

Discussion Paper for Round Table 1

Food price volatility

How to help smallholder farmers manage risk and uncertainty

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Enabling poor rural people to overcome poverty



Food price volatility – how to help smallholder farmers manage risk and uncertainty

Discussion paper prepared for the Round Table
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The opinions expressed in this paper are those of the authors and do not necessarily reflect official views or policies of the International Fund for Agricultural Development, except as explicitly stated.

Acronyms

ACP	African, Caribbean and Pacific (countries)
CAADP	Comprehensive Africa Agriculture Development Programme
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement
ECOWAP	West Africa Agricultural Policy
ECOWAS	Economic Community Of West African States
EPA	Economic Partnership Agreement
FAO	Food and Agriculture Organization of the United Nations
FAPRI	Food and Agriculture Policy Research Institute
FEWSNET/MSU	Famine Early Warning Systems Network/Michigan State University
IFPRI	International Food Policy Research Institute
LDC	Least Developed Country
LIFDC	Low-Income Food-Deficit Country
NEPAD	New Partnership for Africa's Development
OECD	Organisation for Economic Co-operation and Development
UEMOA	Union Economique et Monétaire Ouest Africaine

Following a period of soaring prices for virtually all agricultural commodities, prices for many of them have fallen dramatically since August 2008, although they still remain relatively high compared with previous years. Rural producers are confronted with greater uncertainty, and food price volatility has become a major issue given its impact investment decisions of agricultural producers and thus on long term world food security.

Price volatility may increase in the future, since the effects of climate change are likely to increase uncertainty and instability of food production, especially in lower-latitude, tropical regions.

This paper, prepared as background to the Round Table discussions at IFAD's 32nd Governing Council in 2009, provides a framework for focusing the discussions around the challenges identified and the policy options available to address those challenges.

I. Food price volatility on international markets: trends and transmission to domestic markets

After a low and stable 25-year trend,¹ prices of agriculture commodities started a moderate rise between 2004 and 2005 followed by an acceleration between the end of 2007 and the summer of 2008. Considering the period between October 2006 and May-June 2008, commodity prices (expressed in constant dollars – base year 2000) were multiplied by 3.2 for rice, 2.1 for wheat and 2.5 for corn.

Following the dramatic rise, the prices for rice and wheat fell 55 per cent in the 2nd semester of 2008 and corn fell 64 per cent in spite of an appreciation of the dollar for the same period. In January 2009 the prices increased slightly.

Table 1: Index Prices of rice, wheat and corn (2000-2008)

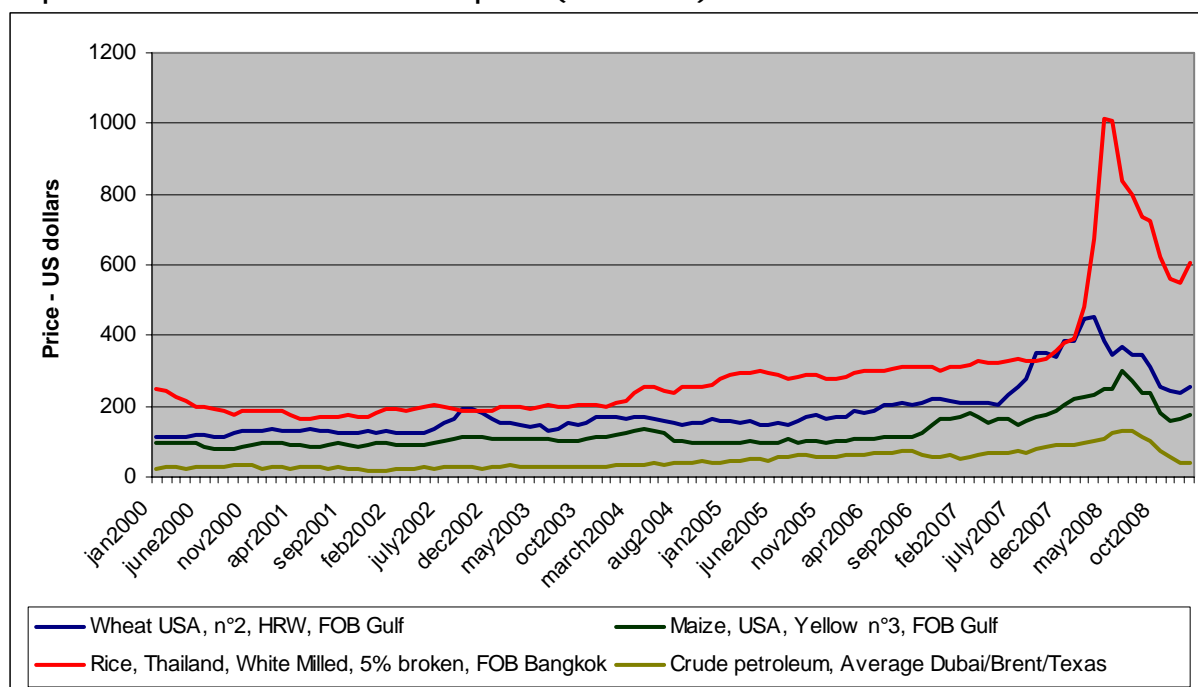
	Rice	Wheat	Corn
Average (Jan 2000 – Dec 2003)	100	100	100
February 2005	145	136	106
December 2006	151	183	183
September 2007	161	294	188
March-April 2008	498	380	278
November 2008	276	204	179
January 2009	297	215	196

Source: Elaboration Bureau Issala on UNCTAD and FAO data

It appears that a confluence of factors has led to the unique developments of the past two seasons: (i) the reforms in public policies for the agriculture sector over the last two decades; (ii) unexpected supply-side shortfalls of food production; and (iii) unforeseen rises on the demand side. Another factor on the supply side that has had a significant impact on the volatility of markets is the gradual reduction in the level of stocks, which can no longer serve their function of adjustment. Markets are therefore more exposed to speculative operations (Annex 2 provides an analysis of the underlying factors of the recent trends on global commodity markets).

