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POLICY SYNTHESIS

*for Cooperating USAID Offices
and Country Missions*

(<http://www.aec.msu.edu/agecon/fs2/psynindx.htm>)

Number 65

May 2003



Africa Bureau,
Office of Sustainable
Development

USAID/Zambia

USAID/Mozambique

COORDINATION FOR LONG-TERM FOOD SECURITY BY GOVERNMENT, PRIVATE SECTOR AND DONORS: Issues and Challenges

By

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BACKGROUND AND OBJECTIVE: This policy synthesis will focus on coordination for long-term food security among government, private sector, and donors. It will use current examples in the region to illustrate issues and challenges. This will highlight empirical work in Zambia showing why maize prices have risen above import parity levels during the lean season in recent years, due to coordination problems between public and private actors involved in maize importation. It will discuss potential modalities to improve coordination during periods of food shortfall to better protect low income consumers from food insecurity during these periods. It will also draw on analysis from Mozambique addressing how coordination between private sector import practices, government tax and other import policies, and different emergency response programs could be improved to mitigate the potential adverse effects on long-term market development.

ZAMBIA: THE NEED FOR PREDICTABLE GOVERNMENT ACTIONS DURING TIMES OF DEFICIT: Food relief for vulnerable groups is important in times of deficit. For the remainder of the population, well functioning grain markets can save lives during times of food shortfalls. This section illustrates how predictable government behavior in the market can improve markets' ability to meet the needs of consumers.

If grain markets in Zambia functioned efficiently, the wholesale price of maize would not exceed the cost of importing maize from South Africa for any sustained period of time. If local prices rose above the cost of imports, then traders could make profits by importing grain from South Africa (or other neighboring countries with surplus maize). However, when maize

grain wholesale prices in Lusaka are compared with estimated South Africa maize import prices, in both the 1998/99 and 2001/02 marketing seasons, domestic prices rose well above the cost of imported maize for several months. Why didn't traders import maize during these periods?

Causes of import marketing problems – the example of the 2001/02 marketing season: In July 2001, the national crop forecast and food balance sheet suggested a commercial import requirement of 200,000 tonnes of maize. In August 2001, government announced its intention to arrange the importation of maize to be sold at a subsidized price, and initiated a tender process to select importers.¹ It made arrangements with 16 Zambian maize millers (as buyers) and a number of commodity trading firms (as sellers) to import 200,000 tonnes of white maize over the period October 2001 through April 2002. However, starting in November, shortages were evidenced by many people queuing outside shops to buy mealie meal, and local maize prices rose well above the cost of importing from South Africa.

¹ Subsidies have been in two different forms. First, direct subsidies on imported maize were provided to millers during the 2001/02 season. Second, indirect subsidies were provided during the 1998/99 marketing season through exchange rate depreciation: the Food Reserve Agency imported maize for sale to millers and kept its Kwacha selling price constant during the remainder of the season. As the Kwacha depreciated, the dollar value of the maize sold to millers decreased and was never adjusted. Hence, FRA provided an indirect subsidy equal to the Kwacha/US Dollar exchange loss. As a result, in both scenarios government gave selective advantages to buyers that were given access to its subsidized maize supplies, effectively pushing all other millers and traders out of the market.



Government behavior affects private trader behavior: The subsidized maize imports did not commence until December 2001 - January 2002. Between August and December 2001, marketing actors had information that government and millers were working out financing arrangements and other modalities to import maize to be sold at below-market prices in Zambia. During this period, most private companies refrained from importing commercial supplies, since subsidized supplies were coming into the country under the government import program to be sold at below market prices, undercutting commercial sales.

Due to financing problems, imports under the government program were delayed. By the end of May 2002, only 130,000 tonnes had been imported under these arrangements, not the intended 200,000 tonnes. Late and insufficient imports under the government program had two major effects:

(1) Fewer private market participants: Because government arranged to supply selected milling firms with subsidized imported maize, these millers would have a major advantage compared to other millers and traders who faced commercial import costs at some \$80/tonne more. This situation effectively stifled activity of all traders except those chosen under the government program.

(2) Maize grain (and mealie meal) shortages and high prices: Between the tender announcement in August 2001 and the arrival of the first substantial imported volumes in December 2001, local supplies dwindled and maize prices rose sharply. Despite the widely recognized shortage of maize and mealie meal, the uncertainty on the arrival of subsidized supplies discouraged traders from commercial imports that would have lowered prices.

Import subsidies on imported maize grain provided to large millers may not benefit the consumer: The 2001/02 maize shortage resulted in rationing of maize meal and the subsidy that government conferred on maize importation was not passed through entirely to consumers. Despite the subsidy on maize and subsequent price reductions of maize grain, breakfast meal prices remained at high levels throughout 2002. While maize grain market prices dropped from US\$350/t in January 2002 to US\$160/t in May 2002 (a decrease of more than 75%), breakfast meal prices in Lusaka declined by only 15% during the same period.

