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PROGRESS AND PROBLEMS IN MANAGING
THE MALI LIVESTOCK SECTOR II PROJECT
Project Number 688-0218
AUDIT REPORT 7-688-85-5
Dated March 27, 1985

EXECUTIVE SUMMARY

This report assesses USAID/Mali's efforts to correct project design and implementation problems noted in past evaluations and audits of the livestock sector, and the results of the current Livestock Sector II project. During our fieldwork, which was completed in October 1984, we examined records, visited the project zone, and held discussions with USAID/Mali and host government officials and project beneficiaries. We also visited the Ivory Coast to obtain information on the potential for cattle exports from Mali. Since the project was underway only about 18 months, we limited our audit to the most active components--the management development assistance team, and cattle feeding and related research components.

The current 5-year $17.5 million livestock project merged various aspects of previous projects, such as animal health research and delivery and cattle feeding. The overall goal of the project was to improve the income and well-being of Mali's roughly 275,000 livestock producers.

USAID/Mali resolved many of the project management problems noted in past evaluation and audits of the livestock sector. It reassessed previous project activities prior to designing the current project, then revised project assumptions, eliminated activities that were the source of past problems, and sought to improve the host country's managerial capability. Much of the improvement in project implementation can be traced to the establishment of a technical assistance team to manage the project and to develop host country management capability.

While recognizing the positive USAID/Mali effort, our review questioned certain aspects of AID's assistance in the current project. We found the cattle feeding component cannot be cost effective because sales levels cannot be reached due to limited local and export markets. Other options to make the component cost effective, such as raising the costs to the farmers or extending the program to other host government organizations, were also limited. Additionally, sales achieved by the private sector in a similar program may further compete with those of the project. We saw little potential for replicating this program throughout Mali as envisaged by the project.

This $2.6 million component called for farmers to feed 2 to 3 cattle with crop residue between December and April for resale between April and June. The project provided loans to the farmers, and food supplements and health care to the cattle through extension agents.

Project designers recognized the potential for marketing problems but assumed the problems would be resolved as herd size increased and health improved. Through its project monitoring process, USAID/Mali found that the farmers could not sell all of their fed cattle production. The Mission concluded this was because the farmers could not reach outside markets. Attempts to create new markets were unsuccessful. The Mission also believed that a strong export market could be developed for fed cattle.

The program needed sales of 4,000 to 6,000 cattle to cover its costs. In October 1984, host government officials told us that local market conditions in the project zone significantly restricted sales of cattle and the zone could absorb only about 2,500 fed cattle between April and June. Available data from previous years also supported this limited market potential. Export sales potential was also limited because of a lack of interest in imports of fed cattle by the Ivory Coast, Mali's principal importer. Cost effectiveness could be improved by charging farmers more for project services, but farmers will only accept so much increase. The program could have been extended to other host country organizations, but one of 3 contacted thus far did not want to get involved because of the marketing and credit problems inherent with the program.

Sales potential for the project may also be reduced in the future because Malian banks are successfully promoting a similar program. One bank reported sales of 1,500 fed cattle throughout Mali in 1984 and expected to double their loan program for 1985. If this program grows, it would capture a larger share of the limited sales market for this type of cattle.

The project also included a production research component to facilitate the development of improved livestock production technologies. Among the activities to be carried out were testing of forage crops, market studies and improved systems for selecting feeder cattle. If it were not for the overriding market limitation aspect of this, research related to the feeding program would complement it well. However, under the circumstances, we believe it can only have a limited impact.

The report recommends USAID/Mali discontinue the cattle feeding program and reassess the need for the related production research activity. In response to a draft of this report, the Mission suggested that the project cattle feeding component be reassessed over the next two years with particular emphasis on marketing constraints. We disagreed because we did not believe additional time would significantly change the market constraints faced by this project, or would add to lessons learned from the project and the private sector.

Mali

Lambert Conformal Projection
Standard parallels 8° and 32°
Boundary representation is not necessarily authoritative

Railroad
Road
Airport

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INTRODUCTION

BACKGROUND

Mali has the highest livestock production in the Sahel, with over 5.7 million units.1/ This compares to 5.1 million for Niger, 4.3 million for Chad and 3.2 million for Burkina Faso. Livestock is an important export commodity and source of tax revenue. The 1973 drought destroyed over 30 percent of the herds in the country with the more humid south experiencing milder losses than the north. Since then, Mali rebuilt its herds, relying more on its southern regions because of better water and forage. Currently, these regions contain more than 50 percent of the herds, compared to 30-40 percent in the early 1970's.