¹ Following the spike in food prices during the food crisis of the 1970s, agricultural prices were below the level of USD 200 per tonne for corn and wheat (expressed in constant dollar - base year 2000) and below USD 300 per tonne for rice for the period 1982-2006 (see Annex 1).

Graph 1: The evolution of international prices (2000-2008)



Source: Elaboration Bureau Issala on UNCTAD and FAO data

I.1 Uncertainty dominates the medium- to longer-term outlook

FAPRI², IFPRI³ and OECD-FAO⁴ studies identify the recent trends on the international commodity markets as a structural break which will create tensions on the markets and most likely increase the volatility of commodity prices for the next 10-15 years. The underlying factors of the tensions on commodity markets can be summarized as follows:

- the impacts of climate change on agriculture, including land degradation, growing uncertainty about crop yields and the intensification of floods and droughts in tropical areas;
- demographic dynamics: population growth and increasing urbanization;
- the state of natural resources and the conditions of their use, in particular: (i) the growing demand for land in developing countries by outside investors; (ii) the degradation of land due to unsustainable agricultural practices; and (iii) ineffective management of water resources for agricultural use;
- agriculture outputs increasingly being used for the twofold objective of providing food and providing feedstock for biofuels, thus linking the volatility of oil markets to the volatility of commodity markets;
- the potential negative long-term impacts of short-sighted agricultural public policies put in place hurriedly in response to food price increase and the associated risk of a return to agricultural protectionism;
- the slow rate of restocking at the household, state, regional and international levels; and
- the interests of financial investors (e.g. hedge funds, sovereign wealth funds) on commodity markets to diversify their financial portfolios'.

² Food and Agriculture Policy Research Institute.

³ International Food Policy Research Institute.

⁴ OECD-FAO Agricultural Outlook 2007-2017.

I.2 Transmission differentiated according to local contexts

It is still too early to fully assess to what extent price movements on the international markets over the last two years have been transmitted to developing countries – too early as well to define the different impacts on consumers and producers. Most of the studies (FAO,⁵ CIRAD,⁶ OXFAM,⁷ IFPRI,⁸ FEWSNET/MSU⁹) analysing the transmission to domestic markets were undertaken in 2008, and data at micro and meso levels are just emerging.

Box 1: The impacts of 2006 - mid 2008 soaring food prices

On rural producers. The rise in prices can benefit producers. However, a distinction needs to be made between net food buyers and net food sellers. For net buyers, soaring food prices means that a higher share of the family income is devoted to buying food. A similar situation is faced by poor urban populations. The additional costs to purchase food erode the financial reserves of the family and their production capacities. Net sellers are in a better position to benefit from the rise in food prices. However the impact will vary depending on: (i) the evolution of the costs of production; (ii) cash available to buy the inputs and tools for additional cropping; and (iii) the organization of cooperative efforts to store and market products until selling is opportune.

On the food security of vulnerable populations. The rise in food prices has been associated with similar trends in energy prices and transport costs, which taken together are increasing the costs of goods for family consumption. The impact varies according to: (i) the degree of transfer from international prices to domestic prices; (ii) the extent of consumption subsidies; and (iii) the degree of dependence of families on imported food products. The most recent estimates from FAO indicate that 75 million more people were thrown below the hunger threshold due to the impact of high prices in 2007, and another 40 million in 2008, bringing the total number of undernourished people to 963 million (FAO, 2008 - The State of Food Insecurity in the World).

On public finances, via the suspension of customs duties and VAT on the principal food products imported. According to a report issued by FAO, 43 developing countries have applied these measures. For the eight countries in the UEMOA (Benin, Burkina Faso, Cote d'Ivoire, Mali, Niger, Senegal and Togo), the loss of revenues is estimated at between USD 690 million and 1,380 million (see Soulé B.G., Blein R.; Hausse des prix alimentaires en Afrique de l'Ouest: revue et analyse des mesures engagées à court et moyen terme ; Fondation FARM ; 2008).

On the imports bill. According to FAO, the cost of food imports for the developing countries increased 85 per cent between 2006 and 2008, with those of the LIFDCs increasing 35 per cent. These percentages show that the LDCs and LIFDCs have reduced their volume of imports (contraction of demand, insufficiency of hard currency, lack of cash reserves for importers).

Table: Evolution of food import bills

	2006			2008			Evolution 2008/2006 (%)		
	Developing countries	LDC	LIFDC's	Developing countries	LDC	LIFDC's	Developing countries	LDC	LIFDC's
Cereals	69 410	5 683	29 450	147 776	9 154	34 055	113	61	16
Vegetal oils	35 050	1 945	22 884	90 299	6 444	35 916	158	231	57
Milk products	12 930	801	4 924	25 947	1 450	6 857	101	81	39
Meat	16 806	810	6 013	24 093	831	4 210	43	3	-30
Sugar	13 871	1 753	7 587	13 712	1 710	5 819	-1	-2	-23
Food products	185 529	13 362	86 473	343 121	23 667	117 079	85	77	35

Source: Food Outlook - FAO

⁵ Dawe D. Have Recent Increases in International Cereal Prices Been Transmitted to Domestic Economies? The experience in seven large Asian countries. ESA working paper n° 08-03; April 2008; FAO; p. 12.

