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PROGRESS AND PROBLEMS IN  
IMPLEMENTING  
ADAPTIVE CROP RESEARCH  
AND EXTENSION PROJECT  
IN SIERRA LEONE

AUDIT REPORT NO. 7-636-85-1

October 30, 1984

## TABLE OF CONTENTS

	<u>PAGE</u>
EXECUTIVE SUMMARY	i
BACKGROUND	1
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	4
NEED FOR BETTER INFORMATION ON PROJECT IMPACT	4
Project Must Have Measurable Objectives	4
Limited Project Monitoring	4
Designing Follow-On Project Is Premature	7
Need to Involve REDSO/WCA in Project	8
NEED TO BETTER MANAGE TECHNICAL ASSISTANCE AND TRAINING	9
Delays in Fielding the Technical Assistance Team	9
Continuing Staffing Problems Impair Project Progress	10
Delays in Participant Training	11
SIGNIFICANT IMPROVEMENTS IN ACCOUNTING FOR PROJECT FUNDS	13
APPENDIX I - List of Report Recommendations	16

## EXECUTIVE SUMMARY

This report assesses the results of the Adaptive Crop Research and Extension Project in Sierra Leone and discusses selected aspects of the project's management of technical assistance and financial controls. We examined records, held discussions with USAID and project officials and visited project sites, and the AID Regional Economic Development Services Office in Abidjan, Ivory Coast. We completed field work in August 1984.

Agriculture is considered the key to recovery of Sierra Leone's declining economy. This project pioneers and develops food crop research adaptable to the local needs of the farming community. About 675 farmers are involved in trials and demonstration of the research results. These results are then disseminated to some 20,000 small farmers in the form of minikits containing improved seeds and farming techniques. By using minikits it is expected that farmers will increase crop production and income.

The project agreement was signed in 1978 and activities began in 1980. AID granted a total of \$9 million to complete the project by June 1987. The Government of Sierra Leone spent the equivalent of about \$5.5 million as of April 1984, of which \$3.6 million were AID P.L. 480 Title I funds. A \$10 million follow-on project is being designed to strengthen research capabilities and to help distribute results country-wide.

Considering the difficulties encountered, and the fact that this is the first phase, project accomplishments are commendable. By April 1984, the project: (1) established a technical assistance team to focus research, (2) developed a system to transfer research results to the farmers and trained 50 extension agents, (3) involved 675 farmers in trials and demonstrations, (4) distributed minikits to some 20,000 other farmers, and (5) supported a participant training component. A reliable accounting system had been established to eliminate weaknesses found early in the project.

The project monitors the activities of the 675 trial and demonstration farmers who are closely supervised by project extension agents and remunerated for participating. Test conditions show that crop yields can be increased substantially. Although encouraging, the results may not be representative of how well the farmers provided minikits are doing.

Because of flaws in project design which did not establish measurable objectives and milestones or an effective monitoring system, information is unavailable concerning project success with this larger number of farmers. USAID/Sierra Leone and project officials said that a monitoring system was to be developed but never was.

Without this critical information project management cannot judge if research results are being adopted by the farmers receiving minikits. Farmers in Sierra Leone face lack of storage facilities, losses to pests and insects, shortage of labor, and lack of credit. Any of these factors can adversely affect project effectiveness. For example, little is achieved by increasing crop yield and letting the crop rot due to lack of storage. Project management cannot be expected to overcome all of these constraints, however, it must know how widespread the constraints are if farmers are to be helped. USAID cannot adequately design a follow-on project without knowing how successful farmers are in adopting project technology. Therefore, we find USAID's current design effort to be premature.

