative to food commodities actually increased, as beverage prices fell less than the food price index. Such changes in relative prices are known as changes in the terms of trade, which is the relationship between the prices at which a country sells its exports and the prices it pays for its imports.

9. Although the fall of metal and energy prices was steep, the IMF price indices for these commodities in the fourth quarter of 2009, relative to the FAO food price index, were still well above their average level from 1992 to 2003 (by 47 and 109 percent, respectively, see Figure 2). Thus, while the decline obviously hurt oil and metal exporters, it did occur from a historic high. To the extent that metals and energy exporting countries practiced prudent macroeconomic management by saving some of the windfall earnings and increasing foreign exchange reserves, the impact of the recent decline can be mitigated.

10. The ratio of tropical beverage prices to food prices on world markets started to increase in the second half of 2008 as food prices declined, and it has continued to increase since then (Figure 3). Thus, for several countries that rely on earnings from beverage exports to import food, their terms of trade seem to have improved as the economic crisis took hold. The story is similar for cotton, although the recent improvement in the terms of trade has been much smaller than for beverages, and the terms of trade has not recovered to its 2006 level.

Figure 2. The ratio of metals and energy prices to food prices has returned to more normal levels: ratio of IMF metals and energy price indices to FAO food price index, 1992–2009, quarterly.

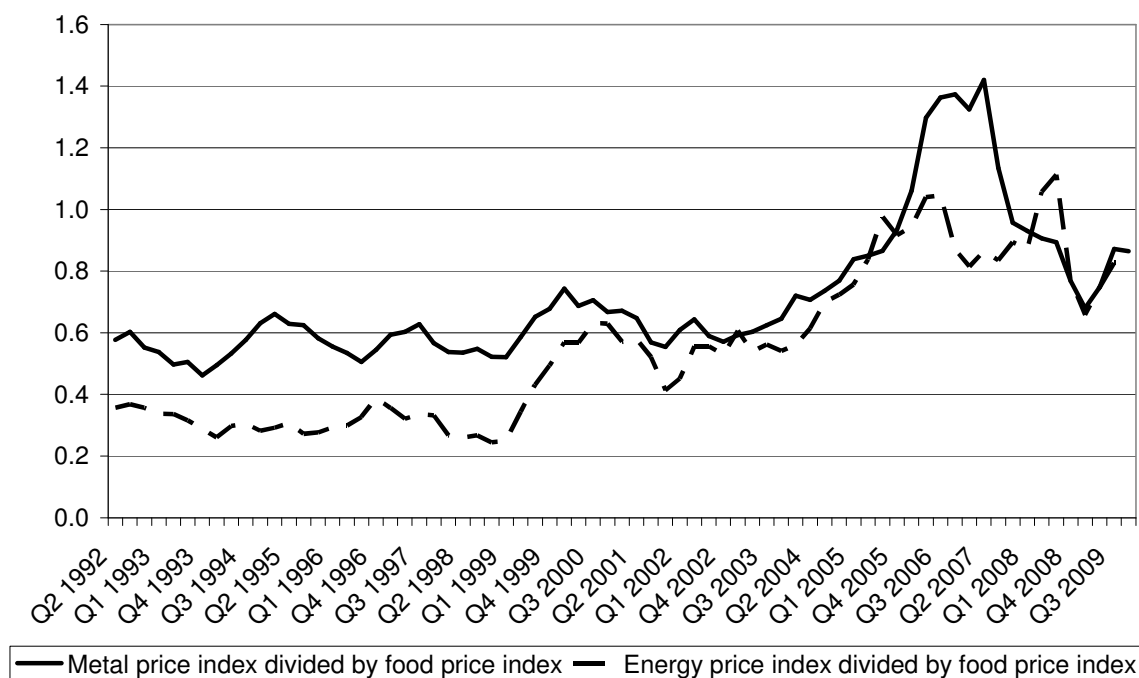
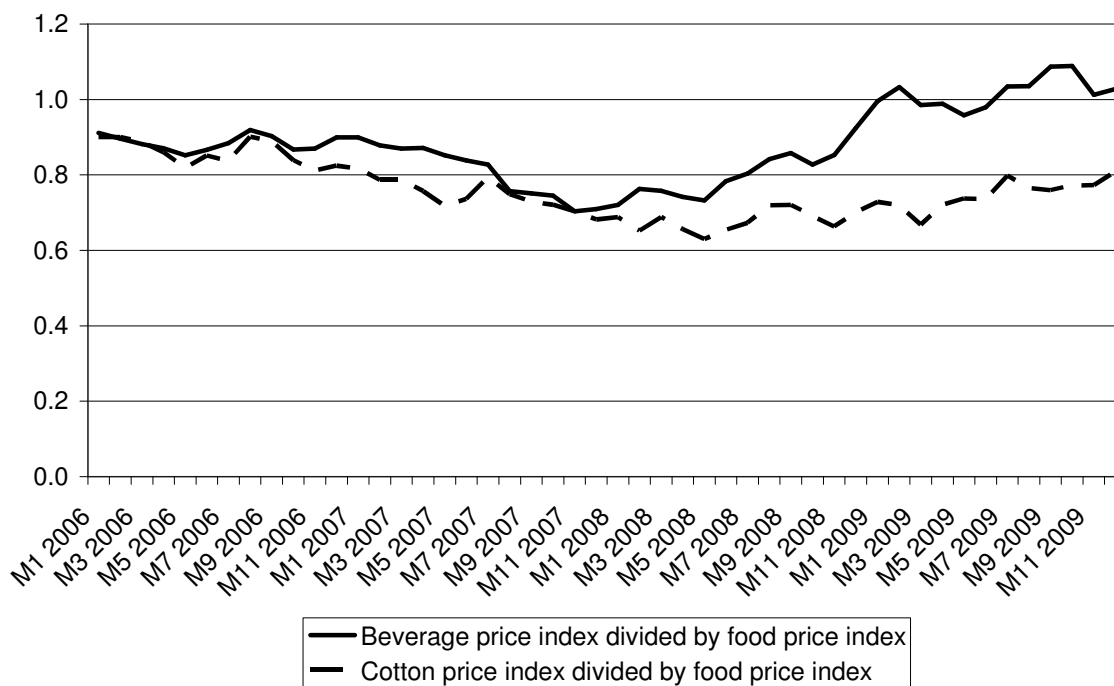


