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The increase in prices due to the drought in the United States

Rise in agricultural commodity prices: a temporary phenomenon, but one that may be repeated

The prices of some agricultural commodities, mainly corn and soybeans, are rising sharply. They have even surpassed the peak levels seen during the crisis in 2007-2008. On this occasion, it is weather conditions that are pushing up prices, however; some of the structural and cyclical factors that triggered the previous food crisis are not in evidence.

Although it is too early to say with any degree of certainty whether the present spike in commodity prices will lead to a new food crisis, there is already sufficient evidence to suggest that the rises may only be temporary, without serious consequences for global food security, but may be repeated due to the increasingly unstable climatic conditions worldwide.

The latest spike in prices is different

The present drought in the United States–the world's leading corn and soybean producer and exporter–is the worst in the last 25 years and has had a big impact on corn production, resulting in a temporary shortage of the grain in international markets. The dip in U.S. corn production, followed by a fall in exports, has triggered sharp price rises. In addition to corn, the price of soybeans has soared.

Other developments in Russia and neighboring countries are exacerbating the situation created by the drought in the United States. For example, rainfall has decreased and temperatures have risen in Russia, Ukraine, Kazakhstan, and Turkey; the monsoon in India failed to appear on schedule; and there have been heavy rains in China and the Koreas. These developments have recently led to a sharp increase in the international price of wheat (No. 1 Hard Red Winter), which rose 25.2% between June and July 2012, reaching USD345.69/t.

At the same time, Central America is experiencing a serious drought, with bean and corn crops hit the hardest. Corn production losses are estimated to be around 50% in Guatemala and Honduras, and 10% in El Salvador. In this region, small farmers who use traditional methods have been the most affected.

Although the prices of corn, wheat, and soybeans have risen rapidly, international prices of other commodities (e.g., rice) have remained stable, as have those of oil and fertilizers, which are important components of agricultural production costs. Prices of other agricultural products have dropped; for example, cacao, sugar,
and coffee prices have all fallen in the last 12 months (by 25.8%, 22.8%, and 29%, respectively).

Other important differences suggest that the relative and temporary impact of higher prices will be less serious than during the 2007-2008 crisis. Firstly, global reserves of the products whose prices are rising, which are used to cushion the effects of lower production, are now higher than the extraordinarily low levels observed during the 2007-2008 crisis. According to the estimates of the United States Department of Agriculture (USDA 2012), global corn stocks, taking into account a 32% fall in yields in the United States and higher production in Argentina, are put at around 123.3 million tons, 9.3% below the level observed during the 2011-2012 growing season.

It is also forecast that by the end of this year, world grain production will be slightly higher than the previous year, with stocks standing at 431.1 million tons, equivalent to 19.2% of global food production. During the 2007-2008 crisis, the figure was 348.3 million tons. Finally, world soybean production is expected to be 10% higher than during 2011-2012, with stocks up nearly 3%.

Secondly, the developed economies are either in recession or are growing slowly, while the emerging economies that have become the new drivers of world growth are losing steam (especially China, India, and Brazil). This situation suggests an easing of global demand for commodities and less pressure on the markets.

Impact of higher prices on food security: not yet a serious concern

The impact that price rises can have on the countries' food security is a cause for concern, due to the direct impact on consumption and the indirect effects throughout food chains (especially, in the case of corn, on the meat chain). Any increase in the prices that food processors pay for commodities are bound to be passed on to the consumer.

From the consumption standpoint, the first point that has to be considered is the importance of the products whose prices are rising in the diet of the population, especially the most disadvantaged groups. The product whose price is rising the most at present is yellow corn, but in the developing world, except perhaps in Mesoamerica, a hike in the price of that product has much less impact on hunger and poverty than an increase in the price of rice or wheat, since the latter are the main sources of calories in the diets of poor people. Indeed, rice and wheat account for a fifth of all food for human consumption, and are the chief sources of calories and proteins. Worldwide, 275 million poor consumers depend on corn, while 1200 million depend on wheat (CIMMYT 2011). On the other hand, the high prices of corn will benefit low- and low-middle income producers in developing countries, who account for 67% of world corn production (CIMMYT 2011).

Given the foregoing, the impact of higher wheat prices on food security is greater and more direct than that of hikes in corn and soybean prices. Most Latin American and Caribbean (LAC) countries depend heavily on imports of wheat; hence, the international prices of this grain are transmitted rapidly to domestic markets, affecting the prices of flours and pastas. This may lead to higher consumption of substitute products, such as rice and potatoes, whose prices are bound to rise as well, though only slightly, because local supplies of those products are relatively plentiful.

With regard to non-food uses of corn, the United States Department of Agriculture (USDA) forecasts that less corn will be used for ethanol production and other industrial uses, which would reduce the pressure on the availability of the crop for food uses (USDA 2012). On the other hand, it should be borne in mind that nearly one third of the corn employed in the production of ethanol returns to the market in the form of by-products used in the feeding of animals.

Another point that has to be considered is the way in which, and the speed with which, the transmission of international prices to domestic markets and food chains occurs.

Some experiences in LAC and the United States suggest that price transmission is not 100%, nor does it take place immediately.

For example, in Peru, the transmission of the international price of corn to the domestic market was put at only 59%, and it did not occur immediately.

In fact, a 30% increase in international corn prices could result in an 18% rise in the domestic prices of the grain and push up chicken prices 4.32% (Pomareda *et al*. 2010).