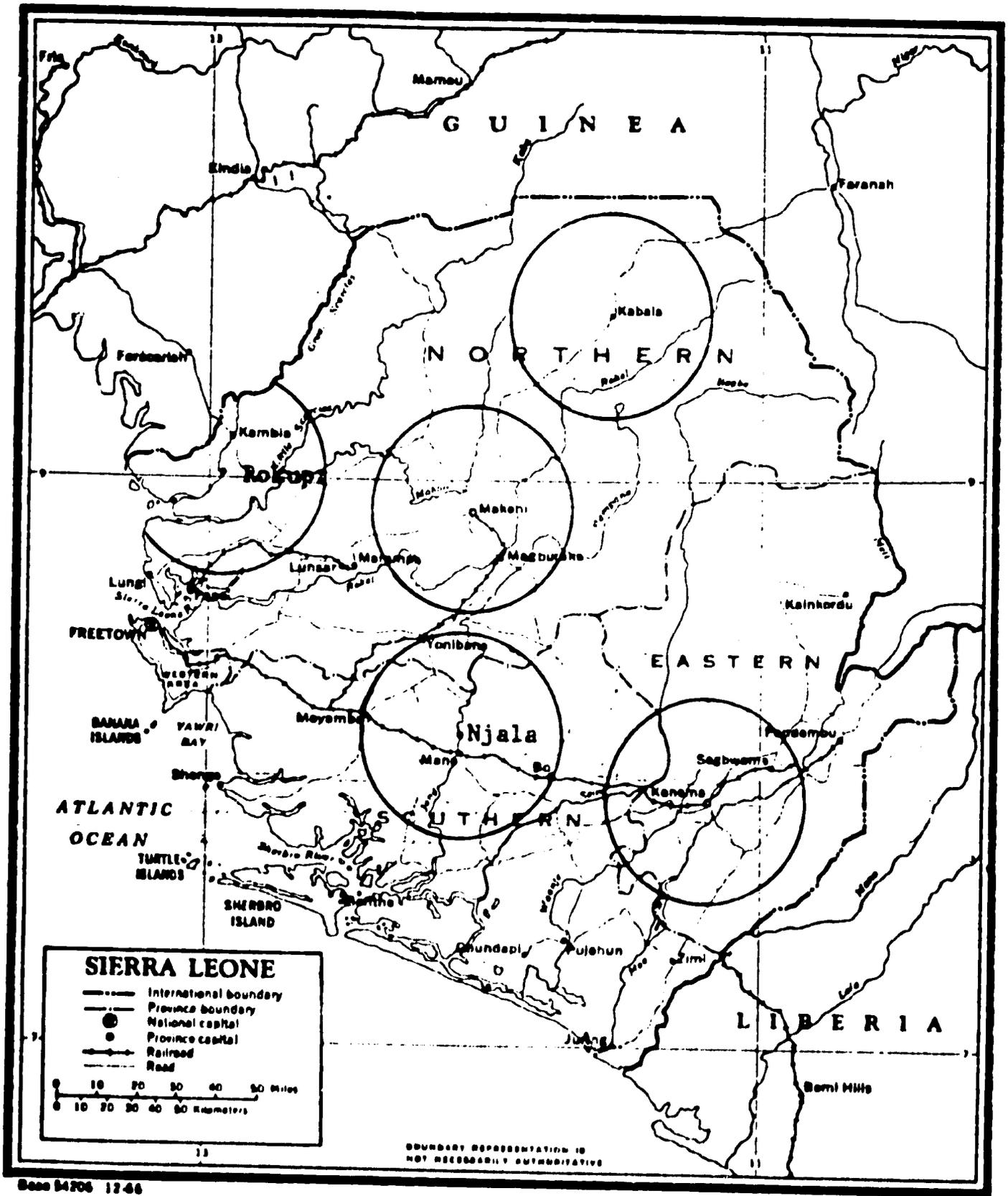
The technical assistance and participant training components of the project are managed ineffectively. The contractor was late in fielding the complete technical assistance team and has continuing problems. Difficulties in recruiting and, to some extent, lack of facilities in the country, contributed to these problems. Lack of monitoring student courses delayed participant return from training in the United States, limited project progress, and increased costs. The system of accounting for project funds is greatly improved but the budgeting system needs improvement.

#### Recommendations and USAID/Sierra Leone Comments

This report recommends that USAID act to sample farmers receiving minikits to measure the results of the project and its effectiveness. We also recommend that design of the follow-on project be delayed until this information has been obtained. USAID/Sierra Leone must also develop a system to monitor and measure the progress of the project among the farming community. In responding to the draft of this report, USAID/Sierra Leone said that an on-going study to be completed late 1984 would provide adequate information to evaluate project effectiveness and develop techniques for the follow-on project. We are concerned about the methodology used in the study. Therefore we will not know if we can concur with the response until we have evaluated the results. Also, USAID/Sierra Leone has outlined a plan to monitor project activities. We concur with this plan.

There is little remedy to problems we found with technical assistance because the contract expires in December, 1984. USAID/Sierra Leone wants to extend technical assistance by two years. We are recommending that the new contract include provisions which protect AID in case of delays in fielding or retaining staff beyond a reasonable time. The report recommends that USAID/Sierra Leone ensure student courses are monitored and studies completed as agreed. In response USAID/Sierra Leone indicates it wants to hold the contractor accountable and will monitor student courses. We concur with this plan of action.

# PROJECT AREA



## BACKGROUND

### INTRODUCTION

In 1972, Sierra Leone's economic output began declining because of falling world prices for diamonds and iron-ore and reduced agricultural output -- the country's major resources. World donors, including the United States, have been concerned that continuing deterioration would weaken political institutions and create instability.

Agriculture accounts for 30 percent of the country's Gross National Product, employs 75 percent of the work-force, and is considered the key to recovery and future economic growth. Agricultural development is stunted by poor productivity, unfavorable government pricing policies, and lack of crop storage and transpost facilities to transfer produce to market. Most of the country's 286,000 farmers hold less than 5 acres of land.

USAID's development strategy stresses increased food production by concentrating on research for improving crops and cultivation methods, and introducing new techniques to the farming community.

