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# ***Staff Paper***

## **Lessons from the Malian MIS Experience**

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### **Abstract**

Mali has been successful in developing a financially sustainable, client-oriented agricultural market information system (MIS) that provides farmers, consumers, processors, banks, government agencies, and donors up-to-date information on market conditions and the forces driving them. Six factors have been critical to the MIS success in Mali: the commitment of policy makers, the financial commitment over the medium term of external funding agencies, developing thorough knowledge of the marketing systems of the country; the choice of the appropriate institutional "home" for managing the system, the development of the human capital for managing the system, the constant targeting of the information needs of the users, which is essential to the financial survival of the system.

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# Lessons from the Malian MIS Experience

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## ABSTRACT

Mali has been successful in developing a financially sustainable, client-oriented agricultural market information system (MIS) that provides farmers, consumers, processors, banks, government agencies, and donors up-to-date information on market conditions and the forces driving them. Six factors have been critical to the MIS success in Mali: the commitment of policy makers, the financial commitment over the medium term of external funding agencies, developing thorough knowledge of the marketing systems of the country; the choice of the appropriate institutional "home" for managing the system, the development of the human capital for managing the system, the constant targeting of the information needs of the users, which is essential to the financial survival of the system.

### 1. Introduction

The agricultural market information system (MIS) of Mali was set up in 1989 at the Malian grain marketing board (OPAM). The mandate assigned to the MIS (known by its French acronym, SIM) was to collect, enter, process, and disseminate information on market prices and their evolution to all the actors in the grain market. There was a two-fold objective:

- To improve the transparency of the grain market by providing all the actors with reliable, timely information on prices and how they were changing over time at various levels of the marketing chain;
- To allow regular monitoring of trends in the grain markets by policy makers in order to permit better management of food security and the evaluation of agricultural market liberalization policies.

Initially, the SIM worked primarily to satisfy the information needs of policy makers. Indeed, it was critical for policy makers to avoid big increases in consumer grain prices at the beginning of the grain market liberalization process in order to minimize the political risks associated with these reforms. Gradually, the SIM moved towards satisfying the information needs of the private-sector actors, in particular producers, traders, and the processors. This re-orientation more towards the private-sector led to a restructuring the SIM in 1998, which became the Agricultural Market Watch (*Observatoire du Marché Agricole*, or OMA).

The OMA is a service that is administratively attached to the Permanent Assembly of the Chambers of Agriculture of Mali (APCAM), an umbrella farmers' organization. The OMA's operating costs are completely financed by the national budget. The OMA enjoys administrative and financial autonomy from APCAM. The system monitors market conditions for products other than just cereals, including horticultural products, livestock, and agricultural inputs. The OMA is decentralized, with 24 local information collection and diffusion units spread out across the entire country. These local units are connected to each other and to

the OMA Central Unit in Bamako via an Intranet (using e-mail transmitted over HF radio and powered via solar panels). Each local unit also has links to one or local private radio stations, which broadcast the local market reports in local languages. The local units are charged with satisfying the information needs of producers, processors, traders, and policy makers at the local level.

## 2. Lessons from the Malian Experience

Today, the OMA is regarded as both a technical and institutional success by many observers. It is regarded as a model by many countries in West Africa and, as such, it serves as the coordinator of the West African MIS Network (RESIMAO-Réseau des Systèmes d'Information de l'Afrique de l'Ouest), a network that currently links together MIS from 8 countries. What are the factors that explain the success of the Malian experience in creating a market information system that might also be lessons for other countries?

Our more than ten years of experience of working with the Malian MIS indicates that there are at least **6 essential factors**:

- the commitment of policy makers
- the financial commitment over the medium term of external funding agencies;
- developing thorough knowledge of the marketing systems of the country;
- the choice of the appropriate institutional "home" for managing the system;
- the development of the human capital for managing the system;
- the constant targeting of the information needs of the users, which is essential to the financial survival of the system.

### 2.1. Commitment of Policy Makers

The commitment of policy makers is vital for the creation of an MIS because it determines the level of the resources available for the incipient system. In the majority of the countries, the external funding agencies do not pay the wages of the personnel nor the costs of the offices placed at the disposal of the system. In the long run, the operation of the system will be a responsibility of the State; consequently it is important to have the commitment of the policy makers from the beginning in order to plan the progressive withdrawal of external financing.

The commitment of policy makers, however, once acquired, cannot be taken as given forever. The continuation of that commitment depends on how well the MIS satisfies their information needs or the information needs of other actors who can put political pressure on the policy makers. This is why it is important for the MIS to target, in its early stages, the information needs of policy makers in order to assure their support for the mobilization of domestic and external resources.

In Mali, the OMA created "Economic Situation Bulletins" to respond better to the concerns of policy makers regarding food security. These bulletins anticipate future trends in the cereal markets and suggest ways in which the state could regulate (in a broad sense) the markets. Moreover, the OMA makes available to the Council of Ministers (the President's Cabinet) information on prices, levels of market supply, and trade with neighboring countries. This information makes it possible for the government to target interventions better and to determine the selling prices of OPAM (the grain board, which is now mainly responsible for operating the national food security stock). Moreover, information concerning OPAM is necessary for decision-making concerning the management of food aid and imports in order to minimize their impact on production incentives via the local producer price.

The OMA's experience shows that it is important that MIS's be proactive in developing the effective demand for their information products. Indeed, just demonstrating the theoretical importance of an MIS in a liberalized market does not guarantee the permanent support of policy makers for the production and diffusion of information. The managers of the system must develop two-way communication with policy makers in order to provide information and anticipate their immediate and future analytic information needs. The MIS must thus develop an entrepreneurial spirit of anticipating and developing new sources of demand for its information products rather than adopting a bureaucratic spirit of just responding to requests that filter down to it.

