

### WITHSTANDING AGRICULTURAL PRICE VOLATILITY



After the agricultural commodity priced soared in 2007-2008, they have once again been rising since the summer of 2010 for the main commodities—including grains (except rice<sup>1</sup>), oilseeds and sugar. In February 2011, the world wheat prices had risen by nearly 70% in one year, corn prices by 90%, and the soy prices by 45%.<sup>2</sup>

These price spikes and variations reflect an intensification of volatility—i.e. strong and erratic fluctuations—on world agricultural markets.

Agricultural markets are unstable by nature, not only because of production variability due to natural phenomena (the so-called "exogenous" causes of volatility), but also because of the very nature of these markets. Consumption levels are not very sensitive to price levels (i.e. the elasticity of demand is low), the time (at least one crop cycle) between farmers' decisions and the consequences of these decisions on production is long (i.e. the elasticity of supply is low), and market conditions are unpredictable, etc. Those are the so-called "endogenous" causes of volatility.

The transmission of agricultural and food price volatility from international markets to domestic markets varies, depending on the level of domestic market integration in the international market. Due to this transmission, price volatility on international markets harms both poor consumers and farmers:

- Consumers' living conditions are threatened by rising food prices;
- Price drops affect the incomes, the standards of living, and the ability of farmers to invest in production. In addition, the unpredictable nature of future prices encourages them to adopt agricultural practices that minimize risks (such as limiting production costs), sometimes to the detriment of increased production. In addition, they are not always able to take advantage of price hikes on world markets, not only because of value chain structuration (see below) but also because of their limited capacity to increase production. In addition, more than half African farmers are net consumers of food

<sup>&</sup>lt;sup>1</sup> In addition, the rise in world grain prices has not yet been passed on to domestic prices for sorghum and millet, grains that are mainly grown for self-consumption or sale on local markets.

<sup>&</sup>lt;sup>2</sup> According to Agra Press weekly.

products and are, therefore, affected by price hikes.

The fact that monopolies or oligopolies dominate value chains (particularly agro-industry and volume retail) tends to amplify the negative effects of volatility for both consumers (fewer varieties consumed, overtransmission of price hikes) and producers (producer specialization, over-transmission of price drops, and under-transmission of price hikes).

High price volatility also has negative fiscal and budgetary consequences for governments, which must set up policies to face food price spikes (buying on the world market, lowering customs duties, offering consumption subsidies).

Furthermore, the 2007-2008 crisis revealed the vulnerability of many net importing countries whose food bills have skyrocketed. Those that had the means to do so envisaged ensuring their food security by acquiring farmland in other countries, which in turn increased the threat to local producers.

#### Why Agricultural Price Volatility Is Rising

Several factors were behind the skyrocketing prices in 2007-2008 and 2010-2011. First, prices soared at a time when tensions between supply and demand was increasing on world markets. These tensions are not just cyclical but indicate a likely transition toward a period in which agricultural prices will be higher than they have been over the past three decades, and closer to the high prices in the 1960s and 1970s.

A central element in this context is the rapid growth in the use of agricultural products to produce agrofuels, lowering the grain and oilseed supplies available for food given that total cultivated land has not increased. For instance, during the 2007-2009 period, 9% of the secondary grains (mostly corn) and oilseed, and 20% of the sugar cane produced worldwide were destined for agrofuel production.<sup>3</sup> In the United States, 127 million tons of corn (37% of production) are expected to be devoted to ethanol production in 2010-2011,4 compared to 25 million tons (10% of production) in 2003.<sup>5</sup> Agrofuels compete directly with oil, therefore their price is linked to world oil prices. As a result, high oil price volatility and recent skyrocketing-as well as their probable structural upward trend in the futuredirectly influence the prices of dual-use crops (agrofuel and food) such as corn. All agricultural products are affected indirectly, through substitution effects among crops and among products, and impacts on production costs (fertilizer, animal feed, etc.).

