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Agricultural pricing and public procurement in Sub-Saharan Africa

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Harvesting barley in the Delanta Plateau, Central Highlands, Ethiopia.
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Agriculture plays a major role in the economies of most Sub-Saharan African countries – creating employment, boosting GDP and supporting the livelihoods of many of the region's poorest households. Yet the region has gone from being a net food exporter to a net food importer over the last four decades. Ensuring an adequate supply of food is a major challenge and governments have employed a range of pricing and procurement measures in an effort to achieve this, with varying degrees of success.

Key messages

- Government interventions aimed at stabilizing food prices are more likely to succeed in an environment where private and public trading activities co-exist. Public interventions should be constrained by pre-established rules and they will be most successful if they are targeted towards vulnerable regions and households, rather than applied across the board.
- The food pricing and procurement environment should be consistent, transparent and predictable.
- Pricing and procurement policies constitute only part of an integrated mix of government policies, which contribute to food security and economic stability. Governments should focus on a range of policy instruments and services, including providing information and research and development.
- Governments in Sub-Saharan Africa aiming to meet a country's food security objectives need to take into account the deficiencies in production and trade infrastructures when designing or implementing food pricing and procurement policies. Similarly the macroeconomic conditions of a particular economy need to be taken into consideration.

This briefing paper is one of the 10-part Global Development Network (GDN) Agriculture Policy Series for its project, 'Supporting Policy Research to Inform Agricultural Policy in Sub-Saharan Africa and South Asia'. It is based on a longer synthesis paper, ***Agricultural pricing and public procurement in Sub-Saharan Africa***, which draws on extensive published and unpublished research. The full paper can be downloaded at: **www.agripolicyoutreach.org**

It will be of value to policymakers, experts and civil society working to improve agriculture in Sub-Saharan Africa.

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Sub-Saharan Africa has gone from being a net food exporter to a net food importer over the last four decades. As a result the rising cost of food imports has become an increasing concern. The global food crisis of 2007–08 further heightened this concern, as the Food and Agricultural Organization (FAO) food price index rose by 61 per cent. The impact of the crisis was particularly severe in Sub-Saharan Africa because:

- As a net food importer, higher food prices generate trade imbalances.
- A large percentage of this region's households are net buyers of staple food crops.
- Food accounts for 50–70 per cent of household budgets.

Background to the research

A systematic review addressed two primary concerns. The first was to explore whether and the extent to which various price and procurement policies implemented in Sub-Saharan African countries achieved the goals set for them by the relevant governments. The second was to determine whether current conditions in various countries warrant further continuation, or adaptation, of existing pricing and procurement policies.

The review focused on maize, rice and wheat because they are important staple food products in Sub-Saharan Africa's agricultural sector. The focus was on eight countries: two from each of four sub-regions.

Central Africa – Cameroon, Gabon

East Africa – Ethiopia, Kenya

Southern Africa – Malawi, Zambia

West Africa – Nigeria, Senegal

> A thorough understanding of how markets work is needed before interventions are designed. However, this knowledge is lacking in many Sub-Saharan African countries.

Nearly all Sub-Saharan African countries regard food security as the main reason for government interventions in the pricing and public procurement of staple food crops. The agricultural sector plays a major role in the economy in these countries in terms of GDP, employment and as a primary source of livelihoods for many of the region's poorest households.

Government policies have focused on either making the price of staple foods affordable for consumers, ensuring attractive prices for producers or a combination of both. The availability of food at affordable prices is a key political tool in all regions. The consequences of a high price and high food cost scenario for poor consumers could be just as serious as that of a low price and low income scenario for poor producers, in terms of poverty.

Broad generalization is difficult across diverse countries, but essentially:

- The eight countries examined in the review were not able to achieve self-sufficiency. In particular Cameroon, Nigeria and Senegal, which have concentrated on rice as a critical food security crop, have not been very successful.
- If maintaining moderate and stable food prices is a measure of success, the pricing and procurement policies implemented by several countries may have worsened rather than improved chances.
- Neither complete market liberalization nor complete state control has evolved an efficient system that fosters food security and guarantees the right market conditions to encourage an increase in production. A thorough understanding of how markets work is needed before interventions are designed. However, this knowledge is lacking in many Sub-Saharan African countries.

Pricing policies

Government interventions in pricing and public procurement are motivated by food security considerations, defined as a guaranteed adequate food supply for the population with a reasonable degree of certainty in the future.

