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Research Results of SIMA (Market Information) DEST (Statistics Department)t and DAP (Policy Analysis Department) of MINAG (the Ministry of Agriculture of Mozambique), Directorate of Economics
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*Learning from the 2002/03 Food Crisis in Southern Africa: Lessons for the Current Year **

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INTRODUCTION: The Southern Africa region can expect droughts of varying severity two or three times per decade. Because white maize is relatively intolerant to drought, and because it comprises a relatively high share in the food budgets of some middle- and low-income consumers in the region, these droughts have the potential to adversely affect the food security and future livelihoods of millions of rural and urban households. In similar fashion, the manner in which governments and donors respond to these droughts can have major impacts on government finances, on the private production and marketing systems on which these households primarily depend for their food security and livelihoods, and on their future ability to ensure their own well-being. The challenge facing governments and donors is to respond efficiently and effectively, using only as many resources as are needed to stem the current human costs of the crisis while building, or at least not undermining, households' ability to cope with future crises.

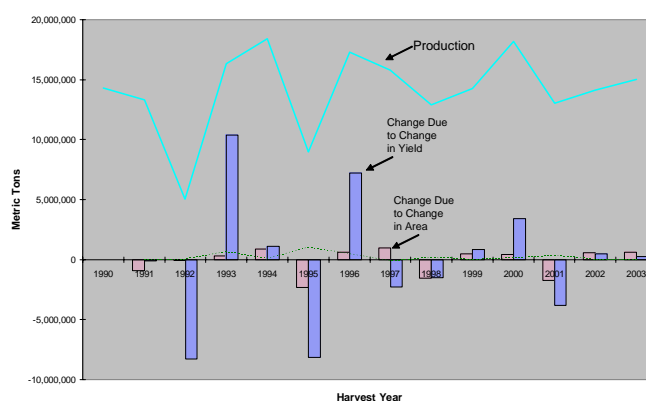
This *Flash* summarizes findings from a longer document examining the 2002/03 food crisis, updates that discussion to the current year, and attempts to draw lessons for improved response this year.

BACKGROUND: Maize production in Southern Africa is highly variable, with a median year-on-year change of nearly 20% over the past 13 years (Figure 1). In four of these years, the year-on-year change has exceeded 50%. Changes in yield, driven largely by rainfall fluctuations, have accounted for nearly three-quarters of this variation. The devastating regional drought of 1992 and the still serious but less severe event of 1995 can be clearly seen in the figure by the large drop and subsequent recovery of yields.

Production in the region has also been highly

covariant, with large positive correlation coefficients among South Africa, Zambia, and Zimbabwe. Two points are worth noting, however. First, while production in Mozambique co-varies with that in Malawi, production in these two countries has not been significantly correlated with that of South Africa, Zambia, and Zimbabwe. In Mozambique, this pattern is driven by the predominance of the North in national production, and by the lack of correlation of weather patterns in this area with those in the rest of the region. For example, during the droughts of 1992 and 1995, production in northern Mozambique was largely unaffected. Since northern Mozambique regularly produces exportable maize surpluses, its lack of correlation with production in the region makes it a potentially important source of supply for both commercial and humanitarian responses to drought.

Figure 1. The Contribution of Area and Yield Changes to Fluctuations in Maize Seven Southern African Countries, 1990-2003



¹ Mozambique, South Africa, Swaziland, Lesotho, Malawi, Zambia, Zimbabwe.
Source: FAOStat

OUR FOCUS: This paper examines the efficiency and effectiveness of emergency response in Southern Africa through the lens of the 2002/03-food crisis in the region. We outline improvements in information and operational

procedures needed to enhance the response to future events. We also discuss national and regional trade regime changes that would reduce the need for emergency response, and consider what lessons the 2002/03 crisis may have for the role of Strategic Grain Reserves (SGRs).

Market reform in the region has led to more diversified production patterns (cassava production especially has grown), more decentralized food distribution systems, and more varied food consumption patterns at least in urban areas. Each of these changes should reduce the region's dependence on external food aid during droughts. Yet some researchers and policy makers have become concerned that many households in the region are becoming more vulnerable to shocks, not less. This apparent increase in vulnerability has become a standard part of the understanding of the 2002/03 food crisis.

FINDINGS FROM THE 2002/03 CRISIS: We review findings on the role played during the 2002/03 crisis by early warning systems, the effectiveness of individual country responses, and the role of strategic grain reserves in confronting the crisis

The Role of Early Warning: A review of the chronology of early warning and response suggests that early warning clearly worked during the 2002/03 crisis. It alerted local governments and the international community to looming food shortages as the harvest was just beginning, provided quantitative estimates of the number of affected households and the need for food aid and commercial imports, regularly updated these numbers through effective communications, and mobilized public opinion and resources to meet enough of those estimated needs to largely avert a humanitarian crisis. The early warning and response process also reflected an exceptional degree of collaboration among governments in the region, the emergency response community, and donor agencies. The way in which the work of national VACs was coordinated by the SADC Regional VAC and fed into donor and relief agency response is especially impressive.