⁶ Daviron B. et al. La transmission de la hausse des prix internationaux des produits agricoles dans les pays africains ; November 2008 ; FARM-CIRAD; p. 61.

⁷ Blein R. et al. The impact of price increases on the food situation in Sahelian countries ; OXFAM GB-Save the Children ; August 2008; p. 114.

⁸ IFPRI. An assessment of the likely impact on Ugandan households of rising global food prices; WFP-UNICEF; June 2008; p. 49.

⁹ Kelly V. et Al. Potential food security impacts of rising commodity prices in the Sahel: 2000-2008; Fewsnets/MSU; May 2008; p. 36.

Nonetheless, two parameters appear determinant in explaining the transmission of food price trends to domestic markets:

- the relative shares of domestic demand satisfied by either domestic food production or by food imports; and
- the ability of public policy to regulate the domestic markets through trade policy at the borders and/or the instruments of domestic policy (consumer subsidies, social “safety nets”, price surveillance policies and competition policies).

Countries dependent on food imports and with bad harvests in 2006-2007 (e.g. Senegal) have experienced a higher transmission of international commodity prices to their domestic markets. Countries with food imports representing a minor part of local consumption (most Asian countries, Madagascar, Mali, Uganda) have experienced a limited and slower transmission of food prices to their domestic markets if compared with food-deficit countries.

Countries whose domestic markets are characterized by a high degree of protection (mostly Asian countries) have been able to soften the transmission of rising food prices by lowering customs duties for imported goods and/or banning exports (Indonesia, Viet Nam). Countries with active public food policies were able to dilute the impact of rising international food prices by subsidizing food consumption or providing targeted social transfers for the most vulnerable populations (Bangladesh, Brazil, Ethiopia, Mexico).

The transmission to domestic consumer prices for rice, wheat and corn has been sizeable for many food-importing countries. For example, in Senegal, where 83 per cent of annual needs of rice are imported, between 95 and 100 per cent of international food prices of rice were transmitted to consumer prices; the increase in the consumer price of locally produced rice was 69 per cent of the international increase.¹⁰

The pass-through to rural producers is variable and dependent upon the local contexts. Rice producers seem more exposed to the price transmission; at the same time, they benefit due to an increase of marketing margins, in spite of the increase in production costs. The transmission to the producer prices for the other cereals is partial and dependent on local factors (e.g. degree of substitution between products, market structure). An analysis of the dairy sector¹¹ in Senegal and Niger shows that the increase in the price of milk powder provided an opportunity for a more competitive domestic dairy sector.

The results of an analysis comparing price volatility on domestic markets (both at consumer and producer levels) with the volatility on global markets for the period 1992-2008 are presented in Annex 3. They show that the volatility of producer prices is generally greater than that of consumer prices. Additionally, the volatility of domestic prices is greater if compared to the volatility of international prices. The notable exception is the comparison of global price volatility with domestic price volatility for the period 2004-2008. During this period, global price volatility is greater. This attests to the incomplete transmission of the rise in prices and a partial disconnection of domestic price trends from those observed on international markets.

¹⁰ Daviron *et al*, *op. cit*.

¹¹ Iram-Gret. Etude de l'impact de la hausse des cours du lait et des produits laitiers sur les producteurs et les consommateurs. Etudes de cas au Niger et Sénégal ; Alimenterre ; 2008.

II. Determinants of domestic food price volatility

In Asia, domestic food prices are less volatile due to a more stable supply and more regulated markets (see Annex 2). On the contrary in sub-Saharan Africa, the volatility of domestic food markets is high – particularly for rural producers – and in most cases disconnected from the dynamics of global commodity markets.

The main factors underlying the instability on domestic markets are the following:

- ***Supply-side variability due to the impact of natural factors on harvests.*** Agrarian systems in Low-Income Food-Deficit Countries (LIFDCs) are generally extensive, use few inputs (fertilizers, seeds) and are very vulnerable to climatic shocks or weather variations.
- ***The decrease in stocks' volumes,*** notably at a family and local community levels.
- ***The lack of organization of producers in the value chain*** (in many African contexts): for example, lack of storage facilities, absence of access to credit and unreliable linkages within the value chain. These deficiencies often imply lower post-harvest prices and higher prices in the months preceding the harvests with negative repercussions on smallholders' income.
- ***The small share of marketed smallholder production.*** The portion of smallholder production commercialized is generally quite limited compared to the totality of production. The share of marketed crops is linked to: (i) family cash needs; (ii) the reimbursement of debts to retailers (in cash or goods); and (iii) eventual surpluses of production after satisfaction of family needs. Moreover, production can vary significantly from one year to another.
- ***Segmentation of regional and domestic markets*** (in many African contexts). Weak infrastructure (e.g. poor roads) creates critical bottlenecks in the marketing of foodstuffs. Sizeable customs duties create additional obstacles. As a result, market transactions are weak between areas that have surplus and those that are food-deficit, thus contributing to higher retail costs for goods to consumers and impacting negatively on the price paid to producers.¹²
- ***Non-tradability of local foodstuff,*** which excludes the possibility of using exports as a policy tool to adjust supply to domestic demand.

