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MADER-Directorate of Economics

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*Market Information: A Low Cost Tool for Agricultural Market Development? **

By: Anabela Mabota, Pedro Arlindo, Antonio Paulo, and Cynthia Donovan

SIMA: Since 1991, the Ministry of Agriculture and Rural Development (MADER) of Mozambique, through the Agricultural Market Information System (SIMA) has collected, processed and disseminated weekly information regarding prices of basic commodities at different market transaction levels (Santos, et al. 2002). This information has been used by different actors in the market, including producers, traders, NGOs, consultants, and policy makers.

SIMA has made efforts to serve multiple users, from the private and public sectors, using a variety of means of communication, thereby contributing to the development of agricultural markets. However, in a time of budget constraints, there is one important question: What is the value of investing in public market information as is currently done in Mozambique?

MARKET DEVELOPMENT:

“There were villages in Mali where people didn't have enough to eat and didn't know where to get food, while others had grain and no market” With the right information the government now relies on the private sector to shift surpluses to areas with shortages without resorting to foreign aid. “Today, for basic grain, we could say Mali is self-sufficient.” (Demebele as quoted in Sansoni 2002).

These words belong to Dr. Nango Demebele, a Malian economist who specializes in agricultural markets. He made the comparison between the Malian economy before and after the establishment of a market information system, under food policy reform for a liberalized economy.

In Mozambique, with a strong market orientation to its policy, every day there are signs of increased economic activities at rural areas. In 1994, for instance, it was common during a two day period to

see only two or three vehicles along the road linking Nampula and Cuamba, important production and consumption districts in northern Mozambique. Producers had to ask for a ride to transport their crops to market or to buy their inputs. Even having a single trader arrive to purchase their crops would have seemed like a dream.

Now, however, thanks to growth of the market economy, the producers have more opportunities to sell their products while the traders demand more agricultural products in many parts of the country. Currently, whoever has greater access to information such as prices, demand and supply conditions, has an advantage in trade

DIFFUSION AND FREQUENCY OF SIMA INFORMATION: SIMA has adopted new initiatives to disseminate information, including daily newspapers, radio broadcasts, and television, in addition to the usual fax, email, and paper copy distribution. Table 1 summarizes the number of publications edited by SIMA since 1991.

Table 1: SIMA Publications (from 1991 through September 2003)

Type	Number of Editions
Weekly Bulletins (<i>Quente Quente</i>)	428
Monthly Bulletins	146
Flash Papers	12
Research Papers	15

Source: SIMA 2003. MADER/Department of Statistics.

In addition to these publications, many users both in Mozambique and elsewhere have sought the SIMA database. Since the early 1990s, at least 20 university students have used SIMA data and other information in their thesis research. At a minimum 54 consultants

have accessed the SIMA database. SIMA data and information have been used by local and international organizations in their monthly bulletins, including the Ministry of Industry and Commerce (MIC/DNC) monthly bulletin and FEWSNET bulletins.

BENEFICIARIES: To analyze the benefits of SIMA, it is important to know how many families are receiving the information. Based on the National Agricultural Survey (*Trabalho de Inquérito Agrícola -- TIA*) 2002 database, 1,080,000 rural households received information regarding prices of basic commodities during the year 2002. Furthermore, almost 15,000 copies of the largest circulation national daily newspaper (*Jornal Noticias*) are sold every Friday, containing SIMA information on the economic pages.

Table 2 summarizes the percentage of the households that received price information. In Nampula Province, 66% of the households received price information, while in Manica province the percentage is 59%. In both provinces in 2002, there were weekly radio programs which disseminated price and other market information using local languages. These radio programs reached many rural areas, beyond the provincial borders, and even households without radios receive information by listening with neighbors.