Furthermore, according to recent information, higher corn and soybean prices in the United States have had hardly any effect on domestic prices and inflation (USDL 2012).

Food prices in the USA rose by only 0.5% in July, even though the price of corn rocketed 34.5%. Given the ongoing drought, however, the possibility of food price increases towards the end of year cannot be ruled out.

Varying levels of vulnerability in the LAC countries: what should we expect?

The evolution of the prices of corn, soybeans and, possibly, wheat will depend to a large extent on the weather during the rest of August and in September, not only in the United States, but also in the grasslands of Argentina and Brazil, where the severity of El Niño will determine the amount of rainfall and, therefore, the size of the harvest.

Although higher domestic prices of soybeans or corn could have a significant impact on the purchasing power of the inhabitants of LAC, it should be emphasized that the impact will be less than in 2008.

Unlike four years ago, when the price of rice practically tripled, at present it is stable and the prevailing weather conditions are not expected to exacerbate the situation.

This is extremely important, since rice is the principal source of carbohydrates in most countries of the region.

In view of the foregoing, it is important to determine which LAC countries would be affected the most by a sudden spike in the prices of agricultural products. To do so, it is necessary to consider the countries' vulnerability in relation to the products that make up the national diet and the supply of those products.

The most vulnerable countries are those where the agricultural products whose prices rise are a key component of the national diet, and are imported. The fact that the countries are importers of the products whose prices rise is critical, but so is the origin of their agricultural imports.

Specifically, countries that import their agricultural products from the United States (for example, Central America and Mexico, which are closer to the U.S. and have free trade agreements with it) will be more vulnerable than those that import them from Argentina, Brazil, or other countries where production has not experienced a sudden fall.

Furthermore, countries that are net exporters of corn, soybeans, and wheat would benefit significantly from higher prices. Grain harvests in LAC are expected to increase 4%.

As can be seen in the following table, most of the Caribbean countries and, to a lesser extent, Mexico and the Central American nations, are vulnerable because their domestic grain supply is highly dependent on imports, and grains account for a high percentage of the population's caloric intake.

Vulnerability of LAC countries to the effects of higher cereal and grain prices

Caloric intake	Dependence on imports to meet the domestic demand: Average (20% – 40%)	Higher (more than 40%)	
Average (10% – 20%)		Bahamas (rice and wheat) Bolivia (wheat) Brazil (wheat) Colombia (corn) Costa Rica (wheat) Cuba (corn and wheat) Ecuador (wheat) El Salvador (wheat) Grenada (wheat) Guatemala (wheat)	Haiti (rice and wheat) Honduras (wheat) Jamaica (rice) Panama (wheat) Peru (wheat) Saint Kitts and Nevis (rice) Saint Vincent & the Grenadines (rice and wheat) Suriname (wheat) Venezuela (corn and wheat)
High (more than 20%)	Costa Rica (rice) El Salvador (corn) Guatemala (corn) Mexico (corn) Nicaragua (corn)	Antigua & Barbuda (wheat) Barbados (wheat) Belize (wheat) Bermuda (wheat) Chile (wheat) Cuba (rice) Dominica (wheat)	Guyana (wheat) Honduras (corn) Jamaica (wheat) Saint Kitts & Nevis (wheat) Saint Lucia (wheat) Trinidad & Tobago (wheat)

Conclusions and recommendations

Parts of LAC are already beginning to feel the consequences of higher international commodity prices. Another source of concern is the fact that in June annual food inflation reached its highest level so far this year (8.9%), mainly due to the high prices in countries such as Argentina, Brazil, and Mexico (FAO 2012). The effects of recent developments on inflation have yet to be factored in for July and August.

The analyses carried out suggest that the price rises are limited to corn, soybeans, and wheat, and that it is a temporary phenomenon. Nor is any shortage of the principal grains envisaged at this time. It is also to be expected that when the new prices prompt producers to increase production, international prices will tend to revert to their long-term trend: higher in absolute terms but well below current price levels.

With regard to food security at the national level, the poorest and most vulnerable segments of the population are likely to be those hit the hardest by any rise in domestic food prices, since they spend an extremely high percentage of their income on food, and in many cases are barely able to meet their minimum nutritional needs. Higher prices of essentials like corn, which is the staple food of low-income families in some LAC countries, could exacerbate poverty and malnutrition, with negative consequences for social, physical, and mental well-being over the long term.

On the other hand, the high prices of agricultural products are an opportunity for rural and agricultural producers. However,

many small-scale producers and smallholders only produce for personal consumption and have no surpluses to sell. They will only be able to take advantage of the situation if they receive assistance to enable them to increase yields and improve access to inputs like seeds and fertilizers, and to the markets in which prices are high.

Given the different economic structures of the LAC countries, it is necessary to monitor the evolution of both international and domestic prices, and to analyze the mechanisms for their transmission, in order to contribute to the definition and adoption of policies designed to offset the negative effects and take advantage of the opportunities offered by higher agricultural prices.

The impact of increased climatic variability is something that agriculture will have to cope with in the years ahead. It is increasingly necessary, therefore, to implement policies that promote the adaptation of agriculture to global climate change, and to intensify the implementation of actions aimed at mitigating the impact of agriculture on the phenomenon.

Finally, it is recommended that the countries proceed with caution and not overreact to the current situation of the prices of agricultural products, in order to avoid trade-distorting policies that, rather than helping, would merely push up prices further and increase volatility.

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