The determinants of food price volatility confronted by smallholder farmers in developing countries are multiple. Nonetheless, predictable market interactions and stable input and output prices are not sufficient, if considered in isolation, to promote pro-poor agriculture-based development processes. They must also address the key constraints that poor rural people themselves confront in dealing with markets: high transaction costs (due to poor transport infrastructure and lack of storage facilities); supply-side constraints (access to agricultural services and inputs, access to and control over natural resources) and the difficulty to comply with quality and safety standards requirements.

Food price volatility hampers the development of smallholder farmers. It contributes to keeping them in poverty and does not promote incentives for smallholders to invest in agriculture.

Family agriculture has enormous potential for agricultural development. To encourage these families to reinvest in agricultural production, the full set of technical, economic, institutional, environmental and marketing risks that they face must be addressed simultaneously.

¹² See MSU, Fewsnet and African Trade Center studies.

Box 2: The warehouse receipt system in Tanzania: Generating additional income and investment

The warehouse receipt system allows small-scale farmers to store their produce (primarily maize and rice) collectively during harvest time, when prices are low; receive credit, using the product as collateral; and wait until prices are more favourable for selling. Through this system, some farmers have been able to double their income.

The warehouse receipt system is the result of the collaboration between two IFAD-funded programmes: the Agricultural Marketing Systems Development Programme (AMSDP), whose aim is to empower smallholders to engage more actively in markets; and the Rural Financial Services Programme (RFSP), whose aim is to strengthen grassroots microfinance institutions.

The Agricultural Marketing Systems Development Programme built the warehouses and managed them initially, with responsibility shifting fully to the districts from the third year of operation. The RFSP built up the Savings And Credit Co-operatives (SACCOs) so that farmers can use their warehouse receipt as collateral for credit. The warehouse receipt system has benefited from the linkages to markets established by the First Mile project. Farmers have access to up-to-date market information, which allows them to negotiate better deals for their produce with buyers or at the marketplace. The Warehouse Receipt System Act, enacted by the government in 2005, provided a legal framework for the system.

The results of the warehouse receipt system have been very positive: the government of Tanzania is promoting the system nationwide. The RFSP has generated a solid approach to increasing the access of the rural poor to financial services through the SACCOs. These membership cooperative societies have enabled poor farmers to pool their savings, extend credit among each other and use the group capital to access loans from financial institutions for on-lending to members. As of September 2008, female membership in the SACCOs and the number of borrowers had reached the 40 per cent mark. As the project is expected to end in 2010, the government has requested the project management to prepare a roll-out plan for extending SACCOs nationwide.

After noting the benefits accrued from the warehouse receipt system, farmers are now able to operationalize the system without government support.

III. The policy dimension of food price volatility and smallholder farmers

III.1 Policy options

Public policies dealing with food price volatility have the twofold objective of: (i) reducing short- and long-term volatility; and (ii) reducing the impact of volatility on the production and income strategies of rural families and, more broadly, on the income, food security and nutrition of poor rural and urban households.

Supply-side policies and investments are commonly being developed to respond to growth in demand. There are many areas of policy intervention that can have an impact on domestic, regional and global food supply, including policies that support: access to credit; management of and control over natural resources; access to research and extension services; and supply management in order to keep stable prices at producer and consumer levels. Complementary to supply-side policies, policies aiming to reduce the risks associated with climatic shocks are also addressing price volatility, in particular the issue of the variability of domestic supply and the related demand for imports.

Trade and market policies can also play a crucial role in reducing food price volatility. Countries with tariff structures and related policies are able to protect strategic products so as to shelter producers from price swings on the international markets. The regional free trade agreements¹³ between developed and developing regions often exclude agricultural products from full liberalization, at least in the short term and allows for some policy space for states to ensure the regulation of domestic markets including through direct intervention on the markets to ensure minimum prices for producers (institutional procurements, public purchase, constitution of stocks).

¹³ Notably in the case of Economic Partnership Agreements (EPAs) between the European Union and the different ACP regions.

Most Asian countries have maintained ambitious and comprehensive supply-side and trade and market policies over the last three decades. For example, Indonesia and Malaysia have been articulating comprehensive policies ranging from subsidized inputs and setting floor and ceiling prices, to supply management of food stocks and investments for land management and irrigation programmes. These policies have been able to triple rice production over 30 years (Indonesia) and double it over ten years (Malaysia), while promoting increases in productivity and markedly decreasing the incidence of poverty.¹⁴

Policy instruments for food security aim to: (i) reduce the cost of food; (ii) reduce the impact of price volatility; and (iii) predict and manage food crises when they occur. Two important approaches have been developed. The first concerns the African countries (notably Sahelian countries) and consists in information and warning systems to prevent the crisis and limit its impacts on the most vulnerable populations. This approach is focused above all on the endogenous mechanisms of resistance to shocks (e.g. through cereal banks, income-generating activities). In the event of a crisis, a number of instruments are mobilized, including public security stocks, food- or cash-for-work programmes and food aid. The second approach is based on social transfers (safety nets) and it consists of a form of redistribution of income in favour of poor people, through food vouchers or cash transfers.