Table 2: Percentage of Households with Access to the Price Information

Province	Percentage
Niassa	29
Cabo Delgado	36
Nampula	66
Zambezia	22
Tete	25
Manica	59
Sofala	26
Inhambane	13
Gaza	9
Maputo	17
Nacional	35

Source: TIA 2002. MADER/Department of Statistics

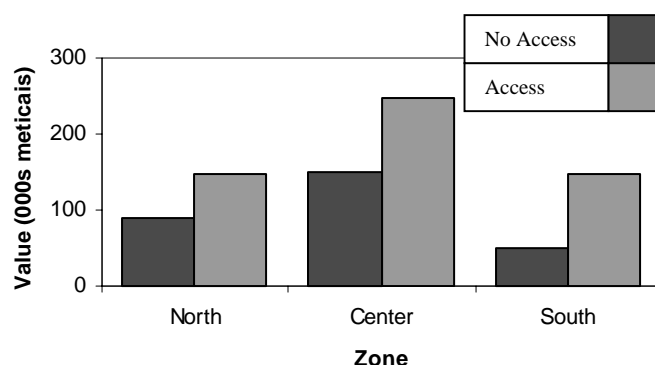
The impact of market information access on market development is not easy to measure. First, while it is possible to know how many people receive information, it is quite difficult to know if and how

they use that information. Secondly, as indicated in the SIMA User Needs Assessment (Equipe Técnica do SIMA, 2001a), private sector agents (traders and producers) combine public information with their own privately obtained information. Finally, the use and value of market information in the marketing process depends on other investments, including roads and transportation.

Nevertheless, TIA 2002 results suggest that there is a relationship between households with information and their participation in the market (see Figures 1 and 2). These data also indicate that in regions where people have access to market information, they also participate more in the marketing of cereals, beans and peanuts. On the other hand, it seems that there is complementarity between access to information and access to extension services; that is, those people who benefited from extension services were more likely to have access to information.

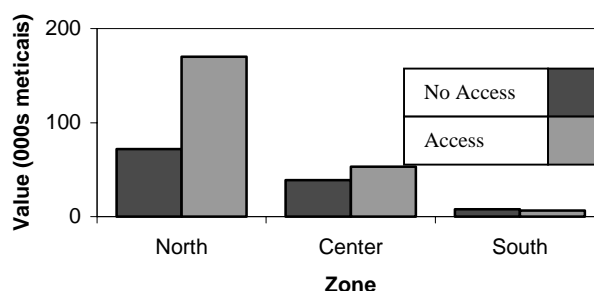
Figure 1 and 2: Agricultural Sales and Household Access to Price Information (Yes or No)

Figure 1: Sales of cereals



Source: TIA 2002. MADER/Department of Statistics.

Figure 2: Sales of Beans and Groundnuts



Source: TIA 2002. MADER/Department of Statistics.

VSIMA COSTS IN 2002: In 2002, operational costs of SIMA, including staff salaries, communication and transport, were around 3.3 billion meticaïs, or US\$130,000¹. Table 3 presents the total costs of the national and provincial SIMAs for 2002. Computing the amount spent to each family who received information using the TIA (2002) data, the average cost per rural household was 2,267 meticaïs, or about US\$0.09.

Table 3: Annual Costs of SIMA in 2002

System	Costs (Mt)
National SIMA	2.447.472.934
Provincial SIMA (Nampula)	749.876.840
Provincial SIMA (Manica)	82.957.500
Total	3.280.307.274

Source: SIMA e MADER 2002a.

Using the amount spent on Nampula province for the provincial SIMA, one can conclude that to disseminate information to cover 450,000 rural households, the province needed to spend only 1,694 meticaïs per household per year (US\$0.07).

INSTITUTIONAL CHALLENGES AND THE MALIAN EXPERIENCE: Analysis of SIMA costs and benefits may be done comparing it to a similar system operating in Mali, called the Agricultural Market Observatory (OMA), previously known as the Market Information System (SIM). This system is an example of the potential for institutional innovation with the participation of the private sector.