In line with this strategy, a project grant agreement was signed on September 28, 1978 between the Government of Sierra Leone (GOSL) and USAID for the Adaptive Crop Research and Extension Project (ACRE). USAID granted about \$6.1 million and the GOSL contributed about 3.2 million Leones, then the equivalent of about \$3 million. About \$3.7 million of the AID funds were allocated to technical assistance under a contract with Southern University and Louisiana State University (hereafter called the contractor). With an initial completion date scheduled for December 1984, project objectives were to:

- develop an extension network to transfer research to the farmers;
- select and involve 300 farmers (later increased to 675) in applied research and demonstration of new crops and farming techniques; and
- provide 20,000 other farmers with "minikits"<sup>1/</sup> for improved seeds, and farming techniques.

<sup>1/</sup> Minikits consist of planting material/seeds, cuttings, fertilizer and cultivation instructions.



ACRE Demonstration Project  
showing close planting of cassava

Central Sierra Leone

close planting increases yield  
by facilitating weeding

April 1984

In addition, GOSL personnel were to be trained in agricultural sciences such as soils, economics, extension, and agronomy in schools in Africa and the United States. The trained personnel would later coordinate research and extension.

ACRE project success depends on transfer of research results to the farming community. Research in new crops and farming techniques is vital to increasing agricultural output. But extending research results to farmers in a timely and useful manner is just as vital. The project can only be effective when both of these facets interact properly. Thus, strong coordination of project activities and management is essential.

The network of interaction between research, trials, demonstrations, and farmers is depicted on the next page.

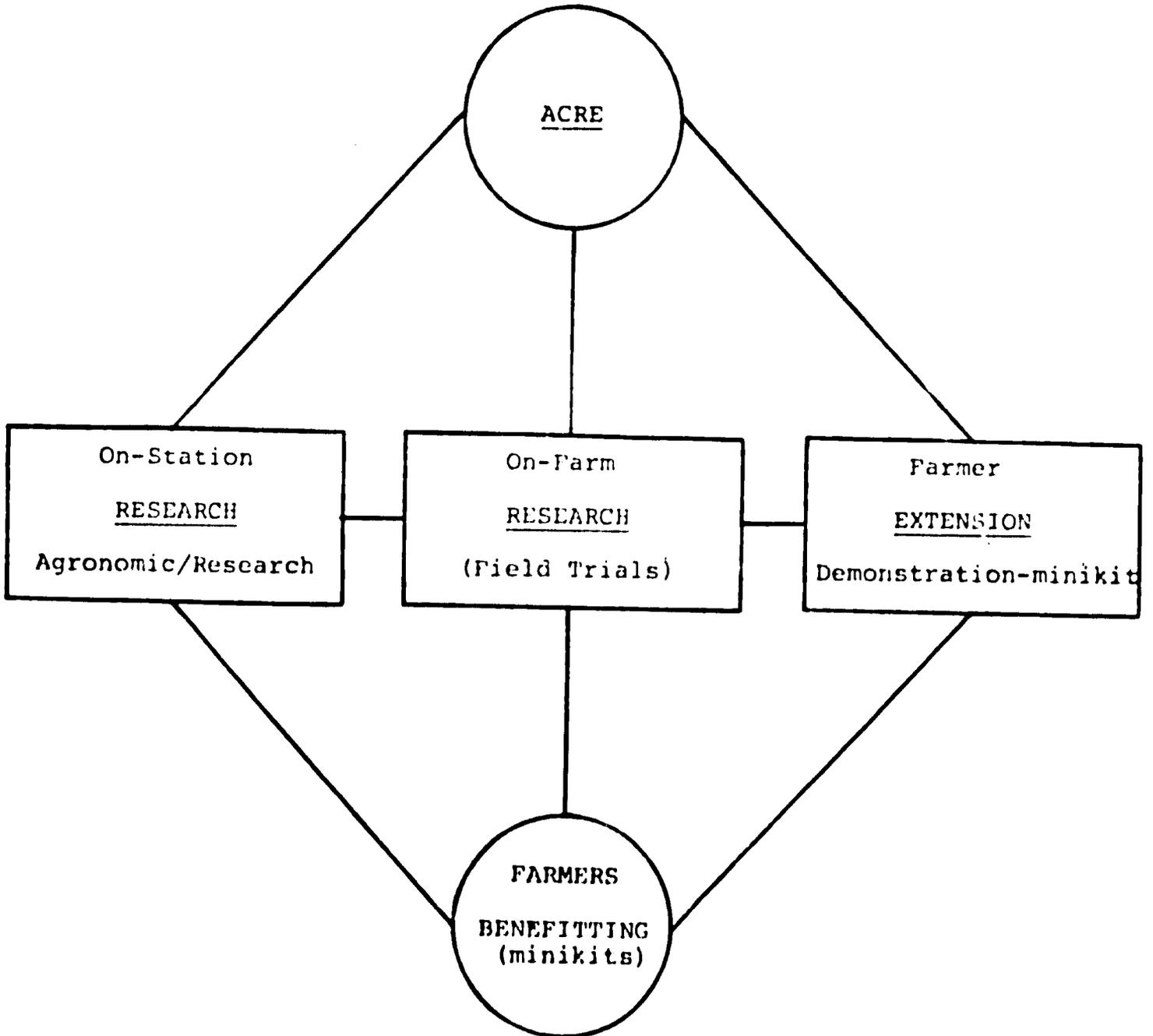
In April 1984 the USAID grant increased to about \$9 million and the GOSL contribution to 3.5 million Leones or about \$4.4 million to cover a 2-year extension to 1987 to include 1) higher construction costs, 2) the addition of a pilot nutritional component, and 3) short term training for 26 more Sierra Leone personnel. At that time, USAID had spent about \$4.6 million and the GOSL the equivalent of about \$5.5 million (about \$1.1 million more than the GOSL was obliged), of which about \$3.6 million were generated from P.L. 480, Title 1 funds. The technical assistance component had risen to about \$5.3 million.

