

RESEARCH MANAGEMENT ANALYSIS
OF THE SAFGRAD PROJECT PHASE II (698-0452)
William H. Judy
July 1, 1991

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1. SUMMARY:

The effectiveness and efficiency of the system developed for research management by the SAFGRAD Projects was evaluated. The institutional development and functioning was also analyzed.

Regional agricultural research in maize, cowpeas, sorghum, and millet is being planned implemented and evaluated through an institutional framework. The Council of Directors of the 26 participating National Agricultural Systems (NARS) advises on policy. An Oversight Committee of elected NARS scientists conducts planning and evaluation studies. Network Coordinators are supplied by two Agricultural Research Centers (IARC), IITA and ICRISAT, to implement the Network programs. Four Networks, one in Eastern Africa and three in West and Central Africa, have been organized to conduct regional food grain production research. Representatives of the National Agricultural Research Systems (NARS) are elected by Network participants to Steering Committees which meet regularly to guide each Network in research planning and evaluation. The IARCs provide backstopping for planning and evaluating Network research.

The Networks used a combination of regional Network trials and enhanced NARS research to address the priority crop production problems. Twenty-two lead centers were selected on the basis of NARS capacity to implement research. A total of 157 scientists have been involved, some in providing technical assistance to smaller NARS. The Steering Committees determine critical crop production constraints and select priority problems for research, and allocate resources for Network trials and lead center research. The effectiveness of the research planning process is reduced by two factors - economic impact is not considered in selecting priority constraints and long term objectives and short term targets are not explicitly defined. Monitoring of Network research is not adequate, perhaps due to the number of countries in West African networks and difficulty in communications.

Commodity research networks have been organized and they have operated effectively to plan, implement, and coordinate food

SUMMARY (cont'd)

grains research among the NARS and with the IARCs. The capacity of the SAFGRAD Coordination Office has been strengthened in terms of institutional planning and coordination and in facilitating NARS participation in networking between countries and with the IARCs. The system established by this Project for networks research management and linking scientists across national and language boundaries should continue to be supported by donors under an effective regional umbrella. .

Network Coordinators and NARS scientists participate in monitoring tours to evaluate lead center research and regional network trials. This activity along with ad hoc training has enhanced the professional skills of NARS scientists participating. Of equal significance is the professional interaction between NARS and IARC scientists and better coordination of research as both IARC and NARS programs have been modified. For many small NARS, the Project has established professional contacts with IARC scientists which did not exist before.

Network research has generated research findings, especially in the areas of sharing and evaluating germplasm. While biologic constraints have been reduced, it is difficult to assess the economic impact and extent of adoption of research results.

The Project has used funds effectively and efficiently to involve NARS in organized planning sessions, workshops and monitoring tours. Of the Network budgets, 16% was budgeted for Network research and the NARS were allocated 86% of that, primarily for enhancing lead center research. Workshops, monitoring tours, and training sessions were conducted at a cost of \$1,377 per participant. Every country has participated in at least one of these Network activities with some 1,000 scientist contacts over the five years.

The SAFGRAD Coordination Office (SCO) has prepared position papers and assisted the Council and Oversight Committee in planning and evaluation studies. The SCO coordinates internetworking activities and coordination among the four Networks.

The NARS are involved in leadership and management of Networks. They make decisions about the planning, implementation, and management of research. A NARS scientist could not operate as a Network Coordinator unless he were taken out of his country and NARS and located within the semi-arid area where logistic support could be provided. The Network Coordinator should continue to do some personal research supporting the Network in order to retain the perception of professional competence.

2. INTRODUCTION

Research management is defined as the system for planning, implementing, and evaluating organized scientific investigation in order to deliver a modified product. The SAFGRAD Project utilizes a research management system to conduct agricultural research in food grain crops of the semi-arid regions of Sub-Saharan Africa. The product of the system is improved crop production techniques which can be utilized by pass-through users (national agricultural research systems) and end-users (the crop farmers in semi-arid areas). This evaluation assesses the effectiveness and efficiency of the SAFGRAD research management system.

3. SAFGRAD RESEARCH MANAGEMENT

A research management system includes several basic components. Components for a complete cycle include:

- Statement of the situation
- Definition of goals and beneficiaries
- Involvement of relevant institutions and groups
- Identification of constraints and establishment of priorities
- Development of the workplan and allocation of resources
- Implementation, monitoring, and analysis of results
- Interpretation and application of the results
- Evaluation of accomplishments and initiation of next cycle

The SAFGRAD research management system is the responsibility of the SAFGRAD Coordination Office, the Network Coordinators and by implication the International Agricultural Research Centers (IARCs) which supply the Coordinators, and representatives of the National Agricultural Research Systems (NARSS) which comprise the various management entities (committees). This evaluation also assesses the effectiveness and efficiency of the contribution of each organization and committee to SAFGRAD research management.