A challenge, and at the same time a threat, for any market information system is the need for timely information. If users receive information late or there are lags in getting the information or producing the analysis, that information loses value. This situation can be avoided with technical skills and commitment, but budgetary allocations and consistent cash flow are crucial elements for success. Each failure in communications, for example, means that every agent in the system loses, and for this reason the word “patience” is synonymous to death of the system.

In Mali, problems with the lack of timely disbursement of government funds led to a strategic move to take the SIM from the Ministry and establish OMA with the National Chambers of Agriculture, a nongovernmental organization with strong public sector support. The government continued to support

almost 80% of the total budget for OMA, but because the funds are disbursed to the Chamber to manage, cash flow problems were reduced. In this way, they avoid problems of lack of money to guarantee timely operation of the system. In addition to the budget allocation by the Malian government, OMA is able to generate its own revenues for some operating expenses. They charge for various services, such as special data requests or analysis.

INNOVATIONS AND OPPORTUNITIES:

Mozambique can follow a similar strategy of looking for institutional innovations to ensure the future, learning from the Malian experience and those of other countries in Africa and elsewhere. Among some recent SIMA innovations, there has been the decentralization of the national SIMA to promote provincial SIMAs. Currently, there are five provincial market information systems (SIMAPs) (out of 10 provinces), although it should be noted that the performance of the SIMAPs varies from province to province.²

For example, in Nampula Province, a partnership between the private and public sector agents developed to enhance the local system. In that partnership, some NGOs participate in the coordination of information from and to producer associations, as well providing financial support for local radio broadcasts. The private sector provides information regarding buying and selling conditions, and the Provincial Directorate of Agriculture (DPA) conducts the analysis for the radio broadcast and bulletin content. The DPA essentially provides the institutional base for the SIMAP.

These SIMAPs should not be seen as substitutes for the national SIMA. The relation between them is a partnership, each depending on the operations of the other, and each with its specific responsibilities. SIMA has developed consistent price data collection and processing methodologies. Each provincial SIMA, in its turn, can generate and transmit local information for producers and traders that builds on the national SIMA method to ensure comparability across the regions.

National SIMA gives technical assistance and combines all information collected to analyze the national and regional situation. This is not an easy task, and requires skilled analysts with market

¹ One US dollar is equivalent to approximately 25,000 meticaïs.

² Including the city of Maputo, Mozambique has 11 provinces. However, the city of Maputo does not have a provincial directorate of agriculture. For this reason, we refer to 10 and not 11 provinces.

training. Ensuring specialized technicians in each province is currently not feasible.

FUTURE ROLE OF SIMA: Agricultural market information is important from the point of view of economic efficiency, performance, and equity. Timely information improves market performance because it increases the knowledge of buyers and sellers about quantities available for sales and purchase and other factors that affect prices. In a market economy, market information is necessary to design strategies to induce the economic and agricultural development. Given the role of smallholder production in Mozambique, public information about new opportunities helps to provide incentives to greater participation in the market.

In this context, the work undertaken by SIMA helps to understand price behavior, interpreting changes and tendencies. However, information alone is not sufficient, and there is an urgent need for better coordination among the different agents in economic development.

Lack of information can result in a reduction of opportunities for those do not have it, particularly in remote areas. Thus, some producers prefer the old agricultural marketing system, in which prices were controlled and there was a guaranteed buyer for selected products. Producers were not subject to the variability of the market.

But such a system has high costs, and by focusing on selected products, limited the options available to farmers, thus limiting growth. Now, producers can have a tool - information - that helps to move agricultural products through the markets from producers to consumers and vice versa. In Mozambique, MADER, through SIMA, is providing market information, but there is still much work to be done, and the challenge is to continue to respond in innovative ways to the needs of the many types of users.

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Contact: SIMA/MADER, tel. (01) 46 01 31; FAX (01) 46 01 45 / 46 02 96
Email: sima@map.gov.mz Website: www.aec.msu.edu/agecon/fs2/mozambique