## **Focus**

# Agricultural development in the context of the global food crisis

High world food prices are provoking worldwide discussions concerning domestic food security and the role of agriculture in development and poverty reduction. The current situation is due to both short term temporary factors and fundamentals that may continue into the medium term. The current situation presents an opportunity to reevaluate domestic agricultural and food policies in many developing countries, and particularly how support to agriculture can enhance growth and food security.

There has been considerable press recently expressing concern about high international food commodity prices, and higher food costs for consumers. Agricultural commodity prices rose sharply in 2006 and 2007 and continued to rise even more sharply in the first three months of 2008 (see also the articles in the Focus of Rural 21, n° 3/08).

While the FAO food price index rose on average eight percent in 2006 compared with the previous year, in 2007 it increased by 24 percent compared to 2006. The FAO food price index is a trade weighted Laspeyres index of international quotations expressed in US dollar prices for 55 food commodities. Currently, the increase in the average of the index for the first three months of 2008 compared to the same three months in 2007 stands at 53 percent. The continuing surge in prices is led by vegetable oils, which on average increased by more than 97 percent during the same period, then by grains with 87 percent, dairy products with 58 percent and rice with 46 percent. Sugar and meat product prices also rose but not to the same extent.

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## Main factors for the rising food commodity prices

It is important to understand the underlying forces, both in the short term as well as the implications for the longer term. In particular, considerable focus recently has been on the "food versus fuel" issue, given new policy mandates that are being developed by many governments. The recent market developments seem to have been the result of short term market as well as of longer term structural changes. The main fundamental factors can be summarised as follows:

On the supply side weather events have negatively affected cereal production in some important exporting countries, reducing exportable surpluses which could not be quickly filled by other countries not affected. Moreover, lower stock levels, especially in some major exporting countries, have exacerbated the situation. These developments then spilled over into the oilseeds and livestock products markets, given the strong linkages amongst them. Most of these developments are temporary.

Rapid increases in demand in some large developing countries as a result of increases in income levels and population, not only lead to higher levels of food consumption but also to changes in the patterns of consump-

tion that have put additional pressure on available supplies. Such increases are likely to continue in the future.

Soaring petroleum prices have contributed to the increase in prices of most agricultural crops: by raising input costs, on the one hand, and by boosting demand for agricultural crops used as feedstock in the production of alternative energy sources (e.g. biofuels) on the other, supported by national policies to encourage production of biofuels for a variety of reasons. The developments in petroleum prices are affected by rising demand as income growth continues and spreads around the world.

Freight rates have become a more important factor in agricultural markets than in the past. Increased fuel costs, stretched shipping capacity, port congestion and longer trade routes have pushed up shipping costs, affecting as well the geographical patterns of trade, as many countries opt to source their import purchases from nearer suppliers to save on transport costs.

High liquidity, as well as instability in financial markets. Low interest rates and high petroleum and other commodity prices have paved the way for massive amounts of cash becoming available for investment (by equity investors, funds, etc.) in markets that

use financial instruments linked to the functioning of agricultural commodity markets (e.g. futures and options markets). Such influx of liquidity has raised spot price volatility. Increased price volatility affects investment decisions and may affect medium and long term production.

It must be noted that increased prices at the international level have not passed through to the domestic markets, hence affecting food and overall inflation, in the same intensity in all the countries. The gradual decline in the value of the US dollar against many currencies since 2005 has lessened the true impact of the rise in world prices of some important commodities denominated in dollars, a major reason behind the brisk world import demand that, in spite of high prices, shows very little sign of retreat.

The impact of commodity price rises on general inflation depends much on the extent to which national nominal exchange rates follow the dollar variations against major currencies, as well as other policies designed to isolate domestic from international markets. The case of many countries

in Western Africa whose currencies are linked to the Euro via the CFA franc is illustrative. High world dollar denominated prices for cotton, a major exported product, and other food commodities, for instance, have not passed through to producers and consumers because of Euro and hence CFA appreciation against the dollar.