## 2.2. Medium-Term Financial Commitment from External Funding Agencies

Despite the political commitment of national policy makers, budgetary constraints often limit their financial capacity to start an MIS. It is thus important that external funding agencies commit themselves to cover the financing of the initial investments and operation during the initial years. A horizon of five to ten years can prove to be necessary to develop local competencies through short and medium-term training. This is why it is important the designers of the system develop from the very beginning a human resource development plan.

Donor support best involves both financial and technical support. Experience shows that this assistance is more effective if it is provided via a university in order to facilitate the training, the development of the local analytical capacities, and the insertion of the system into the broader process of debate concerning agricultural policies and food security. The insertion of the market information system into the national debate on agricultural policies and food security is essential to allow the managers of the system to have interactions with policy makers in order to get to know better their concerns, which will thus be taken into account in the MIS's analyses.

## 2.3. Thorough Knowledge of the Marketing System

Before starting to build an MIS, it is paramount to have thorough knowledge of the organization, the actors and the operation of the agricultural marketing system. Thus, an in-depth study on the marketing system should precede the design by an MIS. This study should make it possible to have information at least on:

- Surplus and deficit areas and the commercial links between them;
- principal categories of actors, their commercial practices, and their roles in the marketing system;
- the different levels in the various distribution chains;
- the hierarchy of the various physical market places, their functions and their days of operation;
- various types of transactions and the types of prices that result from them.

Knowledge of the marketing system by all the people involved in the design and the management of the system constitutes a precondition because it makes it possible to agree on methodology, the definitions of the various types of prices to collect, and the frequency of collection of these price indicators. For the enumerators, it is important that they be familiar with the marketing system in order to understand better the process of price formation at the various levels of the marketing chain.

In Mali, the MIS began with the former personnel of the grain board (OPAM), which had been in charge of marketing of agricultural products before liberalization. The staff was thus familiar with the marketing system and had a thorough knowledge of the mechanisms of price formation, the roles played by the various actors, and the various marketing circuits. This facilitated the training of the enumerators because it was not necessary to carry out training in basic agricultural marketing.

#### 2.4. The Choice of the Institutional “Home” for Managing the System

The experience of Mali shows that the choice of the institutional “home” for managing the system is critical to the success of an MIS. If the management of the system is entrusted to an administrative structure, it will likely lack the flexibility to meet the changing information needs of the users because each modification will require the approval of an administrative “higher-up”, who may not always be sensitive to the needs of the users. This can lead over the long term to a rigid system that will not be sensitive to the evolution of the users’ needs and consequently will become similar to the other administrative structures.

In order to build a system that is sensitive to the needs for the various users and that can guarantee the reliability and the timely diffusion of information, it is necessary to ensure the administrative and financial autonomy of the system. Such autonomy introduces flexibility into the system and allows it to adapt quickly to changes in the market and in the information needs of the users because the manager of the system does not need the authorization of an administrative hierarchy to sanction the personnel or to carry out supervisory missions.

It should be noted that autonomy does not exclude managerial or fiduciary oversight of the system by the State or the users. Thus, the establishment of a stakeholders committee or a board of directors can prove to be necessary to direct the changes of the system in response to the evolution of the information needs of the users. The committee or the board of directors can also serve to lobby the government in favor of the system to help ensure permanent financing for the MIS.

The institutional structure of the system must also enable it to generate its own funds, thus reducing the charges on the state budget. Such a structure makes it possible for the system to develop specialized information products intended for sale or to produce on-demand information in exchange for payment. Moreover, a system that generates some of its own funding can recruit qualified staff on the labor market at wage levels comparable with those of the private sector because it is not obliged to follow the wage scales of the civil service, which are often very low and consequently create few incentives for hard work. This is very important, because the development of the system requires motivated and committed personnel.

There are at least two corollaries to developing the capacity of the MIS to generate its own funds. First, the MIS must have a reliable accounting system in place that will allow the tracking of self-generated funds to assure transparency in their management and to avoid the commingling of public and self-generated funds. Second, the staff incentives must be structured in a way that the MIS does not put all of its energy into doing fee-for-service work (essentially becoming a consulting firm) to the neglect of its important public-service duties of generating basic market information for a broad set of users.

## 2.5. The Development of Human Capital

As mentioned above, it is imperative that from the beginning, the system elaborate a human resource development plan. The plan must identify the short and medium-term human resource needs of the system and establish a training calendar as well as the corresponding financing needs. The plan will be submitted to the funding agencies for the medium-term training (typically outside the country), while the short-term training could be done in-country.

Many countries have neglected the development of human resources at the beginning of their MIS. This has often led to the abrupt ending of the activities or the deterioration of the quality of information and delays in its diffusion as soon as the initiators of the system changed employment or retired. To avoid a perpetual restarting of the system, it is important to train a critical mass people to ensure the stability and the growth of the system.

## 2.6. The Constant Targeting of the Information Needs of the Users, which is Essential to the Financial Survival of the System

No MIS will live very long if it does not satisfy its users. The capacity to mobilize domestic and external resources is a function of the degree to which users' needs are satisfied. This means that an MIS must always identify the information requirements of the various users, rank them, and then target the needs of the top priority users

In Mali, the system initially targeted the needs of policy makers in order to secure their support. In its second phase, the system integrated the needs of producers and others in the private sector (traders, processors). In a third phase, the system began responding to pay-for-service requests by producing specialized information products for sale. It should be noted that the production of information on-demand in response to user-fees requires that the system have a latent capacity that can be mobilized without putting in danger the basic public-good mission of the MIS, which consists of producing and diffusing a basic package of information in exchange for the public financing received by the system.