The project accomplished the following:

- established a U.S. technical assistance team for research at existing institutions and coordination with international institutions;
- developed an extension system to transfer research results to the farmers and trained 50 extension agents;
- involved 675 farmers in research and demonstration of new crops and farming techniques; and
- distributed minikits containing improved seeds, fertilizer, and farming techniques, to some 20,000 other farmers.

The project also enrolled 15 host country personnel in long-term educational programs and 35 in short-term programs.

THE ACRE MODEL



## OBJECTIVES, SCOPE AND METHODOLOGY

The purpose of our audit was to (a) assess progress made toward achieving project objectives, (b) find out if project resources were efficiently and effectively utilized, (c) review the performance of the technical assistance team, and (d) review financial services provided by a professional audit firm.

We reviewed GOSL and USAID/Sierra Leone project records. We held discussions with appropriate GOSL and USAID officials and visited project sites. The USAID office in Sierra Leone is authorized 3 direct-hire positions but is staffed with only 2. The office relies for technical support on the Regional Economic Development Support Office, West and Central Africa, (REDSO/WCA) in Abidjan, Ivory Coast. Because of this we also reviewed REDSO/WCA files and interviewed appropriate officials. We completed field work in August 1984.

Our review was made in accordance with the Comptroller General's Standards for Audit of Governmental Organizations, Programs, Activities and Functions. We reviewed selected aspects of the project's internal controls (administrative and accounting). In evaluating administrative controls we focused on (1) how project results were measured and reported and (2) how project activities were monitored.

In evaluating how project results were measured, we limited our coverage to determining the adequacy of the system in place. We did not sample the farming population. This would require a sampling of a universe of about 20,000 small farmers included in the project. We also reviewed field reports about problems farmers in Sierra Leone were experiencing and discussed these with ACRE personnel.

An independent accounting firm had recently audited project accounts and had designed an improved accounting system. We limited our review of accounting controls to evaluating the adequacy of the new accounting system and the effectiveness of the budget reporting process. We concentrated on the latter because the information is used to justify continued USAID and GOSL funding.

An accounting firm used early in the project to help management in financial matters was of special interest to us. The AID Administrator, in a May 18, 1983 memorandum, encouraged missions to use professional audit firms for financial assistance. USAID/Sierra Leone was among the first to do so. We evaluated the firm's financial services.

## FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

### NEED FOR BETTER INFORMATION ON PROJECT IMPACT

The ACRE project shows positive results, principally among the 675 farmers participating in the full range of project activities. However little is known about the larger number of farmers who received minikits due to flaws in project design which did not establish measurable objectives and milestones, or an effective monitoring system. Without such critical data we consider USAID/Sierra Leone's plans for design of a follow-on project premature.

#### Project Must Have Measurable Objectives

The project paper set an objective of distributing 20,000 minikits to farmers. However, the paper did not set goals for the level of agricultural and economic improvement to be achieved by these farmers. It may be that insufficient information about the farming community was available at the time. However as the project evolved, there was no concrete effort by ACRE management to develop a set of goals.

According to project personnel, progress is measured against the annual work plan. The work plan comprises several documents establishing the work to be performed by project personnel. This is a good management tool to measure the inputs to the project. However it does not measure project outputs such as (1) consistent use of ACRE technology by farmers, (2) increase in crop yields, (3) increase in crops sold to market or on the farm, and (4) acceptable levels of pest and insect damage.

#### Limited Project Monitoring

Project monitoring concentrates on 675 trial and demonstration farmers. Extension agents monitor new crop yields and the adaptability of new farming techniques. The farmers provided with minikits are not monitored. Project and USAID Sierra Leone officials told us that a system was supposed to be developed for the other farmers, but never was.

Baseline surveys of the farming community were conducted between 1980 and 1982. Some of the information obtained included (1) acreage, (2) types of crops (3) distance to market (4) farming family size and (5) income. These results were used to select farmers for demonstration of new crops and farming techniques but were not used to develop a monitoring system for the farming community. The information gathered could have also provided some of the baseline data necessary to measure project effectiveness. Unfortunately, it was not.