# Rising food and fuel costs – a threat to political stability

Substantial increases in the global cost of imported foodstuffs have already occurred, with the total food import bill of the 82 Low Income Food Deficit Countries (as classified by FAO) for the current marketing year estimated to be 29 percent higher than the previous year and the highest level on record. Developing countries as a whole could face an increase of 33 percent in aggregate food import bills, coming on the heels of a 13 percent increase the year before. The sustained rise in imported food expenditures for these country groups is alarming. Today, their annual food import basket could cost well over twice what it did in 2000.

Large increases in food and fuel prices threaten macroeconomic stability and overall growth, especially of low income net food importing countries. About 22 developing countries are especially vulnerable due to a combination of high levels of chronic hunger (above 30 % undernourishment), while being highly dependent on imports of petroleum products (100 % in most countries) and, in many cases on imports of major grains (rice, wheat and maize) for domestic consumption.

Large increases in food and fuel prices have also important implications for people. Immediate visible consequences of economic impact include social unrest and food riots that have taken place in most continents recently, primarily in urban areas, where people have felt the brunt of the impact of soaring food prices, and of rising fuel costs. Long queues at subsidised food stores and higher price tags not only on staple food, but on almost all food items are an everyday phenomenon. Several importing countries are involved in what has been reported as "panic buying" in their effort to secure adequate supplies and build domestic stocks of major cereals. At the same time, major exporters in their effort to keep domestic cereal prices "in check" block or impose serious impediments to exports further exacerbating the tightness in world markets. Least developed countries with high levels of poverty and food insecurity, and large population groups who spend 70-80 percent of their household income on food, are particularly vulnerable.

In the short run those food buyers in the cities and in the rural areas (including the poorest rural households that are predominantly landless and net food buyers) who spend large share



The available food supplies have rapidly decreased due to low grain harvests in many parts of the world and changing consumption patterns in some large developing countries.

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of their income in food, are likely to be pushed deeper into poverty and food insecurity. In some countries urgent action is required to maintain and in some case enhance emergency safety nets.

On the other hand, high prices will stimulate a supply side response where the market signals are transmitted to food producers who have capacity to increase production and where the existing transport and market infrastructure allow them to supply the market. This may represent an important opportunity for promoting agricultural and rural development in many low income-food deficit countries, provided an enabling policy environment and supportive measures are established quickly.

Far less visible but not less important are the difficult choices that households, especially the poorest ones, have to make following rapidly declining purchasing power. The risk of increased food insecurity and malnutrition is high among these population groups, as households have to give up on more expensive sources of protein and other nutrient-rich foods and depend on low-cost high-energy foods to maintain a minimum level of productivity. Poor households find themselves having to compromise on

health care, education and other non-food household expenditures.

Reevaluating the role of agriculture for growth and poverty reduction

At the same time, higher prices present a unique opportunity to relaunch agricultural investment and increase agricultural productivity in the developing countries. While increased international food prices, especially if transmitted to domestic markets, will stimulate increased production, a major issue is whether the new global food price situation presents an opportunity to reevaluate the importance of agriculture for growth and poverty reduction. Major questions that can be posed in this context are the following. Under what conditions does additional or disproportional support for agriculture will be both overall growth enhancing as well as poverty reducing? Given that overall support for agriculture as an efficient growth enhancing and poverty reducing strategy can be justified, what are the most appropriate ways to support agriculture so as to maximise the effectiveness of such support in generating growth and reducing poverty?

Long queues at subsidised food shops and "panic buying" are visible consequences of the increasing food prices.

At early stages of development, an economy needs an engine of growth. Such an initial engine of growth can come from a variety of sources, such as the development of domestic or export agriculture, industry, tourism, etc., and the key issue for development is what is done with the increased incomes and savings that come about from the initial engine of growth.

While in the now developed countries it appears that the major stimulus to early growth was industrial innovations, accompanied but not led by agricultural innovations, there have been some developing countries in the recent past, notably India and China, as well as the Chinese Province of Taiwan, where growth was led by agricultural broad based productivity changes. In these countries it seems that the major source of the demand for the increased product of the agricultural sector was domestic, as there were substantial levels of initial poverty. Hence improved agricultural incomes directly led to increases in the domestic demand for the larger quantities of food produced domestically. A substantial part of the cost of their agricultural productivity improvement was shouldered by external donors, including the major contributions of the international agricultural research centers. Finally, it appears that given the substantial rural population densities in these countries, the cost per agricultural producer of improving agricultural productivity was relatively low, as there was no need for experimentation in too many climatically different locations.