AID has had extensive involvement in Malian livestock. In 1963, AID undertook a $2 million project to develop the country's capability to research, produce and supply vaccine to the herds. This was followed in 1974 by a $6 million project to increase production and marketing of cattle through on-farm and commercial cattle feeding. In 1975, AID granted another $12 million to help increase production and marketing through improved range management and land expansion. Concurrently, AID implemented a $3.3 million project to further Mali's vaccine research and production capabilities.

In August 1982, the Mission incorporated all livestock sector activities under a new 5-year, $17.5 million project, eliminating activities which could not be implemented effectively. This project, Mali Livestock Sector II, included the following components:

-- disease diagnosis and animal health research;

-- delivery of vaccine in the more humid regions ;

-- pilot cattle feeding program for small farmers to boost sales of cattle during the dry season when the market is depleted ;

-- forage production research to facilitate (1) the development of improved livestock production technologies, and (2) the more rapid integration of crop and livestock production systems of small farmers;

-- management development and support team to coordinate project activities and improve host country participating agencies' managerial capabilities.

1/ AID livestock planning in the Sahel uses numbers of livestock as "units."

To September 30, 1984, $15.7 million had been obligated and about $3.2 million had been spent.

OBJECTIVES, SCOPE, AND METHODOLOGY

The purpose of our audit was to assess progress toward achieving project objectives and to find out if project resources were adequately utilized and protected. Because this was our second audit of USAID/Mali livestock activities, we also followed up on previous recommendations.

Our review was performed in accordance with the Comptroller General's Standards for Audit of Governmental Organizations, Programs, Activities, and Functions. We reviewed Government of the Republic of Mali (GRM) and USAID/Mali project records, and we held discussions with appropriate GRM and USAID officials. We visited the project zone, and interviewed project beneficiaries and officials. In addition we visited the Ivory Coast for information on Mali's livestock export potential.

Since project activities had been underway only for 18 months, we limited our audit coverage to the management and cattle feeding components, which were the most active. In view of our findings on the cattle feeding component, we also examined related forage production research, completing our field work in October 1984.

Other than the findings included in this report, we found no significant weaknesses in administrative and accounting controls, and no instances of non-compliance with applicable AID regulations.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

PROGRESS IN MANAGING LIVESTOCK ACTIVITIES

USAID/Mali resolved many of the management problems noted in past evaluations and audit of the livestock sector. They reassessed project activities prior to designing the current livestock project. They revised several project assumptions, eliminated activities which were not effective, and sought to improve the host country's managerial capability.

Much of the improvements in project implementation resulted from establishing a U.S. technical assistance team to manage the project and to develop host country management capability.

Past livestock projects, plagued with problems, were the subject of various evaluations over the years, including a 1980 Inspector General audit report[1]. That report criticized management controls over project design, implementation, and financial management stemming from:

-- inadequate planning during project design and project implementation;

-- inadequate financial internal controls;

-- insufficient recognition of the lack of GRM experience in implementing activities as complex as those undertaken, especially in the areas of operational and financial planning;

-- inappropriate attitudes toward joint GRM-USAID Contractor collaboration in project implementation, particularly in projects using the host country contracting mode; and

-- inexperienced and inadequately trained GRM project directors and USAID project managers.

In order to remedy these problems, in 1980 the Mission began a comprehensive redesign effort of its livestock activities. They revalidated project assumptions, such as those dealing with the merits of range management and the livestock owners' marketing system. The Mission analyzed those aspects of project management which had led to problems, including weaknesses in host country management. Consequently, USAID/Mali discarded uneconomical project components such as a ranch type operation and a feed lot.

[1] Audit Report No. 80-67, dated June 6, 1980, Problems in Implementing AID's Livestock Sector Projects' Activities in Mali

To ensure effective implementation the Mission used the current project's technical assistance team to manage the project for AID and GRM. As a result, we found well managed project activities and good internal controls.