ACRE Demonstration Project  
new maize variety

Central Sierra Leone

ACRE has increased the  
popularity of maize as  
an alternative grain crop

April 1984

The information collected on the 675 farmers shows an increase in crop yields. For example, during the 1980-1981 cropping season, yield for rice varieties increased from 15 to 40 percent through improved seeds and 50 to 95 percent using the seeds and better farming techniques. The results of trials and demonstrations were used to develop the contents of the minikits distributed to the farmers.

According to project management, trial and demonstration results exemplify project success. We agree that the results are encouraging. However, these farmers are in a privileged position compared to the far larger number of farmers provided minikits. The 675 farmers are supervised closely by project personnel, remunerated for their participation, and provided the necessary seeds and techniques.

In our opinion, the results, although useful as a starting point to judge research adaptability, may not realistically represent what the typical farmer can achieve. Without information about the progress and problems of the farmers using minikits, ACRE project management cannot judge if the project is effective.

In commenting on our report draft, USAID/Sierra Leone indicated that a current study of a sample of trial and demonstration farmers and of farmers with minikits should provide information which would adequately address the issue of measuring project results. Preliminary information denotes a strong interest in the ACRE project by the farming community. This is a good sign but does not provide the measurement of project effectiveness which we are advocating.

Furthermore the sampling was limited to 9,165 of the 20,000 minikit farmers. Without the results of the study or the basis for the sampling we do not know how well the issues raised in this report are being addressed. USAID/Sierra Leone will provide us a copy of the final report when available.

The effective use of ACRE technology is limited by the adaptability of of research results to the needs and capabilities of the typical farmer, and the constraints faced by the farmer which arise outside the project activities. This is evidenced by the fact that even the 675 farmers privileged to work on trials and demonstrations are constrained by these factors. Project field reports contain comments about farmers who:

- produce a bumper crop but cannot store or get it to market and therefore lose it;
- lose a sizeable portion of production to pests and insects;
- reject new cropping techniques because labor is unavailable;



Fences suggested by ACRE  
to control rodents

Central Sierra Leone

farmers have indicated the  
labor costs outweigh the benefits

April 1984

- want to use fertilizer but none is available; and
- cannot get credit at reasonable rates.

The project alone cannot be expected to resolve national constraints to agricultural growth in Sierra Leone. However, ACRE management must know the extent of these constraints if it is to deal with them effectively. Here are examples of issues ACRE should address:

- Should the project concentrate on farmers with some minimum storage facilities? Little is achieved by increasing crop yield and then letting it rot due to lack of storage space.
- Should the project seek farmers who are within a short distance to market? Data developed early during the project shows that 30 percent of the 286,000 small farmers live within 5 miles of a market. If these farmers experienced a bumper crop we would expect them to have better success in getting their product to market than the 41 percent who are located further than 10 miles from market, most of whom head-carry their products.
- Should the project recommend cultivation techniques which are labor intensive to farmers who already have a shortage of labor? For example "dibbling," a rice planting technique, was rejected by some farmers because labor required outweighed the benefit of increased yield.

By focusing on the problems of this larger group of farmers, ACRE management would be in a better position to select farmers having a reasonable chance of success -- or, at least provide farmers with the seeds and techniques they can use best.

In order to do this, we believe that ACRE management should know if the farmers:

- have used the minikits and if not, why not;
- have increased crop yield and income;
- have had difficulties using the kits and in adopting some of the improved seeds and farming techniques;
- have had difficulties with storing or getting crops

to market, controlling pests, obtaining fertilizer and credit, and working with existing pricing policies; and

--want to continue using the ACRE improved technology and what benefits and problems they foresee.

Because of the large numbers (up to 20,000), the project would need to sample the farmer population to obtain this information.

In reply to our report draft, USAID/Sierra Leone agreed a mechanism should be put in place. They suggested such a system should measure the diffusion of technical practices introduced by the project, the identification and classification of beneficiaries (scale of operations, income, etc.,) and the benefits achieved by the farmers. If the project were to implement such a system, we believe it would adequately measure progress. Once this initial data is gathered USAID should ensure that specific objectives are set. We have revised our recommendation to reflect the steps suggested.

#### Designing Follow-on Project Is Premature

GOSL and USAID are planning a \$10 million project to start in 1985. This project would shift the research and extension functions to the GOSL. The coordination between these functions would be provided through personnel who had received long-term training under the ACRE project. About \$4.2 million is planned for technical assistance; \$1.2 million for construction of additional research facilities; and the remaining funds for training and personnel.

The proposed project primarily broadens current ACRE activities. Therefore its design depends significantly upon ACRE's success. Before proceeding with the follow on project, USAID/Sierra Leone must know that:

--adaptive research is established in Sierra Leone;

--research and extension activities can be successfully coordinated; and

--large numbers of farm families can benefit from research results and material such as minikits.

Adaptive research results are reaching the demonstration farmers through extension activities. Reports point to increased crop yields and improved farming techniques. However, the project has yet to demonstrate the benefit to the farming community. Without this information, the new project design cannot effectively direct its financial resources.