The situation may well be different in many of the late developing countries, such as those in many parts of Africa, in the sense that the cost per beneficiary of agricultural productivity improvement may be high because of low farm population densities. At the same time overall donor support

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to agriculture has been declining, necessitating a larger contribution to domestic agricultural productivity improvement by the state. Can agriculture play a leading role in the settings of the late developing countries, and should cash strapped governments devote a substantial share of their meager resources to agricultural growth and productivity improvements?

There is by no means an unequivocal argument for agricultural development as an engine of growth and poverty reduction. However, there seems to be a set of initial conditions that make agricultural development both growth enhancing as well as poverty reducing. These conditions involve the following:

- Agriculture must account for a large share of aggregate employment.
- Initial distribution of land must be equitable and property rights must be well specified.
- The technological improvements must not be risk increasing, nor should they require substantive private capital to be implemented.
- Most of the additional expenditure of the direct beneficiaries of agricultural growth must be spent for labour intensive locally produced products.
- There must be an excess supply of underutilised local labour resources.
- There must be complementary improvements in the provision of

human capital assets at the local level (education and health), as well as improvements in marketing infrastructure (e.g. roads).

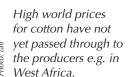
What if the above conditions that make agricultural productivity growth have a beneficial impact on overall growth and poverty reduction, do not hold? While it is not easy to generalise, the following issues can be raised in this context.

First, if agriculture does not account for a large share of aggregate employment, then it cannot easily be a leading sector for growth or poverty reduction. Investments in agricultural productivity growth must then be judged by comparison with investments in productivity growth of other sectors. Perhaps the best policies under such circumstances are investments in human capital, so as to allow agricultural producers to adapt more efficiently to technological changes.

Second, if it is difficult to change the initial conditions in the short run, then, while working toward changing them in the medium to long run, one may want to avoid the types of productivity growth that may favour adversely factors that are unequally distributed. For instance, if the land distribution is unequal, then public research in agricultural development should be better targeted towards labour intensive techniques, so as to absorb excess rural labour, rather than techniques that require much capital.

Third, if there is

no large local excess supply of labour, that could be mobilised when the demand



### Zusammenfassung

Die derzeit hohen internationalen Lebensmittelpreise sind einerseits die Folge langfristiger, grundsätzlicher Veränderungen wie der steigenden Nachfrage in den Schwellenländern, andererseits aber auch das Ergebnis temporärer Faktoren, zum Beispiel von Produktionsausfällen. In der Vergangenheit haben sinkende Preise die Regierungen veranlasst, ihre Unterstützung für die Landwirtschaft zu verringern. Da die landwirtschaftliche Entwicklung unter bestimmten Bedingungen das Wachstum fördern und zur Armutsminderung beitragen kann, bietet die aktuelle weltweite Lebensmittelsituation eine Chance, diesen Trend umzukehren.

#### Resumen

La actual alza de los precios internacionales de los alimentos se debe, por un lado, a factores fundamentales de plazo más largo, como la mayor demanda de las economías emergentes, y por otro a factores temporales como los déficits en la producción. En el pasado, las bajas en los precios han Ilevado a los gobiernos a reducir el apoyo a la agricultura. Debido a que – bajo ciertas condiciones – el desarrollo agrícola puede tanto incrementar el crecimiento como reducir la pobreza, la actual situación mundial de los alimentos ofrece una oportunidad para revertir esta tendencia.

for rural non-agricultural products increases, then it may be prudent to concentrate on improving the marketing infrastructure, and hence lower the marketing cost between rural and urban areas.

The above points are not easily generalised, and the presence of only a subset of the above conditions implies that agricultural development policy in such circumstances must be judged on an individual country basis. Nevertheless, it appears that high global prices for food products provide a unique opportunity to rethink how agriculture can better contribute to growth as well as poverty reduction.