Conclusion

The Mission has significantly improved livestock project management. We believe that through the establishment of the management technical team it has good control over project activities and the means to improve the managerial training of host country participating agencies.

NEED TO DISCONTINUE CATTLE FEEDING ACTIVITIES

We found that the cattle feeding component of the current project cannot be cost effective because sales levels cannot be reached, due to limited local and export markets. Other options to make the project cost effective, such as raising the costs to the farmers or extending the program to other GRM organizations, are also limited. Additionally, sales being achieved by the private sector in a similar program may further compete with those of the project. We saw little potential that this program could be self sufficient and replicated throughout Mali.

The component concentrated on a $2.6 million small farmer cattle feeding program (about 2 to 3 animals per participant) between December and April, the dry season. This program had previously been undertaken but on a limited scale. This new component was expected to reduce administrative costs of unsuccessful feedlot operations and to follow the annual movement of livestock from northern to the more humid southern Mali to feed on farmers' crop residues during the dry season.

With project loans the farmers bought cattle in November and December and sold them in April, May or June. The farmers' cattle were subsidized by the project with food supplements, and health care delivered through project extension agents. This component was designed as a pilot project to demonstrate that the program could be self supporting and replicated to improve the income and well-being of Mali's 275,000 livestock producers.

Cattle Feeding Program Cannot Be Cost Effective

Over the past several years small farmers involved with cattle feeding in the project zone were unable to sell all of their production. Available data indicated that the project could be cost effective with sales of 4,000 to 6,000 cattle between April and June each year. Current information provided by GRM officials showed that the project zone market capacity for fed cattle is about 2,500 yearly during the key months. Unsold project inventories over the years demonstrate the difficulties faced by the project in marketing.

The project designers' marketing assumptions were critical to the project's success. One set of assumptions was that cattle sales at market would correspond to expected increases in cattle production. AID and project officials believed prior marketing problems would be resolved because as herd size increased and health improved, livestock producers would feel more secure and sell more. Other sources, notably an extensive 1981 study by the University of Michigan, questioned this theory. They pointed to limitations in the traditional marketing system such as transportation and exports.

USAID/Mali realized the importance of marketing and hired a marketing specialist in part to monitor local market sales. This effort identified severe constraints. For example, a November 1983 report on the 1982/83 season stated that marketing constrained the success of this component, and that the Malian implementing agency confiscated unsold cattle and placed them in a feedlot. We noted that in one area, Segou, 100 out of 500 head of cattle in the program were unsold as of May 1984. In another, Banamba, 200 to 250 out of 500 were unsold. Farmers told us the market could not absorb the number of cattle offered for sale.

To find out how if the marketing constraints were chronic, we contacted the GRM agency responsible for maintaining market statistics. They indicated the local market for fed cattle was limited because:

-- per capita meat consumption has decreased because of inflation;

-- herders destock if the season is too dry, thereby competing with the cattle feeding program; and

-- markets in the project zone are saturated at 2,000 to 2,500 heads and herders lack the mobility to seek outside markets.

Mission officials told us they recognized this component was in trouble, but believed that 1984 was an exceptional year because of the Sahel drought. They stated they wanted to continue the program another year to have a firmer basis upon which to make a decision. They added that, in a normal year, farmers make a good profit and are able to repay project loans. However, based on project experience during the last three years, and GRM agency comments about market limitations, we do not share Mission views in this matter.

In May 1984, the marketing specialist reported that unless marketing constraints were resolved, the project was headed for disaster. He stated:

> "It has become increasingly evident that the primary constraint to the continued success and expansion of the [cattle feeding] program is marketing. To expand production without creating marketing strategies is to court disaster. The domestic market is severely limited and expanded production designed for this limited demand market can only undermine the price structure. Outlets outside of Mali and outside of traditional marketing channels must be developed. It has been well demonstrated in the past campaign [82/83] that if the participants are not able to sell their animals to advantage, they will not reimburse [the GRM implementing agency] in a timely manner if at all."

We asked Mission and project officials why they had not eliminated this component in face of these marketing constraints. They felt they needed to move cautiously, favoring the development of markets for farmers. We agree that with enough funding, additional markets for this project could be developed by drawing on demand from other areas of the country. However, this would negate the longer term objective of this pilot project -- demonstrate that the project can be self supporting and replicated throughout Mali. In fact, by seeking such markets the project would in essence be competing against those very farmers this project ultimately wants to benefit.

