Policies for the Effective Management of Food Price Swings in Africa

Managing Food Markets Through Stocks During the 2007–2008 Price Episode Evidence and Recommendations
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Policy Brief 1

by the
Trade and Markets Division
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1. **SUMMARY**

The 2007–2008 food price swing has led a number of countries in Eastern and Southern Africa to resort to marketing board operations in order to lower domestic food prices. In general, high food prices and the imposition of export bans by traditional maize exporters in the region stress the need to reconsider the role of government in market management.

This brief provides a short overview of the marketing board operations in the region during the recent food price crisis and draws attention to a number of unintended effects of public stock management. It also focuses on several options aimed at shaping well-functioning markets and timely responses in order to ensure food availability. These options include:

- greater consultation and better coordination between the government and the private sector in terms of market assessment and the provision of information on the availability of food;
- the provision of credible information on public import programs and changes in import tariffs in a timely manner in order to avoid private sector disruptions and ensure the availability of food;
- the establishment of clear and transparent rules for the intervention of governments in the market; and,
- the possibility for governments to keep relatively smaller strategic reserves, thus encouraging private sector development.

2. **INTRODUCTION**

**Objectives**

The main objective of this module is to advise governments and policy makers on food reserve operations, and their unintended negative effects on the markets of a number of countries in the East and Southern Africa. The module also presents a number of policy options which combine strategic food reserves with measures for a well-functioning food market.

**Target audience**

This module is intended for a wide audience, ranging from policy analysts and decision makers, to development practitioners, training institutions, and media. It is of particular relevance to senior and mid level officials and professional officers in ministries of agriculture, finance, trade, rural development, and cooperatives, including line departments and training institutes/units. It should also be of particular interest to senior executives of parastatal organizations, financial institutions, and NGOs/CBOs.
**Required background**

Readers can follow links included in the text to other EASYPol modules or references. See also the list of EASYPol links included at the end of this module.

### 3. Marketing board operations

Since the end of the 1980s, most countries in Africa have liberalized their agricultural markets to different extents. One reason for this change was the significant losses incurred due to the state-controlled marketing boards’ practices of maintaining pan-territorial and uniform pricing of outputs and inputs. This, together with the need to increase market efficiency and the high costs of market management, were the main motivations for the shift to freer marketing systems.

Nevertheless, marketing board operations are still a central characteristic in the Eastern and Southern African region. Public import programs and procurement of domestically produced food into public stocks are typical operations carried out by marketing boards. Together with trade measures, these operations aim to ensure the availability of food at affordable prices.

#### 3.1. Public stock operations are a central characteristic of African food chains

In an environment of rapidly rising prices, marketing board operations attempt to lower the price of food, essentially limiting the transmission of higher international prices to the domestic markets. However, their effectiveness depends on the government’s capacity and budget to mobilize imports and proceed to sales of food staples at pre-determined price levels. The cost of such a policy is significant, while informal trade across the region often reduces its effectiveness.

Most of the countries examined in this brief implement price stabilization policies through marketing boards. In Kenya, the National Cereals and Produce Board (NCPB) is involved in imports, procurement of domestically produced maize and inventory management. In Malawi and Zambia, the Agricultural Development and Marketing Corporation (ADMARC) and the Food Reserve Agency respectively maintain a strong presence in the market.

The presence and trading activities of both marketing boards and private firms give rise to a dual marketing system that often increases the fragility of the market. The lack of trust and the poor coordination between the public and the private sectors often result in food deficits and high domestic price volatility.

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1 EASYPol hyperlinks are shown in blue, as follows:
   a) training paths are shown in **underlined bold font**
   b) other EASYPol modules or complementary EASYPol materials are in **bold underlined italics**;
   c) links to the glossary are in **bold**; and
   d) external links are in *italics*. 
3.2. But the costs of stock management during food price upswings may be significant

During the 2007–2008 food price swing, the response of many African traditional maize producing countries to ban exports resulted in the regional market becoming an unreliable source of food for importers. This highlighted the need to reassess the role of marketing boards in market management as an option to ensure food security.

Nevertheless, within the context of sustained price increases, marketing board operations are costly. Domestic purchases or imports at market prices and the subsequent release of stocks at lower prices may be effective in lowering consumer prices and ensuring the availability of cheaper food. However, these practices will be successful in the very short run only, as costs escalate in line with increases in the international market prices. This renders such policy options unsustainable.

4. UNINTENDED EFFECTS OF PUBLIC STOCK MANAGEMENT

In addition to their high financing requirements, marketing board operations can also have unintended negative effects on domestic markets. In periods of food deficit, interventions often lead to food prices surging even above import parity levels. In Eastern and Southern African countries, the negative impact of intervention on food markets is the result of abrupt and unpredictable government decisions. As a response to food shortages, and depending on market conditions, governments frequently impose import or export bans, adjust their import tariffs, or decide to import large quantities of food through the marketing boards.