3.1. Planning

Introduction: Planning is one of the three major components of research management. Planning consists of a review of the situation, establishing broad goals and short term objectives, examining alternative courses of action, and developing a workplan to solve problems. In the planning phase, the institution involves the relevant groups which can provide

assistance in achieving the research objectives and begins to coordinate efforts with allied organizations and relevant groups. Beneficiaries are identified and their characteristics and needs considered. and finally, a workplan is developed which states the problem, long term objectives and short term targets, the methodology to be followed, the human and physical resources needed, and the time required to accomplish the work.

An assessment is made of the research planning process within the context of the Project as followed by the SCO, the Network Coordinators, and the NARS.

3.1.1. SCO Planning

A statement of the situation in food grains production in the semi-arid tropics was developed in the technical, economic, and social analysis sections of the SAFGRAD Project Paper-Phase II. The SCO presented a situation statement and constraints in its 1985 Indicative Master Plan of SAFGRAD. Later, in its 1986 Draft Master Plan for SAFGRAD, the agricultural production and institutional situation were described. Both of these SCO documents contain broad general statements which do not sharply define the biologic and economic situation nor the benefits that might accrue to the beneficiaries should these problems be solved. The method used to identify crop production constraints and select priority areas for research is not evident in these documents. These documents do identify small scale farmers as beneficiaries and identify relevant institutions at international, regional, and national levels. The SCO has developed several strategy papers on the institutional structure of the SCO, networks, and network management. The SCO has established relationships with other donor funding sources through the OAU, SPAAR, and IRAT. Efforts have been made to strengthen coordination with the IARCs, particularly IITA and ICRISAT.

Conclusion: The SCO, after an evaluation of the network structure and operations in conjunction with the NARS representatives, has developed a strategy for the institutional structure, management, and operation of regional commodity research Networks.

Recommendation: The SCO should be financially supported so that it can continue implementation and monitoring of restructuring and operations of networks for regional food grains research in the semi-arid tropics.

3.1.2. Network Coordinator Planning

The broad objectives, purposes, and beneficiaries were fixed by the Project Paper. According to the PP, coordinators were to develop networks of national and international scientists to strengthen research on staple food crops - sorghum, millet, maize, and cowpeas - in the semi-arid tropical areas. Relevant institutions defined were USAID/Ouagadougou, the NARS in semi-arid areas, two IARCs (IITA and ICRISAT), and, of course, the OAU/STRC as the umbrella organization. The beneficiaries of the Project were defined as the NARS which would "accept" the research findings within their systems and the small scale farmers which would "adopt" the varieties released and cultural practices recommended.

When the four Network Coordinators were appointed at the start-up of the Project, they each prepared a situation statement and involved NARS and IARC scientists in a process to define constraints and select priorities (16,17). All four coordinators followed a similar procedure. The main difference in the planning process between networks was the type and degree of involvement of NARS representatives in the procedure.

The situation statements are found in the Network documents (9,16,17,20). These basic documents are updated annually in the Steering Committee meetings reports for each Network (21,22,23,24). They describe the semi-arid ecological conditions and the biologic systems of the target crop. Some production and yield figures were included. Information was not included about the economic and socio-cultural situation and the potential impact on crop production if constraints were removed. This meant that quantifiable and qualifiable long term objectives and short term targets could not be meaningfully established. The combined effect of these two factors prevents evaluation of the justification for selecting priority research problems and determination of the cost/benefit of the research to SAFGRAD and to the production system.

The beneficiaries of the SAFGRAD Project were only indirectly involved in the SCO planning process. It was envisioned that the NARS that would "accept" the research findings of SAFGRAD and pass them on to the "end-users", the small scale farmers. The "pass-through" beneficiaries, i.e., the NARS, were involved in the policy and planning process through the Council of NARS Directors, Oversight Committee, and Network Steering Committees. But very few NARS in Sub-Saharan Africa have actually surveyed the crop and livestock production systems of small scale farmers to determine the biologic and socio-economic constraints. It is not persuasive to suggest that NARS scientists by meeting in an international forum would somehow better know their country's agricultural production and socio-economic systems.

Institutions and groups relevant to the Project goals and activities were identified. Technical staff from IITA and ICRISAT were involved in the Network research planning committees and workshops and in preparation of the workplan. A special effort was made by the maize Coordinator and Steering Committee to develop an agreement with the CIRAD/CORAF maize network to avoid duplication and reduce demand on NARS resources and scientists.

All the Networks followed a similar process to identify constraints and establish priorities. The outcome of the process was a listing of priority constraints which were common to all or most all countries. Researchable problems were selected according to the availability and capacity of NARS systems and IARC research available.