The 1983/84 season also demonstrated that finding buyers in a market of limited demand is fraught with problems. During this season, the GRM implementing agency tried and failed. Meanwhile, limited markets impaired the farmers' ability to repay their loans. As of September 30, 1984, over 45 percent of the farmers failed to repay.

Mission and project officials also stated that a strong export market was available in the Ivory Coast. We went to the Ivory Coast, talked to the Chef de Cabinet, Minister of Rural Development, and personnel from planning and livestock production, the Director of SODEPRA, a parastatal agency involved with livestock projects, and a representative from the World Bank. We also reviewed documentation about market potential.

Our visit revealed that the Ivory Coast (1) had experienced a downward trend in per capita meat consumption in favor of fish and milk, (2) relied less on imports from neighboring countries because of favorable imports of meat from Europe and Argentina, which generated better tax revenues, and (3) preferred establishing their own cattle feeding operations in the north rather than import similar cattle from Mali. Ivory Coast officials said they anticipated decreased demand for Malian beef in the future. Available reports show that since 1979, national cattle consumption in Ivory Coast has decreased by 21 percent with corresponding decreases in imports.

In commenting on a draft of this report the Mission said our observations were not based upon updated market analysis but rather on conversations with informants whose interest would be to discourage the outlook for imports from Mali to the Ivory Coast.

We agree that our inquiry did not constitute a market analysis. Our information was based on conversations with high Ministry of Rural Development and its livestock parastatal agency officials, and the World Bank. Data on declining meat consumption is that compiled for the past several years by the Government of Ivory Coast. Information on the lower price, better quality and more favorable tax revenues of European and

Argentinian imports was obtained from Ivory Coast officials. The 1981 University of Michigan study also made a similar observation about favorable imports.

We agree that Ivory Coast officials may be biased concerning Mali's imports. However, these officials were the policy makers and therefore their comments were serious and, as implemented, would strongly influence future imports in Ivory Coast. The fact they prefer to develop their own cattle feeding industry cannot be disregarded in looking to the long term potential for Mali's exports--even if the country experiences growing pains in developing such industry in the short run.

Options To Improve Cost Effectiveness Are Limited

Other options to make the cattle feeding program cost effective, such as raising the costs to the farmers or extending the program to other GRM organizations, are limited because (1) farmers will not accept large cost increases, and (2) according to GRM officials one of three GRM organizations sought to extend the program will not do so because of the program's marketing and loan problems.

The project needed to sell 4,000 to 6,000 head of cattle yearly between April and June to break even -- more if administrative costs were included. Costs to farmers could be raised to lower the break-even point, but according to a November 1984 study, farmers will accept only so much price increase until they feel the program is no longer beneficial to them and they leave it. Converselv, the project could absorb these losses temporarily in anticipation that other Malian organizations would assume and extend the project at a lesser cost.

One of the three GRM organizations expected to assume responsibility for replication in southern Mali refused to get further involved with the program. This organization, the recognized leader of agricultural development in the country, covered the cotton-producing areas of Mali, and it reached about 78,000 farmers. GRM project personnel told us the organization declined to participate because it recognized the market limitations and did not want to become involved with marketing and loan repayment problems. The other 2 organizations also have not assumed cattle feeding activities because of various administrative problems and their lack of assurance to the project about providing sufficient extension agents and honoring loan repayments.

In reply to our draft report the Mission indicated the organization did not need to participate in the cattle feeding program because it was already executing a similar program with bank loans. The Mission concluded that the bank was willing to accept the risks involved and apparently did not feel the market posed unacceptable hazards.

As discussed in the next section, the efforts of the Malian banks to provide credit to Government employees, traders, small companies, and farmers are proving successful. Marketing would not be an unacceptable risk because the banks are dealing Mali-wide, and with selected borrowers.

Private Sector Feeding Program is Promising

The private sector is successfully developing a cost effective cattle feeding program. Should this program continue to grow we believe it would put added pressure on an already limited market for fed cattle and thus compete with the project's cattle feeding program.