Trail leading to small farm

Central Sierra Leone

narrow foot trails present  
a problem in  
getting product to market

April 1984

## Need to Involve REDSO/WCA In Project

REDSO/WCA is responsible for assisting USAID field offices with project design, implementation, evaluations and other assistance activities. In 1980 and 1981, REDSO/WCA assisted USAID/Sierra Leone with ACRE project design, procurement, and construction. Subsequently, REDSO/WCA requested AID Washington to reduce its involvement because the project size did not warrant the resources REDSO/WCA was allocating to it. AID agreed on the basis that USAID/Sierra Leone had 3 staff positions authorized and considered this sufficient for the level of activity in the country. Accordingly REDSO/WCA limited its involvement with ACRE to an as needed basis.

We found that neither ACRE management nor USAID/Sierra Leone sought REDSO/WCA guidance or assistance in developing a project monitoring and measurement system. ACRE management relied primarily on its technical assistance team. In view of many staffing problems experienced by the team and the fact that USAID/Sierra Leone was staffed with 2, and not 3 as authorized, the Mission should have sought more assistance from REDSO/WCA.

## Conclusions and Recommendations

By April 1984, GOSL and USAID Sierra Leone had spent about \$10.1 million on ACRE project activities. Progress is recognized in adapting improved crop seeds and farming techniques for trial and demonstration farmers. The project has shown that under test conditions at least, crop yield is increased as a result of the adoption of research methods conducted by the project. Project management does not know how well the large number of farmers with minikits are responding. The project did not establish objectives for these farmers. Coupled with the lack of information about their activities, the project cannot measure progress.

The ACRE project is at a point where management must know how well the farming community is adopting its technology if it is to best direct its research, trials, and demonstration efforts. The study to be completed late 1984 may provide some of these data. We do not believe that a follow-on project should be designed until this information is available. USAID/Sierra Leone and ACRE management should also seek REDSO/WCA's help in resolving some of these questions.

Accordingly we recommend that:

### Recommendation No. 1

USAID/Sierra Leone act to sample farmers receiving minikits to measure the results of the project and assess project effectiveness. If adequate, the study to be completed in late 1984 may provide such information.

## Recommendation No. 2

USAID Sierra Leone in concert with ACRE management and REDSO/WCA develop a system to monitor and measure the progress of adaptive research, trials, and demonstrations among the farming community. As suggested by USAID a short questionnaire based on memory-recall can be used for this purpose. This questionnaire to include factors indicating progress, such as:

1. Diffusion of the technical practices introduced by the project.
2. Identification and classification of beneficiaries (scale of operation, location, standard of living, including income before and after the project).
3. The return to farmers as a result of acceptance of all or part of the new practices.

## Recommendation No. 3

USAID/Sierra Leone defer design of the follow-on project -- Cropping Systems Development -- until the results of the current study have been evaluated. In this regard, USAID/Sierra Leone judiciously evaluate and use the study information in justifying the new project. If the results of the study do not provide adequate information, USAID/Sierra Leone broaden the study to do so.

## NEED TO BETTER MANAGE TECHNICAL ASSISTANCE AND TRAINING

The technical assistance and participant training components of the ACRE project have not been effectively managed. The contractor was late in fielding the complete technical team and has had continuing problems maintaining the team in Sierra Leone. Difficulties in recruiting and, to some extent, lack of facilities in the country, contributed to these problems.

Delays in participants returning from training in the U.S. have also limited project progress and increased costs. USAID Sierra Leone did not adequately monitor student progress and as a result was generally unaware of the problems.

### Delays In Fielding the Technical Assistance Team

The contract specified that the assistance team should be on board by January 1980. The contractor was required to provide personnel

with adequate education and overseas experience. AID was to furnish proper housing for team members in Sierra Leone.

The timely fielding of the technical assistance team was necessary to (1) survey the project zone, (2) conduct base line studies, and (3) guide GOSL personnel in conducting trials and demonstrations. If the team was fielded too late, these activities would be delayed, or if undertaken without the team they could not be conducted as effectively.

The complete team was on site by September 1981, 20 months late. The chief of party and the food crop specialist arrived in February 1980, the economist and soil specialists in early 1981, and the extension agronomist in September 1981.

The delays in bringing the technical assistance team to Sierra Leone occurred because the contractor could not provide qualified personnel. Making adequate housing available to the team on time may have contributed to the problem.

Because the team was not fielded on time the project was not surveyed until 1981. A base line study was conducted by GOSL personnel but it was found to be unreliable, and trials and demonstrations in 1980 were held without the benefit of the team's guidance.

It is difficult to assess the increases in project costs due to these delays. The project surveys and studies were basic to decisions about what research should be undertaken in Sierra Leone and how it should be applied. In addition, a November 1981 mid-project evaluation observed that delays in recruiting the extension agronomist seriously handicapped the project and impaired the effectiveness of his future work.