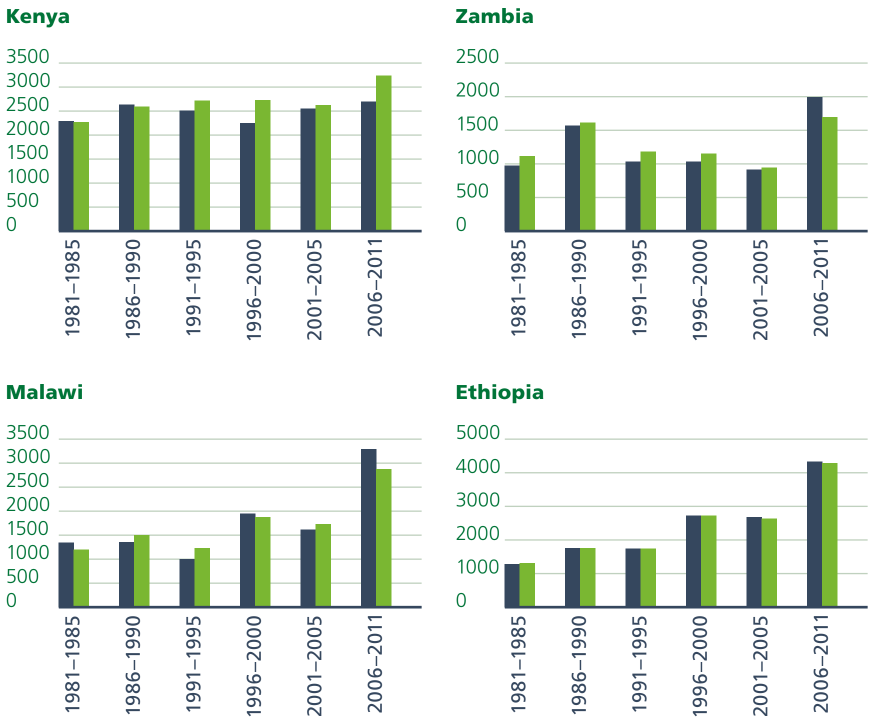
Concerns about food security have constituted a major and often explicitly expressed motivation for government intervention in African food markets. A sharp rise in the price of staple foods is known to have a serious effect on consuming households. Therefore ensuring the availability of food at affordable prices can become an acute political issue.

- In Sub-Saharan Africa maize, rice, wheat and cassava constitute the four main food staples. In Eastern and Southern Africa food security is determined by maize sufficiency; plus wheat and teff in the case of Ethiopia.
- In Central and West Africa, diets are more diverse but rice remains very important to achieving food security.

> Ensuring the availability of food at affordable prices can become an acute political issue.

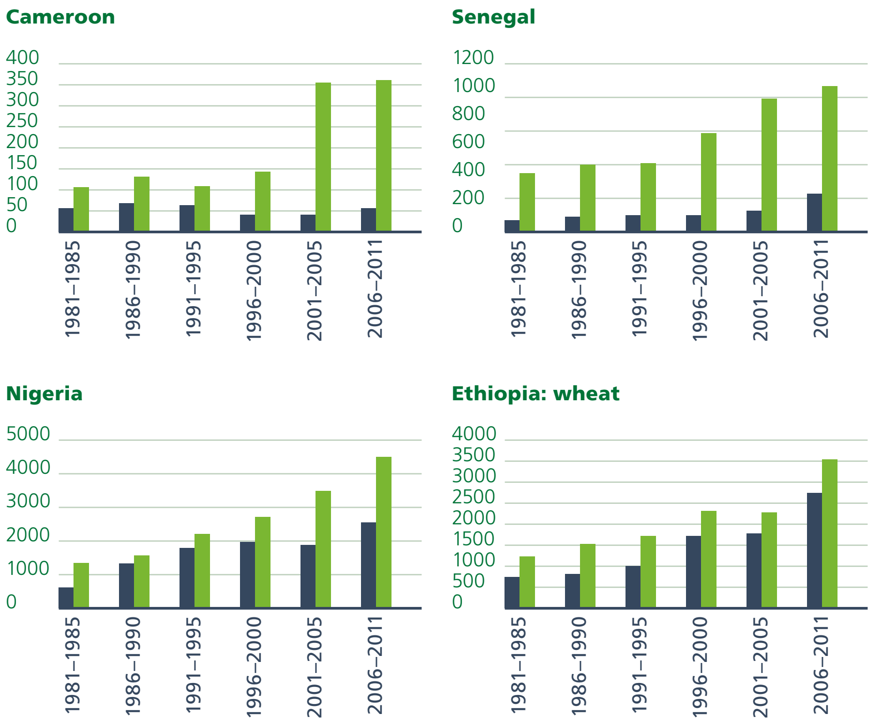
Maize production and consumption
(Period Average in '000MT)

Production
Consumption



Rice and wheat production and consumption
(Period Average in '000MT)

Production
Consumption



Source: United States Department of Agriculture (2012)

Stabilization policies: an overview

In Sub-Saharan African countries, governments typically try to minimize or eliminate risks associated with volatile markets through stabilization policies.