Within this second approach, the Brazilian *Programa de Aquisição de Alimentos* is linking the cash/food transfer programme with a public purchasing programme based on local procurement from family farming. The public purchasing programme has created a stable demand and supports over 100,000 small-scale farmers and redistributed their agricultural output by providing food, via municipal programmes, to food un-secure households (4.7 million people affected). Public procurement provides better and more stable prices for producers. Social transfers to vulnerable people linked with their economic or social inclusion (e.g. through schooling, access to health facilities) provide the opportunity to reduce vulnerability and thus limit the impact of high food prices on poor consumers.

During the 2006-2008 food crisis, many developing countries have increasingly considered the adoption of policy measures to avoid negative impacts of international food price volatility on domestic markets. Several countries have declared food self-sufficiency as their strategic objective. For example, the Government of the Philippines, the largest rice importer in the world, is seeking to achieve 98 percent self-sufficiency in rice by 2010. Senegal, another major importer of rice, has unveiled an ambitious plan of making the country self-sufficient in food staples, especially rice. Many Latin American and Caribbean countries, which commonly rely on food imports, have pledged to give greater attention to domestic food production, rather than focusing their agriculture sector to export crops such as coffee and fruits. Additionally, policies to increase domestic food security and in support of vulnerable households have been oriented to the provision of productive safety nets: national programmes are being articulated to targeted input subsidies (e.g. distribution of seed and fertilizer), and to improve access to credit of resource-poor farmers (e.g. Bangladesh, Dominican Republic, Indonesia and Madagascar).¹⁵

¹⁴ M. Stockbridge, *Agricultural Trade Policy in Developing Countries During Take-Off*, Oxfam GB Research Report, July 2006' Timmer, C.P. 'Food Security and Rice Price Policy in Indonesia: The Economics and Politics of the Food Price Dilemma', Indonesian Food Policy Program, Working Paper No. 14, (2002).

D. Dawe, 'How Far Down the Path to Free Trade? The Importance of Rice Price Stabilization in Developing Asia', (2001) *Food Policy* 26(2), pp. 163–75.

¹⁵ Mulat Demeke, Guendalina Pangrazio and Materne Maetz, *Country response to the food security crisis: Nature and preliminary implications of the policies pursued*, FAO, Initiative on Soaring Food Prices, Rome, 2009.

III.2 From local to global markets

Food price volatility confronted by smallholders is principally linked to the organization of **local and domestic markets**. Such volatility may be further exacerbated by 'imported' volatility from external markets – regional and/or global commodity markets.

Local and national markets. Local and national agricultural and food security policies are critical in shaping the markets and, consequently, the investment decisions of smallholder farmers. There are six domains to be taken into account to reduce food price volatility:

- Supply-side constraints and the source of instability. Policies and investments supporting the smallholder access and the capacity to take advantage of agricultural services, of inputs, and of natural resources needs to combined with policies aiming at reducing the risks for family agriculture, such as climatic shocks (as detailed in section III.1).
- Public purchase combined with safety net programmes. Public purchase programmes through local procurement combined with the distribution of subsidized or free food to food un-secure households can be a win-win strategy for stabilizing prices and promoting food security for the most vulnerable (see Brazil programme in section III.1). Recently, WFP started a pilot program (Purchase for Progress – P4P) in 21 countries that seeks to buy food from local farmers and then distribute the food locally for emergency needs and food security.
- Supply-management and price stabilization policies. Both policies have the aim of reducing food price volatility and require import controls to prevent 'imported' price fluctuations. Additionally, supply management is based on collective marketing and production planning adjusted to the needs of the domestic market.
- Value-adding for agricultural products. Commodity price volatility is often higher if compared with processed products. Therefore, investments and programmes for the processing of agricultural commodities - developing chain partnerships along the value chain - could both result in more stable prices and higher returns and profits for the stakeholders involved in the partnerships.
- Price information for farmers and buyers. Information gaps for both buyers and farmers are resulting in asymmetric market relations and sub-optimal market outcomes. Redressing those gaps and asymmetries can be an important element in promoting market relations whereby farmers are able to make informed decisions based upon market incentives, lowering unpredictability of market prices, while the buyers can rely upon producers who are able to adapt and produce in compliance with market requirements (in terms of, for example, products and standards).
- Storage facilities combined with access to credit for smallholder farmers. Output prices for producers vary considerably during the same cropping season. The provision of storage facilities for smallholders farmers combined with access to credit may be a win-win strategy of providing access to credit for immediate cash needs of vulnerable households while storing their outputs to wait until prices are more favourable (see Box 2).

Regional markets. The regional level is key for developing the value chains and relevant sectoral policies. To support strategic regional value chains, trade policy measures at the borders (e.g. customs duties and safeguard mechanisms) can be created/enforced to regulate and control the prices of imported products. Complementary to global stocks (see below), regional security stocks can be created. In addition, chain partnerships can be created (*organisations interprofessionnelles*¹⁶) to

¹⁶ KIT and IIRR, Trading up: Building cooperation between farmers and traders in Africa and

facilitate dialogue and negotiations among all actors along the value chain and building long-term alliances centered on shared interests and mutual growth.