4.1. Unanticipated intervention discourages private traders and increases price volatility

Such discrete and largely unexpected policy responses increase uncertainty and weaken the incentive for the private sector to engage in trade. For example, uncertainty over domestic prices makes stockholding very risky. As marketing boards are the single most important players in the market, their power over maize prices affects the behaviour of other market participants.

Especially when there are expectations for a poor harvest – a period when imports are most needed – private traders are initially unwilling to import, as governments often respond to food deficits by lowering import tariffs. Early food importers will incur costs, as when tariffs are lowered, competing traders or marketing boards will be able to import at lower prices.

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Even if the government allows the private sector to import a proportion of the food requirements in parallel with the marketing board, traders are hesitant. Governments often subsidize consumers by releasing food from public reserves at prices lower than those prevailing in the market. This practice leads to a reduction in market prices, as significant quantities of food are made available at low prices. The uncertainty over governments’ decisions on the quantity and the price at which food will be released results in ‘crowding out’ the private sector.

The main weakness of such a dual marketing system is the lack of trust and coordination between the public and the private sectors. This mistrust hinders the development of an efficient food marketing system, and often results in much lower levels of imports leading to food shortages and subsequent price spikes and food insecurity.

4.2. Price episodes require good management and greater coordination

International food price booms place significant demands on market management skills of governments. Temporary food shortages caused by poor coordination may lead to dramatic domestic price increases over the already high import parity level, exacerbating the suffering of the poor and the vulnerable.

In an environment of rising prices, the behaviour of market participants, such as farmers, millers and traders, will be largely determined by their expectations of the future price level. Often, expectations of price increases trigger hoarding, as farmers and traders respond by holding on to their stocks, which further fuels the price level. In addition, uncertainty over the amount of food held by households and the private sector increases governments’ problems in estimating the food requirements.

4.3. Marketing boards are not able to arrest food price increases without access to imports

In 2008, the NCPB in Kenya failed to import sufficient quantities of maize mainly due to export bans implemented by the country’s traditional trade partners in the region. In October and November of 2008, an alternative strategy pursued in an effort to arrest the increase in retail prices was to release NCPB stocks to millers, at prices lower than those prevailing at the market. Attempts to purchase additional quantities of maize from the domestic market were unsuccessful. Producers found the price offered by the NCPB unattractive due to the high production costs caused by the increased prices of inputs such as fertilizer and fuel. In an environment where prices rose rapidly, attempts to procure additional quantities failed, as farmers held on their stocks. With no other possibility for

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securing sufficient quantities of maize, the policy led to low volumes of food being handled by the board and had little effect on offsetting price increases.

4.4. Lack of trust between the public and private sectors may result in higher prices

In Zambia, in October 2008, the government instructed the state marketing board to import maize, while at the same time import licenses were issued to private traders in order to import additional quantities to meet the county’s food requirements. The government at that time maintained that they were not in a position to provide assurances to the private sector that public stocks would be released at market prices, reserving the right to influence the market if the maize price level were very high. Consequently, the private sector reacted with caution and no quantities were imported. Due to the resulting maize shortages, domestic maize prices increased towards import parity levels.

4.5. Competition between marketing board and traders may result in higher prices

In Malawi, based on estimates of surplus production in May 2008, the government requested that the ADMARC accumulate food security stocks by initiating purchases in the domestic market. Within an environment of upward trending international maize prices, ADMARC progressively increased its price in order to outbid private traders and secure the requested quantities. Competition for maize between traders and the board was likely to have led to the domestic price increasing to historically high levels. As the food security targets were not met, the government banned large-scale trade and the marketing board became the only legal trader of large quantities of maize in the country. Small-scale trade was allowed at a maximum price which, however, was lower than the market prevailing price, thus resulting in farmers and traders holding on to their stocks.

5. Recommendations

The experience of the recent food price upswing provides an opportunity for developing countries to reassess their reliance on trade and food reserves, especially as the imposition of export bans by others significantly limited possibilities for imports. A number of policy options for effective management of the market which consider the role of the private sector in ensuring food availability have already been discussed in the context of crop failures. These include greater consultation and coordination with traders, transparency and predictability in government intervention according to pre-determined modalities and rules (e.g. price bands), strategic food or financial reserves and warehouse receipts.

Nevertheless, maintaining market prices at a certain level in an environment of sustained price increases in the world market is significantly costly. Such costs may be considerably

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higher than those of marketing board operations during crop failures within a stable world market environment. Therefore, governments may have to intervene to offset part of the increase in order to protect vulnerable population groups, and more importantly, to avoid exacerbating the price increases.

5.1. Intervention during food price booms should maintain private sector competition

The government’s role in managing food markets in Eastern and Southern Africa has been extensively debated. Although arguments for full liberalization on the grounds of efficiency are in essence justified, governments in the region may play an important role, as inter-seasonal storage is both expensive and risky. High storage costs and high price volatility due to elevated transport costs may discourage sufficient private inter-seasonal storage and necessitate government intervention.