Agricultural markets in low-income countries tend to be volatile. Prices tend to fluctuate significantly over short periods of time. When prices are high, markets are particularly volatile.

This volatility increases risks for consumers and producers. Stabilization policy debates revolve around issues such as:

- Whether and the extent to which producers or consumers or both could achieve higher welfare with or without an agricultural price stabilization scheme.
- Whether it is produce price or producers' income that should be stabilized.

Governments try to stabilize markets through a number of stabilization policies, but often these policies are based on inadequate knowledge of the markets. In this picture farmers weigh their surplus goods in Chiringa village market, Malawi.
SVEN TORFINN | PANOS PICTURES

Until the 1990s the Zambian government guaranteed farmers a minimum price for their maize crops. This secured a market for smallholder farmers and improved food security but it imposed a heavy fiscal burden on the government. Following liberalization the government abandoned attempts to set minimum prices. Competitively priced imported food pushed down prices for consumers. As a result fewer farmers planted maize, threatening food self-sufficiency and in effect food security. The government has since resumed buying maize at 40–60 per cent above open market prices, which indirectly provides income support to maize farmers but has pushed up prices for consumers.

Stabilization policy objectives vary depending on whether directed towards staple foods or export crops. With staple foods, national policies seek to strike a balance between the interests of domestic producers and consumers. With export crops, national stabilization schemes are concerned with the interests of producers. The government's agricultural price stabilization policy may have to incorporate minimum and maximum prices as a means of protecting both poor consumers and producers.

Price support mechanisms

One policy instrument available to a government seeking to expand its domestic food production is to create a price support mechanism. This means governments can set guaranteed produce prices that are higher than market levels. As farmers respond to price incentives, output tends to increase and surplus production is likely to be generated. This policy is criticized for several reasons:

- It leads to a rise in food prices so supports domestic producers at the expense of domestic consumers.
- Poorer consumers spend a higher proportion of their income on food, so the policy imposes a regressive tax.
- Only a small proportion of the benefits go to farmers; many of the gains are made within the processing and distribution system.

Reducing the volatility of food prices

Several domestic market policy instruments can be used to reduce or eliminate the impact of food price volatility.

Price control: governments prescribe the maximum or minimum prices for specific food products.

Administered prices: governments set administered prices that are indicative rather than being legally binding.

Neither form is likely to be effective without government control of the quantities of affected products.

The private sector is more likely to play its role effectively when public interventions are consistent, transparent and predictable.

Stockholding agricultural produce

Private economic agents stock produce when the price is low. When prices are high and are expected to fall, they release the stock. If governments decide that private stocks might not adequately stabilize food prices, they create public stocks. Stocks fall into two categories: strategic stocks that are used to stabilize prices and emergency reserves that are used to protect food security during periods of extreme food price increases. Stockholding tends to work better in dampening downward price movements. But this has its limitations, as when stocks are exhausted, they can no longer dampen prices. Public stocks may also be susceptible to mismanagement and corruption. Furthermore, their discretionary use may generate market uncertainties, which can increase the problem of price volatility. Given these shortcomings, it is important to make the rules of a stockholding scheme explicit before embarking on it as a price stabilization measure.

Trade policy measures

Trade policy measures can be used in price stabilization schemes. Under normal conditions, international trade provides general access to agricultural products regardless of where they are produced or consumed. A range of factors influences the viability and effectiveness of trade policy measures. These measures affect both consumers and producers.

National-level fluctuations in food prices can be moderated by adjusting the quantities of produce imported or exported. But trade policy measures affect both sides of the market. When trade policy keeps domestic food prices low through export tax or restrictions to protect consumers, the producers are affected. They do not have as much incentive to produce. When import tax or other forms of import restriction are used to keep domestic food prices high to boost producers' incentives, consumers are penalized through high food prices.

Other factors influence the viability and effectiveness of trade policy measures.

- A trade-based food price stabilization scheme requires adequate financial (especially foreign exchange) resources that may not be available to low-income and food-import dependent countries.
- Trade policy also tends to be less effective if imports are required to fill gaps in domestic food supply when world food prices are high.
- Trade measures are more likely to fail if they change frequently. Government trade measures should therefore be constant.
- Unreliable world market supplies limit the extent to which trade policy can serve as an important component of a food price stabilization arrangement.