Figure 3. Changing terms of trade: ratios of IMF beverage price index and cotton price index to FAO food price index, January 2006–December 2009



Migration and remittances

11. It is clear that the economic crisis precipitated a drop in remittances that will result in lower incomes, and consequent problems, for many. For a significant share of the population living in developing countries, migration and subsequent remittances represent an important livelihood strategy and a source of income for the family members staying behind. Officially recorded remittances account for around USD300 billion, or 2 percent of total GDP of developing countries, but the figure goes up to 6 percent for low-income countries (World Bank, 2008). Actual figures are likely to be larger because not all transfers travel through official and measurable channels.

12. Global figures fail to convey the importance that migration plays for many individuals, households, regions and nations. For example, remittances tend to be the main source of capital inflow in small countries near the migration corridors of North America, Europe and Russia Federation. World Bank figures for 2007 show that remittances in Tajikistan amount to 46 percent of GDP, with figures of 25 percent in Honduras and 24 percent in Lebanon. In several large African countries (Egypt, Ethiopia, Morocco, Nigeria and Senegal), remittances account for between 5 and 10 percent of GDP. Within countries, remittances are often concentrated among certain geographic regions, such as in Nepal.

13. The extent to which different countries will be affected by reduced remittances will also depend on exchange-rate movements, which will affect, first, decisions on how much money is sent home and, second, the purchasing power of the recipients when remittances are exchanged into local currency. Eastern Europe and Central Asia, which receive a large share of their remittances from Russian Federation, were vulnerable to the devaluation of the Russian ruble (as well as the slowdown in the Russian economy).