If maize import arrangements are to benefit low-income urban and rural consumers, alternative market channels should be explored: The observed high mealie meal prices during a maize deficit season, coupled with the non-availability of maize grain in the public markets, would strengthen the argument for making government-imported maize grain directly available to consumers and small retailers, not exclusively to large millers. Low-income consumers stand to benefit a great deal from having access to maize grain for grinding at the hammer mill, rather than having no choice but to purchase expensive industrially milled mealie meal.

Options for government to consider during maize deficit seasons:

(1) Import arrangements, either in the form of subsidies for selected market participants or in the form of direct government/FRA imports, should only be announced if and when the necessary resources are in place to cover the entire announced import requirement. Uncertainty over Government's actions in the market compounds the risks that private traders face in importing supplies. A key goal of government is to add stability and clarity to the market, so that traders can respond to opportunities. Clear statements about government intentions backed up by timely action is critical.

(2) If government is uncertain that the required resources will be available to meet its intended import target, it is in the country's interest to encourage private sector imports by clearly announcing the sale of any maize imported by government at full commercial US dollar-based price, covering all import costs. The sale of government imports can be through a series of open tenders with full import cost as the reserve price. The cost to consumers could actually be lower under this approach than if government attempts, and fails, to import and sell sufficient quantities at subsidized rates.

(3) If maize import arrangements (subsidized or not) are to benefit consumers, maize grain should not be available exclusively to large mills, but also to small scale traders, hammer mills and consumers.

MOZAMBIQUE: PRIVATE MARKETS' KEY ROLE ENSURING FOOD SECURITY:

Experience in Mozambique over the past decade provides evidence that private markets can function effectively to protect the food security of poor urban and rural consumers. This effective performance of markets is predicated on clear government policies and



practice allowing private imports. More recent experience suggests that government may need to pay careful attention to the potential differential effect of policies on the formal and informal marketing systems if it wishes to fully exploit the private sector's ability to contribute to food security objectives. We review here two instances where government policy clearly contributed to a positive private sector response, and one in which policy may have hindered this response.

Selling food aid in markets in 1992 strengthened markets and protected consumers: Markets played an important role in responding to the 1992 Southern African drought, even before the war ended in October 1992. During the 1992/93 marketing year (April 1992-March 1993), approximately 40% of the maize food aid; and 36% of all food aid were monetized. These monetized food aid volumes arrived primarily between May 1992 and January 1993, being sold in Maputo in the south and to a lesser extent Beira in the center. Despite the war, this aid flowed quickly to markets throughout the south and center of the country through the informal marketing system. Traders from outside Maputo regularly arrived in Maputo to purchase grain for shipment north. Traders based in Maputo also shipped grain to outlying markets. As a result of this type of trading activity, yellow maize prices in southern markets closely tracked those in Maputo, while those in the center tracked prices in Beira.

In addition to distributing food aid broadly throughout the south and center regions of the country, informal food markets channeled much of this aid into the small-scale maize milling sector, with substantial benefits to poor consumers. While white grain and meals nearly disappeared from the market, yellow grain and meals remained regularly available. The retail prices of white grain and whole white meal averaged US\$0.43/kg and US\$0.51/kg during the 1992/93 marketing season, compared with US\$0.17 and US\$0.19 for their yellow counterparts. Research shows that households that purchased whole yellow meal had mean incomes approximately 25% below those of non-purchasing households, and that low income households are nearly twice as likely as higher income households to consume whole meals when these carry modest (20%) price discounts relative to refined meals. Finally, whole meals yield 15% to 40% more human food per unit of grain than do refined meals, and at a lower price. This must be seen as a clear benefit in a country such as Mozambique, where the vast majority of the population has incomes too

low to be significant consumers of meat products (livestock are the principal consumers of the by-products from refined meal production).

Private trade stabilized maize prices in Maputo in 1995/96: Up to 1992, the informal marketing system of southern Mozambique grew largely on the back of monetized yellow maize food aid. After the drought and with the ending of the war, food aid quantities declined dramatically, leaving the south in structural deficit, while the center produced surpluses during most years. The informal marketing system in the south responded to these circumstances by extending its reach to regularly bring surplus white maize from the center to Maputo and other southern cities, and also to import grain from South Africa for southern markets. Thus, this system played a key role ensuring food security for urban consumers, and rural net buyers, regardless of the country's overall food position. Beira, the second largest city in the country, lies in the center close to surplus production zones, and never developed an active import trade with Zimbabwe, which would be the most logical market for imports when they were needed.

