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Increasing Agricultural Productivity and Improving Food Security in Costa Rica

Christopher Columbus' fourth and final voyage to the New World in 1502 led to the first European landfall in the area of present-day Costa Rica. In 1522, the new settlement of Costa Rica, meaning "rich coast," began. For nearly three centuries, the region was controlled by Spain as a part of the Captaincy General of Guatemala under a military governor. Finding little gold or other valuable minerals in Costa Rica, the Spanish turned to agriculture (Background 2).

Agriculture in Costa Rica has been around for hundreds of years. It is believed that it began earlier than the landing of Spanish settlers-- as early as 3000 B.C. with the raising of fruit trees such as avocado and tubers such as yucca. After the Spanish settlers arrived and Costa Rica was more developed, corn became an important crop and hasn't changed since (Costa Rica Agriculture 1).

Since the landing of Spanish settlers and development of agriculture within the country, Costa Rica has been one of the world's leading countries in agriculture production. With its fertile land, frequent rainfall, and location in the Central American isthmus, Costa Rica makes a great place for growing and harvesting crops, and easily accessible to the North and South American markets as well as European and Asian continents (Background 2).

Many people throughout the country grow their own food. Locally grown food can be found almost anywhere in Costa Rica. It is not uncommon to find families with fruit bearing trees as well as gardens in their backyards, even in the cities. More and more of the Costa Rican population is turning toward buying and selling their food locally. Not only does this help the economy of the country, but it also encourages healthier eating. Locally grown crops in Costa Rica are more likely to be grown organically than inorganically. Much of the Costa Rica diet is strongly based on the products individual farmers raise for their daily sustenance (Background 2).

In addition to corn, banana and coffee are two key cash crops in Costa Rica, along with sugar and cocoa. Over 85 percent of coffee properties in Central America belong to Costa Ricans. The banana industry has been producing more than one million tons of bananas annually since the 1970s. Coffee and bananas accounted for 31 percent of exports in 2001, with values of $163.4 million and $501.1 million, respectively (Agriculture 1).

Despite the rising percentage of local crop growth and sales, Costa Rica is still hindered by the pressure of exporting their goods to other countries. With the United States provided nearly half of all Costa Rica's imports, it is financially difficult to import the necessary goods without exporting most of the food that has been grown. Corn and sugar crops are usually sufficient to meet domestic needs, but rice and beans must be imported from time to time due to lack of production.

The average daily per capita calorie supply in 1999 was 2,761, and of those, 506 calories was from animal products. This means that nearly three-fourths of the average Costa Rican diet is grains and cereals. With 69 percent of the countries grains and cereals being imported from other countries, Costa Rica is not producing enough of their own. Part of this is because there is 21.4 percent of irrigated cropland and only 9.9 percent of land suitable for cultivation. With such a small amount of land appropriate for crop growth, Costa Rica is unable to produce the grains and cereals needed to provide the country with the adequate amount of food (Earth Trends 1-2).

Agriculture forms the backbone of the Costa Rican economy, and its national strategy has focused on the production of export crops instead of production of imported crops (Costa Rica 3). If Costa Rica would focus more on producing more crops that are grown less in the country, fewer crops such as grains and cereals would have to be imported, if imported at all. Because of rising oil prices, food is even more expensive to transport. If Costa Rica grew more of the crops needed, less money would have to be spent on imports. It would also be less expensive for Costa Rican consumers to buy food if more grains and cereals were grown and sold locally.

The world is experiencing the consequences of an unhappy conjuncture of long-term structural influences and short-term factors. During the past two decades, demand for food has been increasing steadily, reflecting the rise in the world's population, positive improvements in incomes, and the diversification of diets. However, until mid-2004 food prices had been declining, thanks to record harvests and the use of world grain stocks. At the same time, average crop yields were flat or falling, as investment in agriculture, particularly in developing countries, declined. Moreover, low prices, especially for food staples, and distortions in agricultural markets, discouraged production particularly in low-income countries.