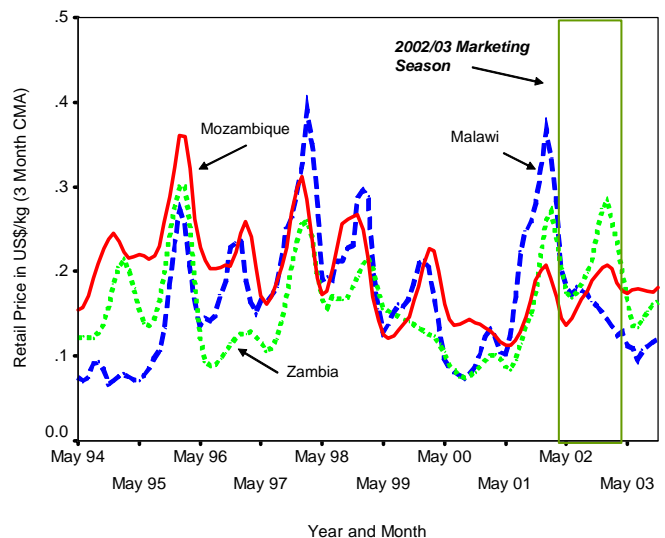
Whether the early warning information was “right” is a different and more complex question. One way to approach the issue is to ask whether, if estimated food

aid and commercial import requirements had been met, the crisis would have been stemmed without negatively affecting markets. Stemming the crisis required meeting the current food needs of those with neither the income nor the assets to do so themselves while allowing households to avoid coping mechanisms that increase their vulnerability to future crises. Nutritional monitoring during the crisis was spotty but suggested that wasting was well below levels that would cause alarm. Because wasting is a lagging indicator, it should ideally be complemented by information on the sustainability of household coping behavior. Unfortunately, very little such information has become publicly available, even though a substantial volume of data was collected through the VAC surveys which might have shed more light on food security and vulnerability. This is clearly an area that requires improvement.

How did Countries Respond to Early Warning?

Price behavior suggests great variation in market impacts across the region. *Malawi* created a major problem of oversupply late in the 2002/03 season and into the next, because it imported large amounts of grain commercially and as food aid, all through government channels, while completely ignoring informal trade. Because the 150,000-250,000 metric tons of informal imports arrived more quickly, government was left with a comparable amount of grain that it could sell only at a loss. As a result, maize prices throughout 2003/04 were exceptionally low.

Figure 2. Retail Prices of Maize Grain in US\$/kg in Southern Malawi, Southern Mozambique, and Southern and Eastern Zambia (04/94 – 04/04)



In *Zambia*, the experience in 2002/03 showed that the private sector could import substantial quantities of grain when needed, but better operational mechanisms need to be designed between public and private sectors if the government is to be assured in future crises that private sector will be able to import the quantities needed to keep prices stable.

Mozambique provides evidence that this can happen on a regular basis when government simply stays out of the import business. Prices in Mozambique remained relatively stable during this crisis, and well below those in Zambia and Malawi.

Overall, trade covered 75% of the food deficit in the region. Although less – perhaps substantially less – than three-quarters of the estimated food aid needs had reached intended beneficiaries by the time the new harvest was coming on in April 2003, the consensus view is that the crisis was effectively averted.

What Role did Strategic Grain Reserves Play?

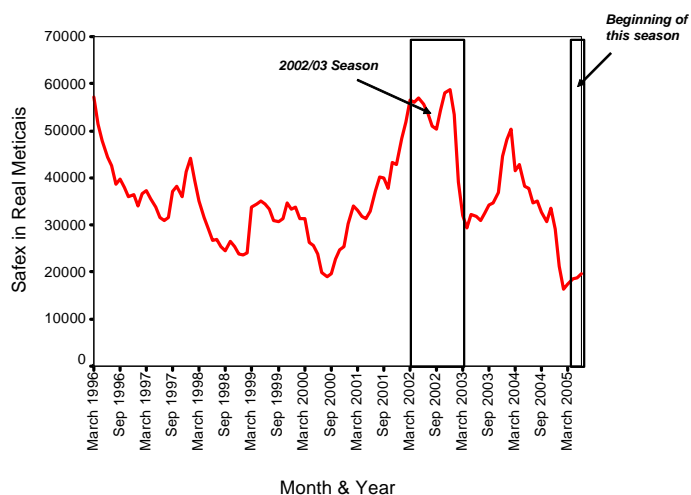
Strategic Grain Reserves played no role in what has to be considered a successful response to the 2002/03 crisis. Yet SGRs are back on the policy agenda, despite the discouraging management record of such facilities in Africa. We suggest that government and donor time and money are likely to be better spent on continuing improvements to market information and early warning systems, on improved infrastructure for domestic food marketing, on more transparent policy towards external trade, and on market facilitating mechanisms that can be deployed when needed during crises.