Nevertheless, the experience acquired during the recent price episode highlights the need for effective coordination between the public and the private sector. Better synergy can smooth food supplies and avoid temporary shortages that, during an international food price upswing, can lead to dramatic price spikes.

Increased cooperation between the public and the private sectors in marketing would require greater consultation, as well as transparency in the governments’ intentions about import programs, trade policy instruments and other market operations.

5.2. Better coordination between the government and traders is crucial

Better coordination can be achieved through the creation of a forum for regular consultation, the provision of information and the assessment of the market situation. Furthermore, coordination could improve if governments provided credible information on their intentions regarding import tariffs and import programs, as well as details on marketing boards’ plans for food quantities that will be purchased and sold.

Participatory and well-timed decisions and intervention will not only guarantee the availability of staple food in the market, but it will also ensure that traders remain profitable by adjusting their purchases and stock according to reliable information. Improved coordination will promote the sustainability of the private marketing system, while at the same time preserving the role of the government in safeguarding the availability of food.

Ideally, a set of clearly defined and transparent rules, such as price bands (consumer price ceilings to trigger government intervention), are necessary. For example, the set-up of price bands provides clear indications to the private sector that the government will intervene when prices move below, or above, the pre-determined floor and ceiling. Nevertheless, price ceilings can easily become the centre of political debate. Moreover, in an environment of increasing prices, ceilings are difficult to defend and therefore, targeting a certain price level may not be practical. Instead, the government and the private sector may pursue a target in terms of staple food quantity, based on the assessment of supply and demand.
5.3. Small versus large public food inventories

The quantity of grain to be handled by the government is also of crucial importance. Given effective coordination of the public and private sectors, policy makers may also explore the possibility of maintaining relatively small strategic food reserves, instead of attempting to directly manage the market through larger inventories. One argument for the government to handle smaller quantities of staple foods is that it encourages the private sector to develop, and thus improves the efficiency of the marketing system.

In the event of price spikes, such strategic food reserves can be utilized to provide inter-seasonal storage and offset price increases until imports arrive, or to provide subsidized food to vulnerable population groups. Their gradual release during periods of sustained price increases, together with credible information on the country’s import program can also help to discourage farmers and traders from holding on to their stocks.

In a way, strategic reserves can assist in balancing government intervention and private sector competition. Again, their management ought to be shaped by clear and widely accepted rules. Some policy experts call for ‘an arm’s length food reserve’, with autonomy like the one enjoyed by a central bank, and well-defined objectives5.

5.4. Practices of targeting subsidized release of public food stocks should be examined

The general release of public stocks at prices lower than those prevailing in the market should be carefully assessed. As indicated above, such practices erode the value of private stocks and undermine the functioning of the marketing system. Instead, targeting the poor should be considered as an option. Subsidized food sales combined with social safety nets could effectively target vulnerable population groups without distorting the market.

There are a number of ways to achieve a targeted release of public stocks at subsidized prices. For example, the release of subsidized grain in areas with a very high proportion of poor targets the vulnerable in a relatively effective and inexpensive manner. Likewise, the subsidized grain distribution program could release only ‘self-targeting’ foods, or foods that are consumed by the poor. Within the context of the recent food price hike, in Zambia it has been argued that consumer subsidies should target the poor only by placing it on “roller” meal, a relatively inferior product as compared with breakfast meal that is preferred by non poor households.

5.5. Warehouse receipts may also provide more information on private stockholding

Government decisions on how much to import are plagued by a lack of information on the amount of private stocks. Reliable data on private stockholding could be collected through a warehouse receipts system, where farmers can deposit amounts of staple food of a stated

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quantity and quality in a warehouse and obtain evidence of ownership. This could ensure that appropriate action is taken when there is a need.

As the warehouse receipts system does not require farmers to surrender their produce, the receipts can be used as collateral to obtain credit, thus enhancing smallholders’ liquidity and smoothing consumption. Within the context of sustained price increases, the system provides strong incentives to farmers to hold on to their deposited produce if they expect that prices will continue to rise. On the one hand, this provides an opportunity for smallholders to maximize the windfall from the price boom. On the other hand, if there were a food deficit, farmers may hold on to their warehouse deposits, putting further pressure on the prices to increase.

If farmers secure additional credit using the increasing value of the warehouse deposit as collateral, they would be able to hold on to their stocks. Such a collateralization of the price upswing may lead to a spiral of further rises in food prices and in increased credit. Nevertheless, smallholders, collectively as a group, may not be able to hold on to their food commodities for long. First, most of the food-producing households face strict liquidity constraints and this means that for many, hoarding may not be an option, as they need cash. Second, both banks and informal lenders may perceive the collateralized warehouse receipt as risky, as a fall in prices will result in a high default rate and thus ration credit.

On the whole, although a warehouse receipts system will provide accurate information to the government on private food stocks and will assist farmers in securing the price windfall, there is a small likelihood that it may lead to price spikes due to hoarding.

6. **Further Reading**


