



Rising Food Prices – Causes, Implications, and Challenges for Development Policy

For several months now, worldwide food prices have exploded. This has had severe impacts on many developing countries, ranging from increases in poverty and hunger and problems with inflation and balances of payment to national instabilities.

The extreme price boom is likely to prove more short-term in character. However, there are a number of longer-term trends that appear to indicate a tendency toward food prices higher and more unstable than they have been in the past.

While in the short term the ongoing food crisis is harmful to most urban and rural households, viewed in the longer-term perspective, (moderately) higher prices have

positive effects on the majority of rural households, and thus on poverty as well, which continues to be a mainly rural phenomenon. Both governments and development policy are urgently called upon to adopt short-term measures, including e.g. an easing of import and export restrictions, provision of import or consumer credits, direct transfers, and, possibly, food aid, designed to quickly defuse situations that may often be explosive. But there is also a need for longer-term measures designed to promote agriculture in developing countries -, on the one hand to boost output and thus to return food prices to tolerable levels and stabilize them and on the other hand to bolster rural economic cycles and sustainably raise the purchasing power of the rural population.

Prices for staple foods have soared in the course of recent months. In 2007 the FAO Food Price Index rose on average by 23 % compared to 2006, reaching a level of 57 % in the period from March 2007 to March 2008. Even higher price increases have been reported for individual agricultural markets. These high prices have led to crisis-like situations in many developing countries, there has been unrest involving loss of human lives, indeed in Haiti the government was even brought down. The World Bank has recently reported food crises in over 30 countries.

Are we experiencing the end of the times of worldwide overproduction and falling agricultural prices we have grown accustomed to in the course of recent decades? Is what we see now an unexpected substantiation, 200 years in coming, of Thomas Malthus' hypothesis that agricultural production is inevitably unable to keep pace with population development? Indeed, do we now need to prepare for a permanent increase in hunger? And what measures need to be taken to counteract this development? These are questions that have been posed again and again and often answered wrongly, and even today there is no clear-cut answer to them. Even so, the international community needs to come up with an assessment, for what is at stake here are vital questions concerning survival and development, issues that may call for long-term countermeasures.

The causes of the food crisis

In its present, critical form, the food crisis is likely to be more short-term in nature, a consequence of a series of bad harvests and self-reinforcing reactions to them.

However, the crisis has developed over the medium term, with some longer-term trends making themselves felt in the background, and the latter make it seem unlikely that agricultural prices will, in the longer term, return to the historical low they had reached e.g. in 2001/02.

These trends are to be found on both the demand and the supply side as well as among the factors responsible for equilibrium between the two sides.

On the demand side there are many trends that indicate that prices may well continue to rise over the long term: population growth, increasing urbanization, rising incomes, above all in advanced developing countries, growing meat consumption, and the emergence of new forms of use for biomass, which are in turn bound up with climate and energy policies and dependent in large measure on high prices for oil and energy. Only in the (unlikely) case that these trends reverse radically could the underlying tendency toward sharply rising food demand be stopped.

Looking at the supply side, we find that the trends are more complex than they are on the demand side, and there are major unknowns involved. Thus far gains in agricultural output and productivity have been very high. In the US and the EU it has been deemed necessary to use set-aside schemes, quotas, price cuts, and a transition to premiums unrelated to output to reduce the overproduction resulting from the prevalent agricultural policy, keyed as it is to protection and subsidies. However, the levels of agricultural support provided in industrialized countries continue to be very high. On

the whole, gains in production and productivity in developing countries have been even higher, although there are major country- and product-related differences, and poorer countries, in particular in Sub-Saharan Africa, have not benefited from this trend. It is precisely in the latter that agriculture has been neglected by both national governments and development cooperation, with the consequence that it has come to be neglected by the private sector and the rural population as well. International agricultural policy has contributed to this neglect. For the medium term (up to 2015) most analysts see a continuation of the trend toward rising production, though with declining rates of growth due to high oil and energy prices, discontinuation of farmland expansion, declining yield increases rooted in the limits of the technologies presently in use, and the growing scarcity and degradation of natural resources and the increasing costs involved in avoiding and limiting them.