International markets. There are two main dimensions to be taken into consideration to reduce food price volatility at this level:

- International Trade Agreements. Global and bilateral trade agreements need to take into account the possibility for developing countries to stabilize prices of agricultural products that are strategic for their food security and agriculture development processes.¹⁷
- Negotiations on international stocks.¹⁸ The gradual reduction of international stocks has eliminated the buffer that enables adjustments to be made on the basis of quantity rather than price. Negotiations at global level should focus on: (i) minimum volume of stocks; (ii) governance for the management of the stocks, including the role to be played by developing countries and the engagement of the large producers–exporters for stock management; (iii) international stock financing modalities; and (iv) possible innovations (e.g. virtual global food reserves¹⁹).

The articulation of policies and investment programmes from the local to the global level should be always done taking into account the following two general principles:

- ***Policies and investments need to take into account the livelihood of smallholder farmers and the complexity of farming systems.*** Family agriculture bases its livelihood strategies on a variety of sources of income – agricultural production, off-farm labour, remittances – with the aim of simultaneously maximizing their livelihood and minimizing their risks. Farming systems, in particular African farming systems, are often based on a variety of products: cereals, roots and tubers, livestock and dairy products, forestry and artisanal fisheries. The almost exclusive recent focus of the international debate on cereals – and the related almost exclusive focus of domestic and regional policies on cereals – is too narrow a focus to tackle the livelihood problems of smallholder farmers. As an exclusive focus, it can be counterproductive as a measure to increase food security and promote agricultural development.
- ***Public policies for reducing food price volatility need to be negotiated and articulated with the active involvement of organizations of farmers, consumers, and market intermediaries.*** Policies aiming at reducing food price volatility must reflect a social, economic and political “compromise” at national and regional levels that accommodates the needs of both producers and consumers. The leading role has to be played by public authorities, while the private-sector farmers’ organizations, and market intermediaries, together with associations of consumers, must play an active and supportive role in the design and implementations of these policies.

Inter-Reseaux – Working Group on Organisations Interprofessionnelles -
http://www.inter-reseaux.org/rubrique.php3?id_rubrique=328.

¹⁷ At global level these negotiations are presently occurring at WTO in the context of the definition of Special and Differential treatment for strategic agricultural products, Special Products and Special Safeguard Mechanisms.

¹⁸ Joachim von Braun and Maximo Torero, IFPRI - Physical and Virtual Global Food Reserves to Protect the Poor and Prevent Market Failure, June 2008.

¹⁹ A virtual reserve and intervention mechanism would be based on a coordinated commitment by the group of participating countries. Each of the countries would commit to supplying funds if needed for intervention in grain markets (Von Braun, Torero, IFPRI, *op cit*).

Questions to Guide the Round Table Discussion

- How have volatile international food prices been transmitted to domestic markets and to smallholder farmers over the past two years?
- How is price volatility affecting the investment decisions of rural producers, and what is the impact of price volatility on household livelihoods and food security?
- What successful measures have been taken by governments, farmers' organizations and the private sector to reduce price volatility on domestic markets or to reduce its negative effects on producers and trigger investments by smallholder farmers?
- What policies and investment programmes at global, regional, national and local levels can be implemented to reduce food price volatility?
- What processes should be put in place to promote negotiated policies with the leadership of public authorities and the pro-active involvement of organizations of poor rural producers, market intermediaries, other private sector stakeholders together with urban and rural consumers?

ANNEXES

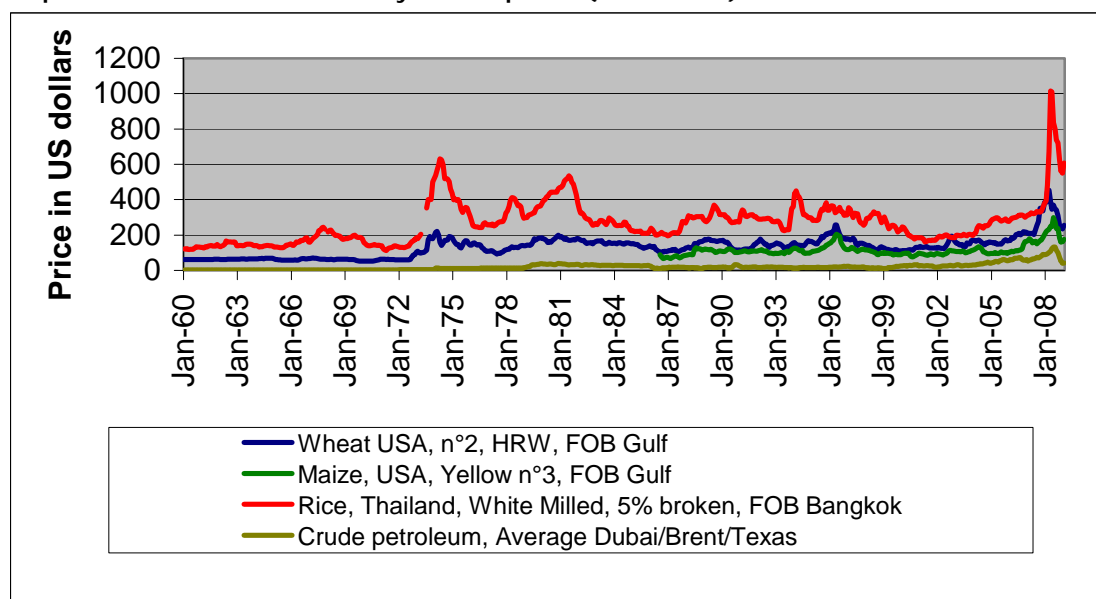
Annex 1: Long-term trends of international food prices (1960-2008)

Annex 2: Main factors for the rise and peak of world prices (2006-2008)