More recently, food price increases have become more pronounced, and, coupled with the rapid increase in oil prices, are posing serious economic and political problems.

Stocks have been slowly declining since 2000. In addition, there were bad harvests in the past three years. The recent strong growth of emerging and developing countries has been a factor as has rising biofuels production in advanced economies. With biofuels, one begins to see the interaction of higher oil prices with food supplies, and biofuel production has also reflected generous policy support in some countries. Finally, high oil prices have driven up the cost of agricultural inputs, like fertilizers, and transport. Very recently, the introduction of export restrictions in some countries, to protect domestic supplies, tightened world market conditions for some key food crops, like rice. Speculation, hoarding and panic buying may also have played some role.

Looking ahead, food prices are expected to ease gradually in the short term. The price of rice has fallen, although corn prices continue to rise, especially in light of the floods in the Midwest of the United States. But the outlook even for the next couple of years is uncertain and depends on policies put in place now to encourage increased production. Nevertheless, the pressure on food prices from the underlying structural influences will likely remain and keep prices at higher levels than in the past.

The immediate problem is essentially a food price crisis rather than a global shortage of food. The rapid increase in food prices has had an adverse impact on poverty, and effectively denied many poor people access to food. This is mainly because the share of food in household spending is very large in developing and emerging economies.

This is particularly true in Central America—these countries tend to have relatively large parts of their consumption bundles allocated to food and within countries, the poorer spend more of their household income on food. Indeed, in Central America, poverty levels, which declined this decade, are likely to increase as higher food prices persist. Available data suggest that on average, the cost of purchasing the "canista basket", which reflects minimum nutritional requirements, has risen about 17 percent from March 2007 to March 2008. Therefore the immediate challenge is to get food—or the money to buy food—to those most in need. In this regard, the international response to the World Food Program's call for additional assistance has been impressive.

In the short term, efforts to get food to the most affected countries, and population groups within countries, must be complemented by measures to ease the burden of higher food prices on the poorest people. These measures include scaling up well-targeted social safety nets, expanding conditional cash transfer programs, temporary subsidies on a small number of products vital for the poor, expanding school feeding programs, and food-for work programs. Some countries in this region have taken such measures, including Costa Rica with school feeding programs, supplementary income to the elderly poor, and transfers to poor families.

Policies that have negative effects on countries that rely on food imports must be avoided. Export restrictions are harmful, not helpful, as are or direct price controls, which distort price incentives and discourage production. Countries should also avoid general subsidies to the extent possible, as these tend to be expensive and don't target those most in need. And often they become entitlements over the longer-term.

At the same time, the long-term factors that are driving up food prices must be addressed, so as to ensure that supply increases rapidly enough to meet growing demand.

Higher oil and food prices have already led to substantial increases in overall inflation, particularly in emerging markets and low-income countries. In Central America, average headline inflation, year-on-year was 11 percent in March 2008, with food price inflation doubling.

The rise in the price of cereals and oil has contributed about 3 percentage points to headline inflation. In addition, in some countries domestic demand pressures have pushed up inflation.

The sharp increases in food and fuel prices have led to higher import bills and strained the balance of payments position of many countries. Central America, as a net importer of fuel has seen its oil import bill rise by over 2.5 percent of GDP between 2004 and 2007. While the region as a whole is a net food exporter, the food price shock has largely affected cereals, of which the region is a net importer.

As a result, the combined price shocks have led to deterioration in the region's trade balance in 2007, and are expected to do so again in 2008, although the effect will vary across the region. Fortunately, reserve positions of the Central American governments have generally remained strong and, thanks to continued capital inflows, the overall balance of payments position has not experienced stress, and depreciation pressures have not emerged.