14. The extent to which declines in remittances will impact the agricultural sector will depend on the extent to which these financial flows are used to finance agricultural working capital or investment. The evidence on this point is mixed – in some cases, remittances do make a contribution to agricultural production, but in others they seem to be largely used for other purposes.

Trade, credit, foreign direct investment and foreign aid

15. The recession in developed countries has had a severe negative impact on trade, credit, foreign direct investment and foreign aid. In April 2010, the IMF estimated that global trade fell 11 percent in 2009. Trade in advanced economies declined slightly more, at 12 percent, and in developing countries slightly less at 8 percent, held up largely by industrializing Asian economies. Many developing countries now face higher costs for external credit, from both private and public sources, as the risk premium for lending money to developing countries has increased. In many cases, credit is not available at any price as banks ration credit and lend only to those perceived as the most reliable borrowers. This can affect international commodity trade and make it more difficult for small-scale traders to carry on their business. It can also affect farmers who borrow money to finance costs of production.

16. Foreign direct investment tends to be very volatile across time. In the current crisis, it has fallen sharply as private corporations in developed economies face pronounced recession. In countries such as the Gambia, Georgia, Jordan and Lebanon, foreign direct investment amounts on average to more than 10 percent of annual GDP. The IMF has estimated in April 2010 that foreign direct investment fell by 40 percent in 2009 in developing economies as a group, with a 30-percent fall in sub-Saharan Africa. Most foreign direct investment is for mining, industry and services, with very little going to agriculture (although some is related to agricultural processing), but reduced employment stemming from the decline will have economy-wide ripple effects, and will in some circumstances increase back-migration from urban to rural areas.

17. Foreign aid is the principal source of capital inflow for some of the poorest countries. In sub-Saharan Africa, official development assistance (ODA) often makes up a large proportion of GDP (more than 40 percent in Burundi and Liberia, for example). In Haiti, Laos and Nicaragua, the share is more than 10 percent. In response to the steep rise in food prices, ODA at the global level increased substantially in 2008. However, with donor countries facing tougher budgetary constraints in 2009, the IMF projected that the poorest 71 countries will experience an overall drop in ODA of about 25 percent, although the new level will remain above that of 2007. Changes in ODA can affect budgetary allocations to the agricultural sector and impact programs to increase productivity and the incomes of farmers.

Agriculture as a macroeconomic buffer

18. Economic crises have different impacts on various sectors, depending on the nature of the crisis, the size of the sector in terms of employment, and the trade structure of the sector. However, patterns emerge in regard to the agricultural sector. First, in nearly all of the crisis examples in Table 1, the growth rate in the agricultural sector before and after the crisis has been lower than that of aggregate GDP. Second, in all cases, the growth rate of agriculture is greater than that of GDP during the crisis. Thus, agricultural growth tends to be more stable than growth in other sectors.

19. Agricultural employment also often expands during a crisis, as in the case of Indonesia during the economic crisis of 1997–98. Although employment in the industrial and electricity sectors fell by 13 and 27 percent, respectively, employment expansion in agriculture (a 15.2 percent increase), more than made up for the reduction in other sectors. The pattern in Indonesia was similar to that in other Asian countries affected by the 1997–98 crisis. Agricultural employment rose 9.1 percent in Malaysia and 5.4 percent in the Republic of Korea, while it fell in the manufacturing sector in both countries.

20. Why would agricultural growth be less affected than growth in other sectors? First, as income drops, demand for agricultural products, especially food, does not drop proportionately – people will sacrifice other goods, such as industrial products and services, to make sure they can buy enough food (or as much as their income allows). On the supply side, other sectors may use credit more intensively, while agriculture, especially if it is dominated by smallholders, is more self-financed and thus less affected by sudden credit shortages. This latter argument would be less relevant for large and commercial farms, where credit is a key input. Further, the supply of credit might be augmented by migrants who return from urban areas.