In 1984, a Malian bank provided credit to government employees, traders, small companies, and farmers throughout Mali who could work with about 30 or more cattle instead of the 2 to 3 per farmer contemplated by the project. The private sector fed and sold about 1,500 head of cattle. The bank charged 11 percent loan interest versus 6 percent charged by the project. Unlike the project, the bank also charged for cattle health care. The bank experienced a 98 percent repayment rate versus the project's 54 percent.

Bank officials informed us that based on these positive results, they intend to double their loans next year. They found the program attractive because their clients handled enough cattle, loan processing costs were low and the program could be monitored by two bank employees with the help of the GRM agency responsible for animal health care. This experience led us to believe the bank's assertion that it could significantly expand its loan program, and thereby cattle feeding.

In commenting on our draft report, the Mission noted that the project cattle feeding program has spurred private sector activity in Mali. If this was so, this was certainly a worthwhile achievement. In essence the private sector was demonstrating that cattle feeding could be a cost effective and viable investment under certain conditions.

Conclusion and Recommendation

USAID/Mali made significant efforts to manage the cattle feeding program in the face of serious marketing constraints. We believe they mis-read these constraints as being caused by the farmers' inability to develop markets when past and current data showed markets could not absorb the quantity necessary to make the project replicable and cost effective.

We believe there is ample data to demonstrate the cattle feeding program can have limited success but cannot lead to the replication envisaged by project planners. In addition to limited markets, successful efforts by the private sector could ultimately compete with project sales. Part of the success of the private sector stemmed from dealing with customers who handled more cattle than the 2 or 3 per farmer contemplated by the project. This made bank loans attractive and reduced the cost of implementing the program.

We believe this effort should be encouraged and the private sector left to find its own balance of supply and demand for fed cattle.

Accordingly, we recommend:

Recommendation No. 1

The Director, USAID/Mali terminate the cattle feeding component and deobligate the remaining funds.

Mission Comments and IG Position

In commenting on a draft of this report, the Mission suggested the project cattle feeding component should be reassessed over the next two years with particular emphasis on marketing constraints in the event of program expansion. We disagreed with this suggestion because (1) for years this program has been unable to market even its limited production; (2) market potential within the zone was significantly lower than what the program needed to break even; (3) marketing outside of the project zone was limited due to uncertain export market potential, and (4) the private sector ultimately may compete with the project. We found no evidence these factors would change significantly over the next few years.

NEED TO REASSESS PRODUCTION RESEARCH ACTIVITY

Because of the program's overriding market limitations the related production research activity can have only limited impact on the program. As a result, the need for this research should be reassessed.

An element of project strategy was a $2.8 million research component to facilitate the development of improved livestock production technologies and the integration of crops and livestock production systems of small farmers. Among the activities to be carried out were testing forage crops, market studies and improved system for selecting feeder cattle. These activities would make cattle feeding mmore cost effective and replicable.

To better define the relationship of this to the cattle feeding component, we asked mission and technical assistance officials about the nature of research activities to be undertaken. They told us the component was to maximize income to producers through crops and livestock.

Given the objectives set forth in the project papers and the officials' statements, that portion of production research related to cattle feeding component cannot yield significant results. For example, marketing studies likely would not further clarify results that have demonstrated time and again this program has limited market potential.

In its reply to the report draft, the Mission indicated that the assertion that the Farming Systems Research Activity was almost exclusively in support of the cattle feeding program was incorrect. They stated the research was established to seek a solution to dry land farmers' peak season labor constraints in crop production, especially the area of traction animals.

This information somewhat agrees with the objectives of the research as described in the project documents. However, the project document calls for short term priority research to enable cattle feeding farmers and farmers owning traction animals to increase forage production. In the long term the document calls for expanding research of objectives to traction animals. The point of this report is that to the extent research is related to cattle feeding it should be discontinued. We have revised our recommendation to reflect Mission's views.

Conclusion and Recommendation

To the extent production research is directed at making the cattle feeding program more cost effective or replicable, it will have limited impact because of overriding marketing and other constraints. We believe the Mission should identify the portion of the research related to the cattle feeding component and terminate it.

Accordingly we recommend:

Recommendation No. 2

The Director USAID/Mali terminate production research activities related to the cattle feeding component.

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