#### Continuing Staffing Problems Impair Project Progress

Since September 1981, the technical assistance team has been fully staffed only 18 months. As personnel withdrew from the project, they were not replaced for many months. The tropical crop specialist withdrew in March 1983 and was not replaced until April 1984 when AID, not the contractor as required by the contract, located a replacement. The agricultural economist left in July 1983 and as of August 1984 had not been replaced. At that time, a possible replacement was being considered.

The contract does not specify whether the contractor is to maintain a fully staffed team at all times. As well, a time frame for contractor replacement of team members who withdraw was never established.

The basic team of five (chief of party, agricultural economist, extension agronomist and tropical soil and crop specialists) is essential to the work to be performed under the contract. Project

officials stress the need for continuity of staffing in the development of crop adaptive research and a replicable technology delivery system in Sierra Leone.

Incomplete staffing has substantially delayed project operations. Maize research, one of the most important crops to be developed, has been at a standstill since the crop specialist left in March 1983. Cost benefit and various marketing studies about the impact of the project on the farmers have been delayed for a year thus far.

In reply to our inquiries about the inability of the contractor to staff the team, the project director replied that the contractor is consistently slow in taking action and is unorganized in finding experienced people.

#### Delays in Participant Training

Since 1982, AID and ACRE project management have set limitations on the length of long-term training at universities. Limits for a Master's Degree were set at 2 years. Three students scheduled to complete training in August 1984 will not finish until January 1985, or about 6 months later than agreed. This delays 4 candidates currently working on the ACRE project from September 1984 to January 1985. The delay will also reduce training the returning students receive from the technical assistance team extension agronomist from one year to 6 months.

According to USAID/Sierra Leone, the delays are due to lack of direction by faculty advisors in the students' coursework. USAID has requested the university explain why the students have not yet completed the 24-month study. USAID noted that funds are not available to cover the additional study costs.

Under the contract, one of the contracting universities was to handle most of the graduate training for students selected through the ACRE project. The university was to provide students with an appropriate academic environment and monitor performance. Regardless of the university's role, the AID Handbook clearly assigns the responsibility for participant training to mission personnel whether the programs are managed by the mission or a contractor.

Thirteen students are scheduled to complete graduate degrees in the United States between August 1984 and January 1986. Three of the first 4 students who should have graduated in August are late. Nine students are to graduate by January 1985.

In view of USAID/Sierra Leone's comments about the university's inadequate monitoring, this does not augur well for the remaining students. We are also concerned because USAID/Sierra Leone, while criticizing the contractor for lack of monitoring, was unaware of the students 6 month delay until June 1984 -- 2 months before the scheduled graduation.

In replying to our draft report USAID/Sierra Leone expressed dissatisfaction with the contractor's performance. USAID/Sierra Leone will request AID's Office of Contract Management to consider the possibilities of a penalty clause for every month the contractor cannot fill a position on the technical assistance team as required. It is uncertain on how a penalty clause can be applied to a non-profit organization. However, the Office of Contract Management deals with this issue: the key is to hold the contractor accountable for performance.

### Conclusions and Recommendations

Technical assistance provided to the ACRE project could have been better managed. This assistance represents a sizeable investment, about \$5 million of the \$9 million AID investment. Problems contributing to ineffective use included delays in fielding the team, staffing problems throughout the life of the project, and delays in participant training.

Some of these problems were not totally within the control of ACRE project management; others were. By far the most significant problem was the lack of adequate staff throughout the life of the project. Since the technical assistance team is the link to the implementation of adaptive research in Sierra Leone, lack of adequate staffing severely hampered the project. Belatedly project management and USAID realized that the contractor did not have the capability to sustain the level of effort required by the project.

The current contract expires in December 1984 and little can be done about past delays in fielding the technical assistance team and inadequate staffing. However, in awarding any further technical assistance contract, we believe AID must act to minimize the problems experienced under the current contract. Accordingly we recommend:

#### Recommendation No. 4

USAID/Sierra Leone and REDSO/WCA in drafting a Project Implementation Order for Technical Services request that the AID Office of Contract Management, in a future contract for technical assistance include provisions to hold the contractor accountable for performance. These provisions to consider:

1. A timetable for fielding team staff and a penalty clause if staff is not on site within a reasonable time.
2. A requirement for full staffing and a penalty clause if staff cannot be replaced within a reasonable time.

### Recommendation No. 5

USAID Sierra Leone ensure that long-term student courses are monitored and that completion of studies will be within time agreed upon with the contractor.

### SIGNIFICANT IMPROVEMENTS IN ACCOUNTING FOR PROJECT FUNDS

In late 1981 USAID/Sierra Leone and REDSO/WCA recognized that the ACRE project could not adequately account for project funds. They engaged a public accounting firm in July 1982 for about \$35,000 to (1) set up a system of internal controls and budgeting (2) evaluate the adequacy of project funding including the reasonableness of certain costs (3) evaluate the effectiveness of the mid-project evaluation and (4) audit project accounts for the 18 months ending June 30, 1983.