Annex 3: Internal instability of Sahelian and Malagasy domestic markets

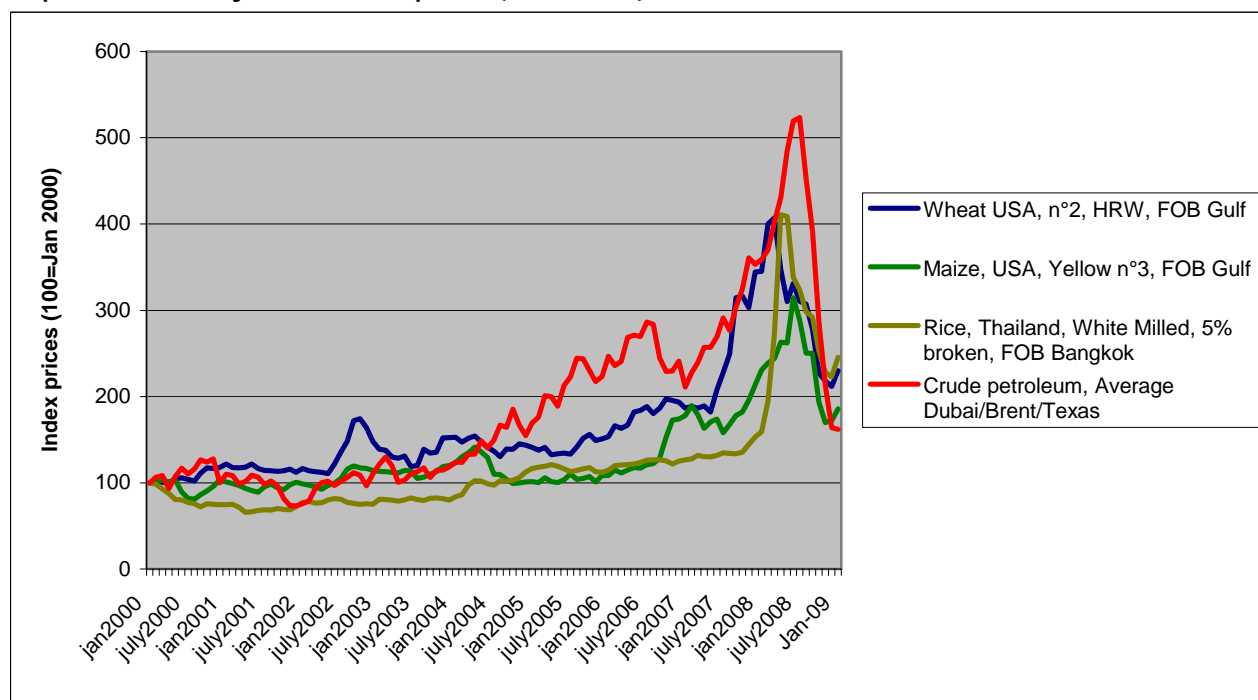
Annex 1: Long-term trends of international food prices (1960-2008)

Graph 1: International commodity and oil prices (1960-2008)



Source: Elaboration Bureau Issala on UNCTAD and FAO data

Graph 2: Commodity and oil index prices (2000-2009)



Source: Elaboration Bureau Issala on UNCTAD and FAO data

Annex 2: Main factors for the rise and peak of world prices (2006-2008)

The role of public policy reforms

Agricultural and trade reform policies of the large exporting countries. The 1980s were marked by important production surpluses exported to international markets by the principal producers/exporters. In part, these exports were boosted by agricultural support policies, especially in Europe and the United States, but also in Asia (rice) and the what was then the USSR. The United States and the European Union used different support instruments to pursue a double objective: (i) to regulate their domestic markets, which were fairly well protected; and (ii) to conquer market share in countries with deficits. Asian countries, whose food systems are based on rice, have used the global market as a variable of adjustment on domestic markets (notably India and China). Others claim to be structural exporters (Thailand and Viet Nam). Most major producing countries have "exported" their instability onto international markets by dumping their surplus production that could otherwise destabilize their domestic markets and depress prices.

The reforms begun in the 1990s aimed for a return to market equilibrium of agricultural markets by a reduction of public subsidies: reduction of institutional prices, supply regulation, reduction of public interventions in the markets and an increase in direct payments. They were motivated by: (i) the cost to the consumer and tax payers; and (ii) the mandatory engagements taken in the Marrakesh Agreement (WTO), notably the progressive reduction of subsidies having distortionary effects on trade. In the case of the former USSR, the upheaval caused by the dissolution of the union strongly affected the production and marketing structures.

Liberalization of agricultural and food economies in the developing countries. The economic and financial adjustments begun in the early 1980s has resulted in a withdrawal of the state from the agricultural sector, notably in Latin America and Africa. This withdrawal was accompanied by full trade liberalization, done on a unilateral basis, in the context of negotiations with the International Financial Institutions, and in a global context marked by the persistence of protectionist policies in the markets for foodstuffs and agricultural products. A double movement has been observed: significant liberalization, accelerated in the markets of numerous developing countries, and a slower and much less pronounced liberalization in the developed countries.

Preference for imported goods. In a context of international prices depressed by the public policy support of developed countries with surpluses of production, the liberalization of importations in the developing countries resulted in a preference for imported goods. Rapid urbanization and the increase in urban poverty have incited a number of governments to prefer international suppliers. This has facilitated the access to foodstuffs by poor urban people.