THE CURRENT CRISIS: The regional food crisis this year is driven almost entirely by food production shortfalls outside of South Africa, combined with increased vulnerability to shocks among some households. Excluding South Africa, production in 2005 was 16% below last year, and 5% below the trailing five year average; when South Africa is included, production is 3% above last year and 8% above the trailing five year average. Thus, the anticipated surplus in South Africa could cover the entire deficit in the region.

The supply situation in South Africa – and the difference between this year and 2002/03 – is dramatically illustrated by the real prices of white

maize on SAFEX. Figure 3 presents monthly SAFEX prices of white grain in real Mozambican metical terms (a graph in real Zambian kwacha is very similar) from 1996 through May 2005. The improved regional supply situation compared to 2002/03 has resulted in dramatically lower prices this year.

Figure 3. SAFEX White Maize Prices in Real Mozambican Meticals (March 1996 -- May 2005)



TOWARDS IMPROVED EMERGENCY RESPONSE:

The response to the 2002/03 food crisis in Southern Africa was a major success in terms of early warning and monitoring, collaboration among governments, the emergency response community, and donor agencies, institution building in national and local VACs, and the use of vulnerability assessment methods to guide food aid distribution. We are also impressed that a systematic assessment of the experience was conducted so soon after the ending of the immediate crisis, in April 2003.

Nonetheless, this review has suggested that the response relied too much on food aid, that markets played a larger role than anticipated, and that they could have played an even larger role if appropriate government policies and procedures had been in place. The review has suggested improvements in information and operational procedures that could further enhance the efficiency and effectiveness of emergency response in the region.

An efficient and effective response to future food crises in Southern Africa requires that food aid

agencies and practitioners realize that food aid is all too often the first choice in response rather than the last, that its targeting is often poor (though it has improved over the past decade), that even food insecure households will often prefer cash resources instead of food, and that innovative approaches to promoting market response could reduce the need for food aid while not compromising the humanitarian response. A balanced approach also requires that market proponents and food aid skeptics realize that *not* providing food aid and other transfers to vulnerable households during crises can push them into poverty and undercut their ability to use markets to ensure their food security in future crises. In other words, food aid and other transfers provided in a *timely manner* to the *right people* can widen the future scope for market response, not narrow it.

Information needs include improved food balance sheets, household budget shares and cross-price elasticities of demand among staples, improved market price information, data on the incidence of different household coping mechanisms, and household income shares and an assessment of the likely impact of the crisis on the level of income from each source. Operationally, governments need much more actively to facilitate market response during crises, turning to food aid only if markets and market-facilitating measures are expected to be insufficient to meet immediate food needs and protect vulnerable households from excessive indebtedness or asset depletion.

Trade regulations in the region need to be simplified and harmonized. The paper provides a list of key areas for reform, but stresses that, at the same time, governments and donors in the region need to invest seriously in the professionalization of their customs services. What is needed is a customs service which facilitates legal trade, rather than the all-too-frequent pattern of using trade legalities to hinder open commercial trade and promote its informalization. Similar professionalization needs to take place among the market information services in the region.

We also suggest that local and donor country governments work with WFP and other relief agencies as needed to generate a final accounting of the amount of food aid that had actually reached intended beneficiaries by 31 March 2003, so that a more accurate estimate can be made of the degree to which food aid needs were overestimated. Such final

accountings should be a regular part of any emergency response operation, so that lessons can be more fully learned before attention is diverted to the next “hot spot”. In this sense, the assessment by Mano et al in April 2003 may more profitably have been done a month or two later, when more final numbers on actual distributions would have been available. Finally, we have suggested that as SGRs once again appear on the policy agenda, their probable costs and benefits – especially the opportunity cost of policies and marketing infrastructures not improved because of the focus on an SGR – need to be very carefully assessed.

Turning to the present year, the improved prospects for trade compared to 2002/03 (when trade nevertheless played the predominant role in covering the regional deficit) mean that there will be an especially high payoff to governments improving the transparency and clarity of their trade policies. Such improvements require clear and consistent signals to the private sector regarding import intentions, and active and detailed sharing of information with the private sector about food aid plans and execution. Making it clear that borders will remain open during the crisis is crucial.

References

For a full set of references, please refer to Tschirley et al, “Anticipating and Responding to Drought Emergencies in Southern Africa: Lessons from the 2002-2003 Experience” available online at http://www.aec.msu.edu/agecon/fs2/recent/SADC_EmergencyResponse_2002-03_V6.pdf

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