Successful interventions

Government interventions to stabilize food prices are more likely to succeed in an environment where private and public trading activities coexist. Public interventions constrained by pre-established rules should be consistently and transparently implemented. A mixture of policy measures is often required for effective food price stabilization schemes.

In most practical cases, governments use a combination of several policy instruments:

- A mix of trade and stocks to sustain food consumption when production is volatile. Some countries use import duty reductions and export tax increases to stabilize domestic prices when world food prices are rising.
- Stocks and trade are adjusted accordingly when both are used to control prices. Adjusting stocks works better in the short term, and using trade is a better long-term strategy, especially when the domestic market is fully integrated into the world market.

Building these schemes requires a combination of public and private functions. The private sector is more likely to play its role effectively when public interventions are consistent, transparent and predictable. This kind of environment is largely absent in many low-income countries. The government often has the flexibility to intervene in food markets. Even if private trade coexists alongside state pricing and procurement activities, private–public interactions suffer from a lack of coordination. The private sector then faces significant risks and such a system might fail to achieve its food price stabilization goal.

Procurement

In African countries over the past 60 years, two broad types of food marketing systems have evolved and in some cases now coexist. These are private and state-controlled (parastatal) food marketing systems.

The private system is further subdivided into two components:

- Trader-based marketing system
- Large-scale commercial marketing system

Trader-based food marketing system: Small traders, often single-person businesses, operate at different levels of the marketing chain. They mainly source supplies of small quantities, and trade in several food crops in limited geographical areas. In its immature state, this trader-based market system is typically fluid. As it matures, it becomes more robust and has more stable structures. Supportive institutional arrangements can help to address these problems and lead to a more mature market. This might include brokers or commissioned agents, traders' associations, producers' organizations and periodic markets.

Large-scale commercial firms: Large-scale commercial firms generally engage in wholesaling, transportation, milling and inter-seasonal storage. A small number of large firms tend to dominate the market.

Senegal's experience

After the liberalization of domestic trade from 1990 the private sector took over the production, processing, transportation and marketing of rice. However, the complete commercialization of rice production and marketing was unsuccessful.

The government reintroduced state marketing and procurement policy interventions in the domestic market. Subsidies since 2007 substantially reduced production costs and increased producers' profit margins. The direct benefit of subsidy to the private sector increased private sector participation. Self-sufficiency in rice grew from 20 per cent in 2007 to 40 per cent in 2011.

However, government participation in the rice market accounted for 16 per cent of the trade deficit in 2007, a heavy fiscal burden on the country.

State-controlled food marketing systems

In some African countries, governments believe that food security cannot be ensured in the context of private food marketing systems. This is because of the alleged parasitic nature of traders and private companies. In African cereal markets, governments use parastatal institutions to perform a range of roles in food marketing.

Three ways in which governments use parastatal institutions:

1
To directly intervene in food markets and act as private agents.

2
To work alongside private traders and large commercial firms.

3
To completely replace private traders and legally establish themselves as monopolies or monopsonists.

When this happens, governments usually regulate monopoly controls in export and import trade, restrict the movement of food grains by private traders or limit private storage. They might also regulate concessional credit, preferential access to transport and subsidies on trading activities.

Countries in Central and West Africa have generally relied on trader-based food marketing systems. They are increasingly maturing and large-scale commercial food marketing systems are now evident.

Many countries in East and Southern Africa in the 1960s–80s were under state-controlled food marketing systems. In the 1990s, attempts were made to liberalize the parastatal marketing systems and legalize private alternative arrangements. The general result has been an uneasy coexistence between parastatal and private systems.

Ensuring food security is the major driving force for government-led pricing and procurement policies. Here a boy in Oromiya, Ethiopia, holds a plate of a maize-based staple food.
MIKKEL OSTERGAARD | PANOS PICTURES

- **Public–private cooperation**
  Agricultural pricing and procurement systems require a structure where both the private sector and government can work together within the same system rather than trying to displace each other.

- **Transparency**
  Governments should ensure better coordination and transparent and consistent policies in the food system.

- **Targeted policy instruments**
  Governments should focus on providing a range of policy instruments and services. These might include market infrastructure, dissemination of market information, and research and development towards strengthening private sector participation in the food marketing system.

- **Macroeconomic policies**
  Pricing and procurement policies constitute only part of an integrated mix of policies, all of which impact upon the key issues identified above. Governments should also take into account deficiencies in production and trade infrastructures (and other macroeconomic policies) in the design, and packaging and implementation of food pricing and procurement systems aimed at meeting each country's food security objectives.

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The full paper *Agricultural pricing and public procurement in Sub-Saharan Africa* is available for download at www.agripolicyoutreach.org

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