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Price spikes and world food security

The need for change

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The recent food price increases in international markets threaten food security and have led many researchers, policy makers and NGOs to analyse them in order to address them. Most analysts talk about price spikes, which they characterise in terms of price volatility. This characterisation leads them to advocate measures – market liberalisation, private risk management instruments, and safety nets – that have been showing their limitations for almost 30 years.

Clearly there is a certain level of volatility inherent in agricultural product prices, which has been compounded by trade policies and speculation. But since 2005, a steady upward trend in food prices has been observed, sometimes resulting in spikes. Several factors can explain these spikes: the lack of coordinated storage; insufficient and inappropriate agricultural investment; the depletion of resources; and growing demand from biofuels and emerging countries.

Placing these spikes within the context of an upward trend opens new avenues for national and global action that depart from the predominant vision today: basing the rules of international trade on food security; coordinating storage policies at the global level; investing in ecological agriculture; and limiting growth in demand for agricultural products.

Since 2006, the international food markets have experienced two spikes. The first was curbed by the economic and financial crisis of 2008. The second, which began in 2010, is still underway. These spikes threaten food security by causing an increase in the cost of imports in food-deficit countries and rising consumer prices in most parts of the world.

Volatility, but especially price increases

These price spikes have given rise to numerous discussions, studies and initiatives by researchers, NGOs and of course governments. According to the most common interpretation, the recent evolution of food prices is a problem of price volatility, considered as a structural characteristic of agricultural markets. Indeed, supply, which is subject to sharp fluctuations due to natural phenomena, must be adjusted to demand that depends little on price (low elasticity). Hence the considerable price fluctuations to achieve this. However, the volatility of international prices has recently become problematic. Two causes are given: the first, controversial reason, is speculation; the second, accepted cause, especially for the

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rice market, is trade restrictive measures (particularly export bans).

This characterisation of price spikes in terms of volatility was used in the report prepared in 2011 for the G20 by 10 international organisations. Despite a diagnosis centred on rising prices, and on their determinants and consequences, the report only suggests solutions for addressing volatility. It does not venture far from the "package" of policy options defined in the mid-1980s by the OECD and the World Bank and promoted continuously and insistently despite mixed results, to say the least: liberalisation, private risk management instruments (price, climate), and social safety nets. These solutions were proposed at the time because prices were too low. They are proposed today because they are too high, and still with the aim of reducing price volatility.

However, other studies show that the price situation in international agricultural markets is of a different nature. Since 2005, upward pressures are creating both higher prices and increasing volatility. This is illustrated by the fact that even at the height of the economic crisis of 2008 – the worst since the Second World War –, food prices did not fall back to their pre-2005 levels. It is therefore necessary to analyse the evolution of international food prices from a broader perspective than that of volatility alone.

Long-term causes

The world is coming to the end of a long period of structural overproduction, made possible by the massive consumption of natural resources.

For some analysts, (Timmer, 2010; Abbot, 2008), the evolution of prices points to the existence of recurrent food crises (every 20 to 30 years) due to the dynamics of public policy incentives for the production or consumption, whether food or non-food, of agricultural products.

Where supply is concerned, a period of high prices leads governments to foster research and investment in order to increase production – policies that will cause lower prices a few years later. The period of low prices then leads to a reduction in government interest, meaning a decrease in public support – a situation which persists until supply is so low that prices spike. And then the cycle begins again. From the end of the 1970s to the mid-1990s, in a context of restricted public support for agriculture, growth in agricultural capital slowed down to stabilise at a low level. Several developed regions – North America between 1985 and 1989, and Europe between 1990 and 2004 – even underwent a process of agricultural decapitalisation. This slowing of investment growth also affected funding for agricultural research as well as financial support granted by the OECD countries to agriculture in developing countries.

Where demand is concerned, periods of low prices encourage the public authorities, in conjunction with private operators, to explore and create new outlets (animal feed, food aid, sugar substitutes, biofuels, etc.). Designed as short-term solutions, these outlets become established in most cases and contribute to price increases. This is seen in biofuels. Heavily supported by massive State aid – subsidies and tax exemptions (8 billion dollars in the US and 7 billion euros in the European Union in 2009); mandatory use in petrol –, the accelerated development of this sector has become one of the main factors in the price spikes.

For other analysts, the current spikes announce the end of a period of growth unprecedented in the history of agricultural production and a situation of shortages in agricultural markets. The world is coming to the end of a long period of structural overproduction in international markets, made possible by the massive consumption of cheap natural resources: oil, water, biodiversity, phosphate, land, etc.

Alongside the depletion of resources for food production, new demands for biomass are emerging in transport, heating and housing. Biofuels are the most visible part of this movement. In fossil fuel-dependent industrialised societies, the use of biomass has gradually been limited to the provision of food alone. This absence of non-food uses of land is a radical change in human history. The potential exhaustion of fossil fuel reserves and the need to restrict their use because of climate change brings industrialised societies to a new watershed.

The frameworks of analysis must be renewed and the means of collective action reconsidered.

The upward pressure on food prices in international markets and the broad range of causes underlying these increases mark the beginning of a new era. To guarantee food security in the world, the frameworks of analysis must be renewed and the means of collective action reconsidered. Changes are required; hence the need to launch fresh discussions.