In the near future, agricultural production will have to overcome many challenges to meet the increase in demand due to population growth and changes in consumption modes (including increasing animalproduct consumption). The food supply may struggle to keep up. It can be difficult, in some areas of the world, to increase the amount of cultivated land. Furthermore, increases in food supplies can reach a ceiling due to the limitations of the model that emerged from the last agricultural revolution.<sup>6</sup> The combined effects of climate change should also be taken into account (for instance, of multiple extreme climate events occurring in the same year, as in 2010).

As a consequence of these changes and government withdrawal from agricultural market regulation (notably under the influence of international financial bodies and the WTO), lowered stock levels (especially in the European Union and the United States which had long regulated international markets in practice by adjusting their stocks) have created a favorable environment for skyrocketing prices. Lower stock levels facilitated speculation on agricultural financial markets by financial funds (hedge funds, indexed funds). Those funds identified new profit opportunities, especially following the financial crisis and the decrease in real estate markets' attractiveness. Financial speculation has thus greatly amplified recent volatility.



<sup>&</sup>lt;sup>6</sup> The last agricultural revolution was characterized primarily by the intensive use of improved seeds, fertilizer and phytosanitary products and, sometimes, recourse to irrigation and the mechanization of certain tasks. These limitations are both agronomic in nature—notably in areas where the model lowered the productive potential of cultivated ecosystems—and linked to the increasing scarcity and/or rising cost of certain resources (land, water, energy).

<sup>&</sup>lt;sup>3</sup> Source: OECD, Biofuel Support Policies – An Economic Assessment.

<sup>&</sup>lt;sup>4</sup> Source: Agri-US Analyse No. 173.

<sup>&</sup>lt;sup>5</sup> Source: CyclOpe report 2004.

# A Liberal Vision of Development and Food Security...

The magnitude of the economic, social and political consequences of skyrocketing food prices has pushed the international community to address the issue of volatility.

However, the discussions in preparation for the G20 summit in 2011 show how difficult it is to address this issue and tackle the subject of market regulation due to the preeminence of the liberal vision of development and food security. According to this vision, unifying agricultural markets into a single global market is the best way to limit price volatility:

- By allowing for "optimal resource allocation" (each country specializing in the products for which they have comparative advantages), a unified market is supposed to make it possible to produce more at a lower cost; and
- A unified market is also supposed to allow production fluctuations from one year to the next in the various regions and countries of the world to offset each other.

The existence of world price volatility is acknowledged on both the global and national scale, but it is attributed to mainly exogenous factors (see above). Thus, public intervention on supply and demand must be avoided so as not to interfere with the free operation of the market. For example, it is believed that the tension created by the increase in agrofuel production will be resolved by an increase in production. In addition, according to this vision, the government authorities should only mitigate the impacts of price hikes, by creating:

- insurance and coverage mechanisms in the financial markets of producers and states, and
- emergency food stocks destined to provide inexpensive food to the poorest consumers in the case of crisis, but not, unlike buffer stocks, influence supply and demand and therefore market prices.

Other measures are also envisaged. These measures recognize the importance of establishing shared rules and public policy implementation: a degree of supervision of financial markets, greater information and transparency on the market situation, the establishment of consultation and coordination mechanisms between importing and exporting countries, or even investments destined to increase agricultural production.

# ... Contradicting History and Working Against the Current Challenges

History has shown that, in practice, this liberal vision has rarely influenced changes in human societies. Collective bodies have almost always taken care to regulate agricultural markets through stocks and trade measures, due to economic and social exigencies, and especially societies' food security.

In addition, several economists argue that market expansion does not address the endogenous causes of price volatility, but rather tends to worsen the situation.<sup>7</sup>

Furthermore, agricultural market unification would mean that millions of farmers with extremely diverse productivity conditions find themselves subject to world market conditions—i.e. not only to price instability ("imported" volatility) but also to average price levels. Yet, these prices are generally determined by the extremely low production costs of a few agricultural regions that are greatly advantaged and focused on export.<sup>8</sup> All agricultural production would be subjected to these conditions, even though the percentage of agricultural production traded on the world market is currently very small—15% on average, but even less for certain products such as rice (7%)!<sup>9</sup>

Thus, in the market unification process that is supposed to allow every region of the world to optimize its own "comparative advantages," the vast majority of the billion and a half farmers around the world run the risk of not having comparative advantages to optimize, other than their ability to survive and continue to produce for a time in calamitous labor remuneration conditions. Yet, in many countries, the other sectors cannot absorb the excess agricultural labor force. As a result, the agricultural crisis generates unemployment and poverty. In these context, demanding that many developing countries go along with the world market can harm their food security, not only because of the negative impact of such a wager on national production but also because of the increase in the number of insolvent consumers on the world market.