21. In many cases, crises may be accompanied by a depreciation of the exchange rate (e.g. Mexico in 1995, Indonesia and Thailand in 1997–98). This will tend to benefit agriculture because its products are often considered to be relatively more tradable than output from the service sector. But not all economic crises are the same. In the current crisis, the beneficial effect of exchange rate depreciation on agriculture will be mitigated by the global nature of the economic slowdown and attendant falling world commodity prices. Moreover, the global nature of the crisis also makes it less likely that depreciation of any one particular currency could be an effective boost to that country's exports.

Table 1. Growth rates (percent) by major sector for a number of countries before, during and after an economic crisis (selected years).

Country	Period	Annual average growth rate by sector (percent)				
		Agriculture	Industry	Manufacturing	Services	GDP
Argentina	5 year pre-crisis	1.8	2.0	1.1	3.4	2.7
	2001	1.1	-6.5	-7.4	-4.0	-4.4
	5 year post-crisis	3.4	7.1	6.7	3.7	4.9
Brazil	5 year pre-crisis	4.1	3.1	2.2	3.9	3.0
	1999	6.5	-1.9	-1.9	1.4	0.3
	5 year post-crisis	4.1	3.0	3.4	4.1	3.0
Cameroon	5 year pre-crisis	1.9	-6.1	-1.8	-7.5	-3.6
	1994	3.1	-14.4	-3.3	13.1	-2.5
	5 year post-crisis	7.5	4.7	4.3	0.2	4.6
Ghana	5 year pre-crisis	0.2	-1.5	-0.2	2.6	0.3
	1979-1983*	-1.8	-11.7	-13.8	-1.8	-3.4
	5 year post-crisis	3.5	10.6	12.6	7.7	5.9
Indonesia	5 year pre-crisis	2.5	9.2	10.3	8.5	7.1
	1998	-1.3	-14.0	-11.4	-16.5	-13.1
	5 year post-crisis	3.0	4.1	4.9	5.8	3.7
Malaysia	5 year pre-crisis	0.5	11.1	12.7	10.2	9.2
	1998	-2.8	-10.7	-13.4	-5.0	-7.4
	5 year post-crisis	3.4	6.1	7.5	5.2	5.0
Mali	5 year pre-crisis	4.2	5.0	4.8	2.5	3.5
	1994	6.6	-4.0	-3.6	-0.6	0.9
	5 year post-crisis	4.4	8.8	-3.4	4.2	5.8
Mexico	5 year pre-crisis	2.2	3.9	3.6	4.0	3.9
	1995	0.9	-7.8	-4.9	-6.2	-6.2
	5 year post-crisis	2.0	3.9	3.9	3.8	5.5
Rep. of Korea	5 year pre-crisis	1.4	8.0	7.7	7.2	6.9
	1998	-6.4	-8.2	-7.9	-3.9	-6.9
	5 year post-crisis	1.0	7.4	9.7	4.6	6.4
Thailand	5 year pre-crisis	0.7	9.8	10.6	7.2	6.5
	1998	-1.5	-13.0	-10.9	-10.0	-10.5
	5 year post crisis	3.3	6.3	6.8	4.0	4.8

Source: FAO calculations based on data from World Development Indicators, World Bank.

* The year when the crisis began and ended in Ghana is not as clear-cut as in other cases but the nadir fell within the years chosen.

IV. How are developing countries affected by the financial crisis?

Can world commodity markets be trusted for food imports?

22. The global food crisis of 2006–08 and the ensuing financial crisis prompted many countries to reconsider the virtues of relying on imports for a significant share of their food consumption. Given the high and volatile prices and market turbulence during this time, it is obvious that countries become concerned about excessive reliance on world food markets. But what constitutes “excessive” reliance, and what are the advantages and disadvantages of reducing this reliance?