Dismantlement of instruments for public policy interventions. The dismantlement of public policy instruments in numerous LDC countries, notably in Africa, focused on eliminating instruments in support of value chain developments. Public instruments for policy interventions were indeed limited to warning systems, food de-stocking, and food aid to prevent and control food crises.

Regulated agricultural markets. In the majority of Asian countries the objectives of food self-sufficiency, the struggle against rural poverty and the stability of prices for consumers have led to a continuing high level of state intervention. In India, the state has conserved minimum price supports, guaranteeing profitable prices for producers and ensuring the regulation of consumer prices, a high level of control at the borders, storage facilities, and subsidized inputs. Indonesia also pursues an active intervention policy on

rice (e.g. price supports for production, market interventions, control and restrictions of imports). In the same way, Bangladesh has conserved a strong tradition of public interventions in the food products market, in spite of the liberalization of access to raw materials. In these countries, state procurement is aimed simultaneously at regulating the markets, guaranteeing revenue for the producers, and developing food programmes for the poorest populations.

Food supply trends

The 1990s were characterized by a significant deceleration in the growth of world rice production (1.7 per cent per year versus 2.5 per cent during the previous decade) and wheat (0.7 per cent versus 1.8 per cent). However, corn saw a higher increase in growth (2.7 per cent versus 0.9 per cent). These trends continued in the early 2000s. In addition, over the last two years these trends have been marred by a succession of poor cereal harvests (due to climatic shocks), negatively affecting overall production of world cereal exporters.

Another factor on the supply side that had a significant impact on the markets recently was the gradual reduction in the level of stocks, mainly of cereals, since the mid-1990s. Indeed, since the previous high-price event in 1995, global stock levels have on average declined by 3.4 percent per year (see "Growing demand on agriculture and rising prices of commodities" – paper prepared for the Round Table organized during 2008 IFAD's Governing Council).

Changing demand

The last years have witnessed structural changes in the composition of demand for cereals. The emerging biofuels market was in fact a new and significant source of demand for some agricultural commodities such as sugar, maize, cassava, oilseeds and palm oil. These commodities, which were predominantly been used as food, over the last two years are increasingly being grown as feedstock for producing biofuels. Significant increases in the price of crude oil allow them to become viable substitutes in certain important countries that have the capacity to use them. According to a recent study (Alex Evans - The Feeding of the Nine Billion - Global Food Security for the 21st Century – a Chatham House Report, January 2009) the demand for biofuels has been the single most significant driver of higher prices. According to Evans, data are suggesting that while global demand for cereals is increasing, this is only true as long as biofuels are included – and that once they are taken out, global demand growth is actually slowing down. For example, data from Goldman Sachs show that while historically global demand growth for food crops has been around 1.5% a year, the figure is now 2.0% (and likely to rise to 2.6% within a decade). Yet the World Bank data show that with biofuels excluded, global grain demand increased by only 1.3% a year between 2000 and 2007 – and in East Asia (including China) by just 0.3% a year over the same period. Goldman Sachs's analysis also suggests that biofuels have been the principal driver of rising food prices in recent years.

Annex 3: Internal instability of Sahelian and Malagasy domestic markets

This analysis compares domestic price volatility (consumer and producers prices) with the food price volatility on global markets over three time periods (1992-1999, 2000-2003, and 2004-2008). In order to measure price volatility, the coefficient of variation (CV) (the ratio between the standard deviation and the average value of the series) has been calculated on the series of prices over the three periods. This coefficient is at 20 % for the imported rice in the first period (1992-1999), lower if compared with consumer prices of locally produced cereals in Niger (where it reaches 48%), Mali, and Senegal. In the early 2000's the coefficient of variation is much lower in the world market for rice: 6,7 % while it is still over 25% in the market for local cereals both at consumer and producer levels. Finally, since 2004, we can observe an important variability in the international price for rice (51%), while the variability for locally produced cereals fluctuated between 20 and 26 per cent for consumers, and between 26 and 39 per cent for producers (except for the case of Malian rice). This attests to the incomplete transmission of the rise in prices and a partial disconnection of domestic price trends from those observed on international markets.

Table 1. Comparison of monthly price instability on domestic and international markets

Zone	Consumer prices	1992-1999	2000-2003	2004-2008
		Coefficient of variation (%)		
<i>World market</i>	<i>Rice A1 Super</i>	20,1	6,7	51,0
Madagascar	Local rice	36,3	10,3	20,7
Mali	Local rice	17,1	4,6	9,7
Senegal	Imported rice	30,2	5,9	24,2
Mali	Sorgho	28,1	25,8	23,8
Niger	Millet	48,5	28,5	25,0
Senegal	Millet	27,2	25,9	20,1

Source: Elaboration Bureau Issala on RESIMAO and UNCTAD data

Table 2. Comparison of instability of monthly producer prices and international market prices.

Zone	Production prices	1992-1999	2000-2003	2004-2008
		Coefficient of variation (%)		
<i>World market</i>	<i>Riz A1 Super</i>	20,1	6,7	51,0
Burkina Faso	Maize	33,2	31,4	37,0
Burkina Faso	Sorghum	35,6	29,9	39,1
Mali	Maize	38,1	38,3	32,2
Mali	Rice	21,2	10,2	14,7
Senegal	Millet	35,0	26,3	25,9

Source: Elaboration Bureau Issala on RESIMAO and CNUCED data