The trends influencing the determinants involved in mediating between supply and demand are ambiguous as well: One of the features typical of the international food markets is their "thinness," i.e., the relation between the share of goods traded and consumed is for the most part small (for rice e.g. 2–6%). This is the reason why market prices respond sensitively even to slight fluctuations in supply or demand. While in recent decades globalization effects (communications, logistics) have reduced transportation costs, the most recent increases in oil and energy prices have drastically raised the costs involved in the trade in and transportation and processing of agricultural goods, thus widening the gap between producer and consumer prices. Finally, the international agricultural markets are highly distorted due to government interventions: In the industrialized countries this means in effect subsidization and protection practices that lead to declining world market prices, undercut export opportunities of developing countries, and tend to induce them to adopt policies based on agricultural imports. But many developing countries also protect their agricultural sectors, in this way intensifying the trend toward falling prices in the world markets and reducing the volume of agricultural trade.

Looking at all these trends together, we find the following picture for the period leading up to the present crisis: In earlier decades, up to roughly 2002, growth in agricultural output was more than able to compensate for higher demand (even in an environment influenced by market-distorting agricultural policies), and world market prices declined. The industrialized countries gradually lost export shares to the developing countries, though with marked differences: While the share of the wealthier countries was rising, the poorer countries were losing shares, with many of the latter becoming net importers. However, in recent years, owing to a string of crop failures in several important producer countries (Australia, India, China, Russia) supply was unable to keep pace with a demand that continued to rise sharply. The difference was initially made up for by reducing stockpiles, which subsequently declined to

record levels. At first prices rose only moderately (2006 to 2007: 9%). But then, starting in mid-2007 and accelerating in early 2008, the dramatic price rises described above began to make themselves felt.

However, these fundamental trends are not sufficient to fully explain the extremely rapid price increases that finally materialized. Demand for agrofuels, given the main share of blame for the crisis in many commentaries, was probably one of the contributing factors, though not the predominant one. Nor can higher oil and energy prices be made responsible for any more than part of the upward pressure on food prices.

If the fundamental trends are not a sufficient explanation, what, then, was it that caused the crisis? The following would appear plausible: Production and export shortfalls and dwindling stockpiles in earlier years had served to highlight uncertainties concerning aggregate supply and to make markets jittery. The huge boom in prices for sugar and nonagricultural commodities in 2006 and forecasts of a similar boom in store for the agricultural sector in general induced importers and speculators to lose no time in stocking up or placing their bets on a boom. The urban population began to feel the pinch of first price increases, now governments themselves started to grow nervous, the result was a string of interventions. It started out in the spring of 2007 with the so-called tortilla crisis in Mexico, which led to the imposition of price ceilings. In the course of 2007 there were more and more reports on crop failures (Australia, Ukraine, EU). Starting in autumn other governments imposed either outright bans or levies on exports with a view to keeping prices low (e.g. India on rice) and or skimming off exorbitant profits (e.g. Argentina on soy beans). In recent months more and more countries have chosen to follow these patterns (China, Russia, Vietnam, Egypt, Ukraine, etc.), and the motive behind these moves was almost invariably excessively high consumer prices, even in classic exporting countries. Finally, some importers oversubscribed tender volumes in order to lay in stocks and to be ready if the crunch came. All of these activities aggravated the situation of supply scarcity and surplus demand, ratcheting up the price spiral.

Further prospects

The current supply situation is precarious, and there are few buffers left to cushion the impacts of any further crop failures. While it is true that the first production forecasts for 2008 seem optimistic, even slight disruptions may provoke major price fluctuations, particularly in view of the fact that markets and governments have been sensitized by the experiences of recent months.

For the medium term (to 2015) most forecasts see a gradual decline of prices to pre-crisis levels. There is, however, little to indicate that agricultural prices could return to the all-time lows they had reached in 2001/02. And for the case that agreement should be reached on further liberalization of the world agricultural market, all simulations predict world market prices

rising between 2 % and 15 %, depending on the product concerned and the starting hypotheses used.