In a May 1983 Memorandum for the Executive Staff, the AID Administrator endorsed a recommendation by the Payment Verification Task Force encouraging missions to use professional audit firms for financial technical assistance using program funds. The Administrator noted that financial technical assistance offered the best opportunity to greatly increase the financial integrity of AID projects. In this regard, he contrasted two projects in West Africa, the Semi-Arid Food Grains Research and Development (SAFGRAD) and ACRE.

SAFGRAD in Upper Volta was signed in May 1977. By October 1981, the Mission recognized that the project was financially troubled and requested that we audit the project. We found financial policies and practices which were deficient in all aspects and we reported questionable transactions including shortages of funds.<sup>1/</sup> When faced with similar circumstances USAID/Sierra Leone requested financial assistance for the ACRE project. The Administrator predicted that as a result of these actions, our audit effort would be greatly reduced because a set of books would exist, thereby lessening the probability of serious problems.

The ACRE project did have serious accounting problems in the early stages. We found that in their June 30, 1982 report on the ACRE project, the accounting firm noted that project plans did not provide for a project accountant and that "the absence of any formal laid down system not only results in a general lack of knowledge of how the Accounts Department should operate but also means there is a total lack of normal accounting internal controls." The general ledger had not been kept for over a year, property was not accounted for, inventory records were incomplete, and bank and cash transactions were not subject to basic controls.

1/ Audit Report No. 7-698-83-1, November 12, 1982 "The Administrative and Financial Practices of the SAFGRAD Project Need to be Improved."

The first report provided by the accounting firm included organization charts, job and accounting system descriptions and sample documents. It urged ACRE to recruit a qualified accountant.

Four subsequent reports monitored ACRE's progress in implementing the accounting system. Action was delayed because the project did not hire an accountant until November 1982. But by the time of its June 30, 1983 audit, the accounting firm was able to report that "the revised accounting system...has been implemented and in fact has been in operation for approximately nine months."

We are satisfied that the accounting system used by ACRE, if followed, provides adequate controls to prevent material errors from appearing in financial reports. The system is now capable of producing reliable data to be used as a basis for management decisions. We also believe that the accounting capability has now developed to where the budgeting system can be further improved. Project management realizes that:

- project resources can be best managed through good budgetary control and reporting; and
- negotiations with GOSL can be improved if project management is able to demonstrate the potential effect of changes in GOSL support.

Current reporting is limited to a balance sheet and statement of expenses compared to prior periods, a budget and cash flow statement and various supporting schedules. Reports are produced quarterly from 1 to 3 months after the end of the quarter.

This reporting system is not timely and could be improved if the following features were incorporated:

- addition of a budget based upon the annual work plan;
- budgeting by department or major project activity and tracking of expenditures against these; and
- periodic review of budget categories and related expenses to control expenditures.

These suggestions were discussed with ACRE project management who agreed to the need for these changes and has begun to implement them. In this they were helped by a public accounting firm currently re-evaluating project accounting and reporting systems.

## Conclusions and Recommendations

ACRE project management's early recognition that the project could not adequately account for project funds and the engagement of a professional accounting firm to remedy the problem represent a timely and commendable management decision. In view of the project management's agreement with our suggestions to improve the budgeting and reporting system and management's subsequent action, we have no recommendations.

## APPENDIX I

### LIST OF REPORT RECOMMENDATIONS

#### Recommendation No. 1

USAID/Sierra Leone act to sample farmers receiving minikits to measure the results of the project and assess project effectiveness. If adequate, the study to be completed in late 1984 may provide such information.

#### Recommendation No. 2

USAID Sierra Leone in concert with ACRE management and REDSO/WCA develop a system to monitor and measure the progress of adaptive research, trials, and demonstrations among the farming community. As suggested by USAID a short questionnaire based on memory-recall can be used for this purpose. This questionnaire to include factors indicating progress, such as:

1. Diffusion of the technical practices introduced by the project.
2. Identification and classification of beneficiaries (scale of operation, location, standard of living, including income before and after the project).
3. The return to farmers as a result of acceptance of all or part of the new practices.

#### Recommendation No. 3

USAID/Sierra Leone defer design of the follow-on project -- Cropping Systems Development -- until the results of the current study have been evaluated. In this regard, USAID/Sierra Leone judiciously evaluate and use the study information in justifying the new project. If the results of the study do not provide adequate information, USAID/Sierra Leone broaden the study to do so.

#### Recommendation No. 4

USAID/Sierra Leone and REDSO/WCA in drafting a Project Implementation Order for Technical Services request that the AID Office of Contract Management, in a future contract for technical assistance include provisions to hold the contractor accountable for performance. These provisions to consider:

1. A timetable for fielding team staff and a penalty clause if staff is not on site within a reasonable time.
2. A requirement for full staffing and a penalty clause if staff cannot be replaced within a reasonable time.

Recommendation No. 5

USAID Sierra Leone ensure that long-term student courses are monitored and that completion of studies will be within time agreed upon with the contractor.

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