All of the domestic measures to cushion the burden of rising prices have a fiscal cost—either lower revenues from reduced taxes and tariffs, or higher expenditures on social safety nets or support measures for small farmers. Thus, governments have yet another challenge to confront in allocating scarce resources.

In due course, permanent price shocks will need to be fully passed through to consumers and producers. However, short-term measures can and should be used to mitigate the adverse short-term impacts. Of course, the task of policy makers is complicated by the uncertainty about the extent to which recent increases in food and fuel prices are permanent. But we should ensure short-term measures minimize disincentives for long-run supply responses.

A key macroeconomic objective should be to limit the second round effects of external price shocks to avoid the risk of rising inflation. Such risks are particularly of concern for countries where domestic demand has been growing strongly. The monetary authorities will need to give clear signals to bring inflation progressively down by tightening monetary policy. Fiscal policy will need to be tightened to reinforce the monetary response, especially in rapid growing countries where demand pressures are already contributing to inflation. Blanket wage increases in response to higher prices should be avoided, so as to help contain inflation expectations and prevent wage-price spirals.

It will be important for governments to assess, contain, and monitor the cost of mitigating measures, and some tough budgetary choices will need to be made. Some governments that are in good fiscal positions will have scope to spend more money. Others will need to raise revenue, reduce other types of spending, borrow, or secure foreign aid. It is important that mitigating measures be limited in both size and duration—the food price crisis should not provide an excuse for new entitlements.

This is not just a country-by country problem—it is a problem that requires a coordinated international response. The cost of the longer term agenda is large, and financial support from the international community will be needed. However, it is important that these resources be additional to existing development assistance, and not be mobilized at the expense of support to other sectors, especially health and education. The UN High-Level Task Force on the World Food Price Crisis has presented a Comprehensive Framework for Action, which puts forward a consistent set of recommendations for actions in the immediate and longer term, that seek to bridge the traditional divide between humanitarian assistance and development needs (Plant 1-13).

Riots in hungry cities around the world have focused attention on a daily fact of life: One in eight people around the world go hungry every day. This reflects the reality that more than 850 million people live in extreme poverty and hunger. One billion people live on $1 a day or less. As global food prices rise, this $1 a day buys even less and, as a result, more people are driven into poverty. Part of the short-term answer to this challenge is to offer immediate help to those who are now being driven to live on 50 cents a day.

Part of the long-term solution is to give people economic opportunities to buy and produce food. As a person’s income rises from $1 a day to $2 a day, a person becomes able to provide a very basic meal to sustain them, removing them from an immediate danger zone of extreme hunger.

The current food crisis is exacerbating an already unacceptable situation. Increases in food prices could push another 100 million people deeper into poverty. The rising food prices are hurting children the most. Hunger contributes to the preventable deaths of 5 million children under age 5 worldwide each year. This equals 14,000 children a day, or, one child every seven seconds.

Malnutrition threatens to prevent tens of millions more children from reaching their full potential. When prices are higher, people’s budgets buy less. They also scale down the number of meals they eat and they start eating less-nutritious food. For example, recent news reports have talked about how in the United States, school lunch programs are buying less nutritious food in order to hold down costs. For people living on $1 a day or less, this means cutting out meals. For example, in Afghanistan, World Vision is getting reports of people who used to have a daily diet of tea and bread. With the increase in global food prices, many can afford only the tea.

The global community needs to respond to address both the short-term hunger crisis and the longer-term sustainable issues. In the short-term, the World Food Program emergency appeal of $755 million must be met to just maintain existing programs. Meeting the WFP appeal ensures existing programs continue at current levels but does not make an additional dent to reduce global hunger by one-half in 2015, which is the 1st Millennium Development Goal. The long-term solutions include investing in sustainable agriculture and ensuring access to markets, access to credit, and access to agriculture inputs like seeds and fertilizer. It also includes successfully finalizing the development round of the World Trade Organization's global trade talks in a manner that benefits the developing countries (Zachritz 1-2).

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