23. First, it is important to realize that domestic food prices in many exporting countries also increased sharply during the crisis, e.g. rice in Pakistan, Thailand and Viet Nam, and maize in South Africa. In other words, it is not only importers who are vulnerable to higher prices on world markets, it is any country that is open to trade. Second, price surges can also originate from shocks to domestic agricultural production: a simple policy of insulation from world markets (self-sufficiency) exposes the country to substantial weather-related risks. Thus, there is no easy way to eliminate price instability on domestic markets.

24. Domestic price stabilization in the face of world price surges is easier if the quantity of imports or exports is a relatively small share of consumption or production, because it can be buffered more easily by reasonable levels of stockholdings. If imports account for 50 percent of consumption, it is difficult to implement an effective stabilization policy that protects against world price surges. The same is true if exports are half of production.

25. The merits of reducing the share of trade in consumption or production depend on comparative advantage. If a country has a strong comparative advantage in the production of a particular food commodity, reducing production to reduce the importance of trade (exports) will be counterproductive and harm many farmers. Similarly, reducing the quantity of imports when a country does not have a comparative advantage in production will hurt consumers, and it is often the poorest who will be hurt most by such a policy, as shown in SOFI 2008. Analysis of household survey data can help determine which groups are hurt most severely with respect to a specific country and specific commodity.

26. Of course, comparative advantage is not a static concept. If a country is lacking comparative advantage in the production of a specific commodity, it may be because of underinvestment in agricultural research, rural infrastructure, roads or other public goods. In such cases, the most appropriate solution is to increase investment in agriculture, not impose trade restrictions. Even in the short term, before the investment can bear fruit, trade restrictions are likely to be damaging if they increase domestic prices to levels well above world prices on a medium-term basis because the high prices will typically hurt most the poorest of the poor. Further, while it may be sensible to allow domestic prices to deviate from world prices in the short run, such a strategy pursued over a period of several years can be dangerous. Trade restrictions, once implemented, are often politically difficult to remove, and can fail to provide sufficient market discipline to ensure governments and the private sector invest their money wisely. Thus, restricting imports simply to avoid reliance on the world market may mean that domestic food prices remain high all the time, instead of being high only when world prices are high. The real and lasting solution is to invest more in agriculture to enhance productivity growth.

Impact of higher prices on African producers

27. A key question regarding the fluctuations in commodity prices is their impact in Africa. Were higher prices passed on to local farmers, who might increase production and effectively compete with imports in regional markets? In most cases, it seems that the producer’s ability to respond to the higher prices was constrained by a lack of access to capital, poor infrastructure, limited technology, limited information, few inputs and poor-quality seeds. These obstacles

translate into poorly integrated markets where prices vary greatly between producers and consumers as well as from one area to another. In Ghana, for example, at the peak of global grain prices in mid-2008, the government subsidized fertilizer and tractors for producers. These subsidies were aimed principally at poorer maize farmers. Even at subsidized prices, however, many farmers were unable to afford fertilizer, let alone tractors. The price of fertilizer in Ghana increased about 50 percent from April 2007 to August 2008. There were also large price variations among different local markets such that maize prices in two different towns — only 65 miles apart — differed nearly threefold.

28. Similar obstacles arose in Kenya, which is vulnerable to increases in world fertilizer and energy prices because all fuel and fertilizer are imported. Flat farmgate prices (despite rising consumer prices) and higher costs of agricultural inputs (fertilizer prices tripled in six months) and transportation reduced food-production incentives. This, coupled with domestic political unrest, meant that about half of the agricultural land in the Northern Rift Valley (the key maize-producing area) was not prepared for the 2008 planting season.

29. In Mozambique, high food prices were felt strongly at the consumer level but the size and the geography of the country limited price transmission to farmers. With a fractured agricultural market and poor infrastructure hindering trade, there are limited opportunities for agricultural producers to capitalize on the relatively high and growing incomes in the urban areas. The price of maize imported from Argentina to the market in Maputo, the capital, is the same as the price of maize transported internally from the northern part of the country. This means that domestic production is more likely to be traded within nearby rural communities or to rural areas of neighbouring countries such as Malawi or Zambia that face similar market infrastructure constraints.