Basing trade rules on food security

The food price crisis has undermined what remained of the World Trade Organization (WTO) Doha negotiations. The discussions held in Geneva have focused, to date unsuccessfully, on what can be salvaged from the negotiations. Some Member States are asking how an agenda agreed in 2001 still responds to a world that has changed so much. The trade negotiations on agriculture were launched in a context of structural overproduction. The primary goal was to settle trade disputes between exporting countries by creating the conditions for fair competition and guaranteeing these countries access to importing country markets. But in a context of high prices, this preference in favour of exporting countries is no longer acceptable, especially to importing countries. For these countries, food security must be central to the definition of world trade rules.

Greater consideration to the heterogeneity of countries.

Two proposals could be discussed. The first is that the multilateral rules give greater consideration to the heterogeneity of countries and address the priorities of poor countries. The second deals with the means of using export restrictions guaranteeing both supply for importing countries and price stability in exporting countries, or those which may export in the future.

National coordination of storage policies

Slowing growth in animal product consumption.

History has taught us that a high level of stocks helps to stabilise prices, which has only been possible in the past when one country has taken responsibility for the majority of stocks. For the grain market, the United States did this in the 1960s and early 1980s, followed by China in the late 1990s. Today, no country acts as a central stock holder. Maintaining a minimum storage level thus becomes a problem of collective international action.

International agreements existed in the past, such as the International Wheat Agreement. Their aim was to support prices, thereby protecting the interests of exporting countries. The goal today would be to avoid price spikes by releasing stock when prices start to boom.

One proposal could be discussed: sharing storage between countries and coordinating national stocks at the international level. This would enable countries, whether importing or exporting, to have food available close to their consumers, and also to share the burden of storage.

Investing in the transition towards an ecological agriculture

The World Bank's World Development Report 2008 stressed the urgent need to invest in agriculture to reduce poverty. Since then, the repeated food price rises have demonstrated that investing in agriculture is also a necessity to guarantee world food security. However, this observation should not make short-term growth in world agricultural production the first and only priority for public investment.

The goal now is to foster the transition towards more resilient and more ecological production models that guarantee a production level sufficient to ensure long-term food security (Agrimonde). There are a number of agricultural production systems that respond to growing ecological constraints: the sustainable intensification of agricultural production, advocated by FAO; or agroecology, which is adapted to poor farmers with no access to inputs or credit markets. Production systems of this kind involve crop diversification, and therefore ensure better resilience to biological, climate or economic shocks.

This transition requires investment: in research to understand the processes and to

develop agricultural technologies; in training to teach new techniques; and also to provide farmers with financial support during the transition.

Curbing the growth of demand for agricultural products

In the face of increasingly constrained growth in production, demand, on the other hand, seems to have no limits and is never questioned. Yet faced with long-term price increases due in particular to the depletion of resources, it is now essential to curb demand in developed and emerging countries. Three avenues for collective action can be discussed.

The first is to limit the use of food to produce biofuel. Initially, it would be easy to abandon measures that make it mandatory to include biofuels in liquid fuel, along with the financial support provided to this sector. In the future, other measures could be envisaged, such as taxation. Indeed, several studies point out that given the rising price of oil and the economies of scale, biofuel production will soon become competitive without public support. Taxation of biofuel will then become necessary to limit price increases in the international food market.

The second option is to reduce losses. Losses occur throughout the sector, from producer to consumer, via processing, distribution and catering. Reducing these losses implies improving the technologies used by businesses, as well certain health regulations.

The third option is to reduce the consumption of animal products, or at least to slow its growth. Consumption of these products may pose certain problems: rising levels of overweight and obesity, generating costly public health problems; groundwater pollution; greenhouse gas emissions; and indirect competition between human food and animal feed.

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There is an urgent need to launch pragmatic discussions in order to achieve these changes with a clear focus on food security issues. These discussions could be conducted by a number of different bodies. The Committee on World Food Security could coordinate them, simultaneously addressing trade, social and technical issues, which are currently dealt with in a fragmented manner within specialised institutions (WFP, WTO, FAO, etc.). But the discussions must also take place within individual countries at the national and local levels. The models of consumption or types of agriculture chosen are of concern to all citizens. ■

A few words about...

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This issue of *Perspective* provides a reading of the report on "Price volatility and food security" produced by the High Level Panel of Experts (HLPE) on food security and nutrition. The report is available for downloaded at the following link: http://www.fao.org/cfs/cfs-hlpe/report-1-price-volatility/en/

This expert panel was created in 2009 by the Committee on World Food Security (CFS) to provide it with advice. In October 2010, the CFS asked the expert panel to produce a report on price volatility. This report was prepared in spring 2011 by an ad hoc team made up of Benoit Daviron (CIRAD, team leader), Nango Dembélé (Michigan State University), Sophia Murphy (Institute for Agriculture and Trade Policy, IATP) and Shahidur Rashid (International Food Policy Research Institute, IFPRI). It was presented in October 2011 during the 37th session of the Committee on World Food Security.

TO FIND OUT MORE

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