As a general rule, the large emerging countries have preserved a latitude for intervention that is far vaster than the latitude afforded to weaker countries on whom more stringent liberalization measures have

<sup>&</sup>lt;sup>7</sup> See the study "Managing Food Price Volatility for Food Security and Development", Gérard F. *et al.*, GREMA, 2010

<sup>(</sup>www.cirad.fr/content/download/4927/46470/version/3/file/Managing-Food-Price-Volatility.pdf), and the article "Qui veut la peau des prix agricoles ?" by Arlène Alpha in *Nouvelles de Sud* No. 142 (www.coordinationsud.org).

<sup>&</sup>lt;sup>8</sup> These prices can even be lower than average production costs in exporting countries, when dealing with subsidized products or surplus by-products.

<sup>&</sup>lt;sup>9</sup> Source: International Grains Council.

been imposed. For instance, China, responsible for ensuring the food security of one fifth of the world's population, imports less than 1% of the rice and wheat it consumes, has considerable buffer stocks (for wheat, the equivalent of 6.6. months of consumption in June 2010, compared to the global average of 3.7 months, and 1.4 months for the European Union<sup>10</sup>) and, thanks to this, has only very slightly been affected by the recent price spikes. Brazil also regulates the price of sugar on its domestic market by adjusting the share of sugar cane destined for ethanol production.

These examples show that, if all countries and regions of the world had the necessary political and economic latitude to produce most of their food and adapt their production levels to domestic demand (via suitable trade, storage and agricultural production support policies), the question of world market regulation would only concern relatively limited volumes. Of course, some countries, notably in North Africa, the Near East and the Middle East, will continue to have structural shortfalls. Multilateral cooperation mechanisms could then be envisaged to ensure sufficient buffer stocks to face structural or temporary shortages and surpluses.

In this same framework, multi-annual commitments between exporting and importing countries could be used to guarantee delivery volumes within acceptable price bands.

#### Food Sovereignty and Cooperation

For these reasons, the development and relief organizations that belong to Coordination SUD believe that:

- National and regional agricultural market regulation arenas and tools must be favored, as part of international recognition of the right to food sovereignty, which implies revising WTO rules.
- Additionally, United Nations organizations must set up mechanisms to ensure greater transparency on the state of international markets and a coordinated global system of food reserves aiming to limit price volatility on world markets.
- Measures must be taken to prevent abusive speculation on physical and financial markets.
- Developing smallholder farming is key to lasting food security. It must be supported around the world through appropriate agricultural policies and by fighting land grabbing.

As part of its mission to support the collective advocacy of its members, Coordination SUD has set up working committees. The Agriculture and Food Commission (C2A) brings together international solidarity NGOs that act to realize the right to food and increase support for smallholder farming in policies that impact world food security: 4D, Artisans du Monde, AVSF, AITEC, CARI, CCFD–Terre Solidaire, CFSI, CIDR, CRID, GRET, IRAM, MFR, Oxfam France, Peuples Solidaires in association with ActionAid, Secours Catholique, Secours Islamique. The Commission aims to coordinate the work conducted by its participants, and facilitate consultation among its members for their advocacy work

with social actors and international policy makers. The members of the Commission reach agreements on the representation provided in the name of Coordination SUD in a range of arenas (Concord in Europe, FAO, WTO, UNCTAD) and share information on current international stakes. The Commission is mandated by Coordination SUD to formulate the positions taken by the group during the main institutional meetings on the subject of agriculture and food.

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<sup>10</sup> Source: International Grains Council.