A wholly plausible long-term scenario would be growing relative scarcity and thus rises in food prices. Alongside the trends referred to, climate change is bound to have appreciable effects on agricultural production: In the case of unrestrained climate change, forecasts see only moderate decreases in productivity (3–16 % by 2085), but these changes will differ very substantially from region to region – with the moderate latitudes standing to gain, while precisely subtropical regions (India, southern Africa) will have to contend with extremely negative developments (down to -50 %). All regions will be faced with major weather fluctuations and extreme weather conditions. These in turn will lead to production fluctuations resulting in high transaction costs and lower levels of investment.

Implications of rising agricultural prices for the population

The immediate effects of the food crisis on the population's food supply (shift to lower-cost products, lower consumption, hunger) mainly affect urban centers. They have already experienced unrest, and these areas are in the focus of government interventions. Rural protests have been reported only from places where government-imposed measures have had massive discriminatory effects on producers (Argentina, India).

In general, the impacts of high food prices on the rural population are heterogeneous and on the whole unclear. Over 60 % of all people in developing countries live in rural areas, up to 90 % in poorer developing countries, and the proportion of the rural population affected by income poverty (29 %) is twice as high as it is in urban areas (13 %). A total of three quarters of the poor in developing countries (76 % of people living on one USD per day, 74 % of those living on less than two USD per day) are found in rural areas.

There is much to indicate that in the short term the losers of food price increases will include not only urban households but also, and in particular, a very great number of poor rural households – should, that is, these people be faced with the impacts at all in view of the fact that in situations involving underdeveloped markets and high transportation costs, price transmission often tends to be weak and delayed. As consumers, these people are inevitably quick to feel the effects of rising food prices, and very few of them are likely to have appreciable stocks that they could sell at higher prices.

In the long term, however, rural regions may stand to benefit in several different ways from higher agricultural prices: First, 80 % of the rural population earn most of their income in agriculture. Roughly two thirds of the rural poor are small farmers, one quarter landless, the rest fishermen and herders. This would indicate that as agricultural producers the majority of the rural population, including the poor, stand to benefit from higher agricultural prices. However, small farmers also purchase supplementary

agricultural products. Even if it made sense to do so, it would not be possible to state in any valid way whether, in general, rural households are net producers or consumers, what we have is a continuum for individual countries, regions, and possibly even years. In addition, the effect of rising agricultural prices also depends on how the relation between agricultural goods sold and bought changes, and how production costs change.

Second, rural farming households stand to benefit from higher prices if they are able, over the medium term, to adapt and boost their output. Agricultural growth is on the whole conducive to pro-poor growth. However, many farmers in developing countries lack access to short-term credits, operating resources, and labor, to say nothing of the capital they would need for major investments.

Third, the probable reason for the most important long-term effect of higher agricultural prices is that nonagricultural sectors in rural areas benefit strongly from agriculture: Workers, suppliers, or purchasers stand to benefit from higher demand for their products and services. Other sectors stand to benefit indirectly from the secondary effects of higher purchasing power in the sectors mentioned above. These so-called multiplier effects tend to be substantial in rural areas (1.5–2.5), since the main demand there is for local goods and services.

These upsides to higher agricultural prices for the rural population stand opposed to a number of downsides: inflation, a weakening of the purchasing power of the urban population and net consumers, and decline in their demand. Price increases should not be so high as to block the necessary process of structural change working in favor of growth of the secondary and tertiary sectors, because in this case an agriculture-based economy will ultimately run up against limits and be unable, in the long term, to provide the goods and services expected and sought after by a developing society. Agriculture-driven growth may also generate additional, nonnegligible pressure on the uses to which natural resources are put. On the other hand, though, in many regions it is precisely lack of growth and intensification that leads to resource degradation.

Conclusions for development policy

In looking for adequate responses to rising agricultural prices, it is important to distinguish between short-term and medium- to long-term measures.