30. In Uganda, despite growing demand, production response was low because of a variety of factors. First and foremost, food production is dominated by smallholders with 1-2 hectares of land; such land fragmentation appeared to be the major factor behind low productivity. Food-crop producers do not have access to credit markets and therefore cannot afford fertilizer or high quality seed varieties. This has led to a decline in both land fertility and crop quality. The food market (with the exception of sugar) is fully liberalized meaning that there are no input or production subsidies and no tariffs on exports and imports. Government expenditures on agriculture were about 1.5 percent of total expenditures in 2006 and 2007. With no farm organizations to enhance producers' bargaining power, cash-strapped farmers tend to sell their crops soon after harvest rather than store their crop and wait for higher prices.

V. Prospects for recovery

31. According to the IMF Economic Outlook of April 2010, the global economy is emerging from the financial and economic crisis better than was anticipated in 2009. Leading the recovery is solid growth in emerging and developing economies, and lagging behind are certain advanced economies for which growth is slower and hesitant. The prospects for economic recovery, particularly in advanced economies, remain subject to considerable downside risks, dependent on prudent macroeconomic fiscal and monetary policies which would sustain growth and employment while at the same time contain public debt. In 2010, global economic growth is anticipated to rebound from -0.6 percent in 2009 to 4.2 percent in 2010. Growth in developing economies is now projected to return to rates over 6 percent in 2010 and in the medium term. In contrast, growth rates in advanced economies will return to levels in the 2-2.5 percent range over this period, after having declined over 3 percent in 2009. In such a recovery it will take several years to recoup lost/foregone incomes during the recession.

32. While only preliminary estimates of key data on agricultural commodities on a global level are available for the agricultural sector, in terms of the quantities of commodities produced and consumed, it appears that the sector has again displayed considerable resilience to macroeconomic turmoil. It is difficult to disentangle the impact of global recession on agricultural

production and consumption given other fluctuations that also occur in these quantities. World agricultural production growth appears to have slowed down compared to the average growth of the previous years. On the consumption side, it appears that global food use of staple food commodities such as wheat and rice may grow marginally slower in some countries, but it may have increased in others. Food commodity stock levels have returned to more normal levels than during the high price period of 2006–08. Demand for more income sensitive commodities, such as meat products, has been more affected than the basic food commodities.

33. As the global recovery takes hold, the economic strength of developing countries, particularly many least developed countries, will be important for agriculture and food markets, as well as for food security. As a result of population dynamics and rapid income growth, the role of developing countries in global market developments is increasing quickly. However, while a main impact of the economic crisis was a large fall/correction in commodity prices from their peaks in 2008, (more adjustments will still evolve) commodity prices have “landed” on a higher plateau after the crisis. According to OECD-FAO projection work, food crop prices will be some 15–40 percent higher than in the decade prior to the price spike- due to several factors such as increasing food demand from higher incomes and urbanization, as well as higher biofuel feedstock demand. An important factor will be higher input costs, particularly for energy inputs. Sustained higher prices may offer low input developing countries the incentive to expand agricultural production. However, they will also have an important negative impact on low income net food buying populations. In this regard, it is critical that the recovery also include improved prospects for the poor.

VI. Conclusion

34. The financial crisis and recession that gripped the global economy in 2008-09 has been the most severe period of global economic turmoil in many decades. Agriculture has weathered the storm, sustaining production and consumption better than other sectors. A main adjustment has been a large decline in food commodity prices from their historical peaks, but back to levels much higher than witnessed in the decade prior to the price spike. The recession impacted severely on the poor in both developed and developing countries, due to, inter alia, high unemployment and reduced remittances. These may persist if growth in developed economies continue to remain sluggish. However, with the global economy emerging more robustly from recession, led by solid growth in many developing economies, foregone incomes should soon be replenished, and if sustained, may provide a basis for future poverty and food insecurity reduction.