In 1995, the Southern Africa region was once again affected by drought (though not as severe as 1992), and surpluses in central Mozambique vanished. Faced with this domestic deficit, informal traders in the south turned increasingly to imported grain from South Africa. Government took no policy position of any kind on this trade, thus implicitly allowing it to continue. As a result of these well developed trade links, maize grain prices in retail markets of Maputo remained relatively stable, peaking at US\$0.34/kg, while prices in Beira (located in the center close to production areas) peaked at US\$0.50/kg. Mean prices during the three months of the hungry season averaged 15% higher in Beira than in Maputo, reversing the pattern seen during years of average or good harvests.

While in 1992 the effects of monetized yellow maize food aid were seen throughout the southern portion of the country, in 1995/96, the effects of white maize imports were seen only in Maputo: prices in other southern cities tracked the much higher prices in Beira, not Maputo. It seems likely that this spatially limited effect of the private trade was due to the small scale of operation and limited working capital of informal private traders, making it impossible for them to source sufficient grain in South Africa to fully stabilize prices throughout the south.



An emerging story: Application of a value-added tax on maize imports may have increased maize prices and limited availability of whole meal throughout the south this year: A distinguishing characteristic of markets in southern Mozambique throughout the 1990s was the regular availability of maize grain and affordable whole maize meal in retail markets. Since May 2002, however, whole maize meal has been almost entirely absent from most southern markets, while continuing to be regularly available in most markets of the center and north of the country. Traders have indicated in interviews that the informal sector no longer imports maize grain from South Africa for southern markets, though it does continue to bring surplus production from the center to the south.

The reasons for these developments – absence of whole maize meal and termination of informal imports of grain from South Africa – are not yet fully understood. It is known, however, that the government of Mozambique began to charge a 17% value-added tax on maize grain imports in 2000. Formal sector importers who process the grain into flour or animal feed are entitled to reimbursement of the VAT and have, after initial bureaucratic difficulties, been successful in obtaining that reimbursement. Informal importers who do not process the grain – the standard practice in the informal sector – are not entitled to any reimbursement. We hypothesize here that this unequal incidence of the tax, combined with lower unit procurement costs for formal importers producing refined meals, has undercut the ability of the informal sector to make whole meals available at prices sufficiently low to compete with refined meals. Research is currently underway to test this hypothesis.

CONCLUSIONS AND RECOMMENDATIONS:

Governments in Southern Africa should consider allowing private sector imports as a matter of course. Mozambique's experience shows that unhindered private sector imports of maize can bring substantial benefits to low income consumers, including net buyers in rural areas. If governments choose also to be involved in importing food commodities, these public sector import decisions should satisfy a number of criteria. First, they should be made in close coordination with the private sector, so that private actors can make their own plans based on solid information about government intentions. Second, government import decisions must be realistic: they should be announced only to the extent that the necessary resources for import are actually available. Third, once decisions are made, the actual importation

needs to be timely to avoid disrupting private markets. Fourth, the imports should be sold at full commercial prices to avoid crowding out the private sector. Fifth, there should be no exclusive access to public sector imports by large-scale industrial millers: imported maize should be made available at appropriate prices to small traders who are likely to channel it into the informal system, including small hammer mills.

It must be stressed that if any of the first four criteria are not satisfied, it is likely that the private sector will choose not to import, or to import less than it otherwise would. If this happens, government actions to improve maize availability and reduce prices to consumers will have precisely the opposite effect. Our final conclusion, therefore, is that governments should consider allowing the private sector to handle **all** commercial imports of maize and other food staples. Governments would maintain a central role in food aid decisions and implementation, though the private sector could play a useful role even there if some of the food aid is to be monetized.

FS II policy syntheses and other publications relevant to coordination for long-term food security by government, private sector, and donors: issues and challenges are available on the web at <http://www.aec.msu.edu/agecon/fs2/psynindx.htm>

Nijhoff, J.J., T.S. Jayne, Billy Mwiinga, and James Shaffer. 2002. *Markets Need Predictable Government Actions to Function Effectively: The Case of Importing Maize in Times of Deficit*. Zambia FSRP Policy Synthesis No. 6.

Tschirley, David, Cynthia Donovan, and Michael T. Weber. 1996. *Food Aid and Food Markets: Lessons from Mozambique*. *Food Policy* 21: 2.

Tschirley, David. 1998. *Planning for Drought in Mozambique: Balancing the Roles of Food Aid and Food Markets*. Mozambique FSRP Research Report No. 29.

Funding for much of this research was provided by the USAID Missions in Zambia and Mozambique. Additional support was received under the Food Security II Cooperative Agreement between USAID/Bureau for Economic Growth, Agriculture and Trade, Office of Agriculture and Food Security, and the Department of Agricultural Economics at Michigan State University. The views expressed in this document are exclusively those of the authors.

The authors are all associated with the Food Security Research Project in Zambia, the Mozambique Food Security Project, and the Department of Agricultural Economics at Michigan State University.