What is mainly needed in the short-term is measures designed to defuse the explosive demand-side situations that have emerged in many countries (see list below; in brackets support from donors). The sequence of the list indicates a growing number of problematic secondary effects, and thus declining preference for a given measure. However, depending on the concrete situation involved, they may still be necessary:

- Suspension of import restrictions (none)
- Reduction of taxes on food products (none)
- Provision of credits for food imports (IMF and bilateral credit lines)

- No imposition of restrictions on exports, in particular in important exporting countries interested “only” in averting any minor inflationary or supply problems, including groups of industrialized countries (political dialogue and policy advice)
- Provision of food coupons or money transfers to poor households via existing social security systems (social programs)
- Provision of funding to help alleviate the higher costs of food programs, as far as possible without inhibiting producer incentives (food aid)
- Measures designed to prevent or attenuate and optimize the timing of price controls on food, which may lead to production cuts and producer losses (political dialogue and policy advice).

Some of the measures named will also need to be stabilized over the medium to long term. In particular, there is a need for measures designed to expand social security systems, and these measures should be cost-effective and function properly in rural environments and under the conditions of poor governance.

Furthermore, there is a need, over the medium to long term, for measures designed to strengthen both the supply side and agricultural markets as a whole. Higher agricultural prices would offer an important incentive here. In addition, higher prices would offer a major opportunity to promote agriculture-based, pro-poor growth.

Promotion of agriculture in developing countries is a good approach to creating incomes and purchasing power where most poor people live, and to do so on the basis of what these people already do and can do. What has thus far been impeded by low prices would now appear to border on the imperative. The following measures should be given priority at the developing-country level:

- Development of rural infrastructure, reduction of transaction costs and unnecessary regulation of national agricultural markets, efforts to strengthen individual and collective land ownership and use rights and institutions, particularly in rural areas;
- Creation of transparent and gradually liberalized national and regional agricultural markets;
- Active support for the agricultural sector and its actors – research and advice, farmers’ organizations, rural financial systems and agricultural credits, contract farming, standards, and norms;
- Efforts to forge closer links between or to merge production, resource-protection, and governance-oriented programs in rural areas.

Designed with a view to the new efficiency orientation of development cooperation, these measures should be embedded in national and regional programs. They should also be keyed as closely as possible to competitive and

market principles. The agricultural sector poses particular difficulties of its own here (many, widely dispersed actors, high risks, market inefficiencies, and high transaction costs). These problems are surmountable, although they do call for special support and coordination.

Reforms are needed at the international level as well:

- Liberalization of the international trade in agricultural goods, including sufficient but rule-bound flexibilities for developing countries that are designed to provide targeted protection for their markets;
- Further reforms of the agricultural policies of the industrialized countries, in particular of the EU. Non-agricultural interventions should be used to address income problems in rural areas, fair competition must be possible in the agricultural sector.
- The biofuel policies pursued by the industrialized countries should be far more circumspect than they are. In the present situation there is little room for additional impulses that would serve to drive up prices for agricultural goods. Over the longer term, though, the existence of a price floor for agricultural goods is good news for the rural population, and thus also for a large share of the poor. Furthermore, biofuels may also turn out to be a valuable source of income and an engine of rural growth.
- In view of old and new sources of price fluctuation in agricultural markets that cannot be cushioned entirely by means of liberalization, there is a need for new efforts to stabilize agricultural markets and prices, preferably on the basis of market-oriented mechanisms (insurance, financial products, incentives designed to promote private efforts to build stocks, etc.).



Dr. Michael Brüntrup
Agricultural economist
with the DIE

Literature

- Brandt, H. / U. Otzen (2007): Poverty Oriented Agricultural and Rural Development, London: Routledge, ISBN 978-0-415-36853-7 (Studies in Development and Society 12)
- Braun, J. von (2007): The World Food Situation: New Driving Forces and Required Actions, Washington, DC: IFPRI
- Brüntrup, M. / S. Baumert (2006): Neue Perspektiven für die Agrarpolitik in Subsahara-Afrika: Bericht zum zweiten DIE-Afrika-Fachgespräch am 29. November 2005, Bonn: Deutsches Institut für Entwicklungspolitik (Draft)
- OECD / FAO (Organisation of Economic Cooperation and Development / Food and Agriculture Organization) (2007): Agricultural Outlook 2008–2016, Paris
- Weltbank (2007): World Development Report 2008, Washington, DC: Weltbank