NO //

Two factors limited the range of constraints and problems selected. Most of the NARS and IARC representatives were from one biologic discipline - plant breeding, except in the Cowpea Network Steering Committee. Since there was little or no farming system survey data available, there was no advocate for considering interventions other than varietal improvement. However, a much more serious omission was the lack of estimates of the economic and social impact of constraints. For example, what would be the yield increase obtainable by solving long smut disease of sorghum compared to the impact that could be achieved by removing constraints in some other area, say, soil and water management or weed competition? What would be the socio-economic impact of removing some maize production constraint or cowpea insect pest? It is this kind of information that can sell research findings to farmers and the benefits of SAFGRAD and NARS research to funding agencies.

NO //

This, in itself, is not to suggest that the constraints and priority problems identified by the Project were "wrong", or that solving them might not yield some net economic gain to beneficiaries. But the research management system would be more effective and efficient in the use of resources if beneficiaries of the crop production systems were surveyed, scientists of varying disciplines were involved in the planning, and the economic, as well as the biologic, impact of constraints and problems were considered.

Long term quantifiable and qualifiable objectives and short term targets were not explicitly stated for research problems. Without objectives and targets, it is difficult to determine from within (or from outside) the SAFGRAD Project just what progress has been made toward solving problems.

The methodology to be followed, the human and financial resources needed, and the time allocations were well defined in the workplans.

Recommendation: The Networks should develop research programs and workplans which explicitly state the long term quantifiable and qualitative objectives and short term targets in terms of economic as well as biologic impact.

Conclusion: The effectiveness and efficiency of Networks cannot be determined without explicit statements of long term objectives and short term (annual) targets of the research program.

Recommendation: SAFGRAD should continue efforts to coordinate regional research activities through joint design and monitoring of trials; a good example of successful coordination is the harmonization effort between the SAFGRAD and CORAF Maize Networks.

Conclusion: There is some duplication of activities by SAFGRAD Networks and networks operated by other donors and IARCs in the semi-arid regions.

Recommendation: Networks should expand research into areas other than varietal improvement as a means for removing priority constraints; this may require increasing cooperative research by NARS lead centers and IARCs.

Recommendation: Networks should reevaluate crop production constraints in terms of economic as well as biologic impact and develop network trials which address constraints where the most gain can be realized.

Conclusion: Network trials have basically addressed production constraints through varietal improvement.

Recommendation: NARS should continue in an active role of leadership and management of networks research management.

Conclusion: Differences in Network research planning is a result of the degree of NARS participation in Network research management.

Effective workplans were developed and followed but it is difficult to determine progress toward solving problems and removing constraints.

Research was planned and coordinated with relevant institutions and organizations. The most effective and efficient allocation of resources to achieve research objective was found in the maize and cowpea Networks. These two Networks involved the NARS scientists and the IARCs more effectively in the collaborative selection of research problems and in allocation of components of the overall task.

Conclusion: Progress toward research objectives cannot be determined without an evaluation of the biologic and socio-economic suitability of research findings by the NARS and small scale farmers.

Recommendation: The Networks should obtain empirical data about the acceptance research findings by NARS and adoption by small scale farmers.

Conclusion: Networks have been effective and efficient in planning regional research but need to strengthen research program statements by describing explicitly the long term objectives and short term targets.

Recommendation: The system of regional research programming established through SAFGRAD networks should be continued by external donor support.

3.2. Implementation

The second major component of research management is implementation. Implementation consists in carrying out the research investigation described in the workplan and analyzing the results. Resources are allocated, orientation and training provided, and monitoring used to determine progress and quality. The results of the investigation are analyzed, interpreted, and reported to relevant organizations and groups. The implications of the research findings are fed back into the next cycle of planning and also delivered to the beneficiaries.

3.2.1. Implementation, Monitoring, and analysis

Introduction: One component of implementation includes those activities involved in providing research materials and funds, carrying out the research, technical backstopping for problems, and ad hoc training through workshops, monitoring tours, and organized short courses.

Three of the Network Coordinators devoted 15-25% of their time to research which was a part of the Network research program. While not essential to the role of "Coordinator", conducting meaningful research can be effective and efficient use of Project resources, enhance the professional image and thus the effectiveness of the Coordinator in the eyes of the network participants and collaborators, and strengthen SAFGRAD as an institution with competent scientists. The Coordinators in this Project were all recognized as competent professionals by the NARS and IARC scientists interviewed.

Research materials and funds were supplied to network participants. Lead station research was monitored by Coordinators; few of the NARS Network trials were visited. Monitoring tours provided NARS scientists with the opportunities for professional improvement and for developing professional relationships with scientists across national and language boundaries. The tours also served to establish direct contacts between NARSs and IARCs. In Guinea/Conakry, for example, the monitoring tour was the first time that the NARS scientist had talked on a professional basis with IITA scientists. During the past 10 years, the only IITA scientist to visit Guinea were the Maize and cowpea Network Coordinators and one visit by the IITA Cowpea Breeder. Perhaps the most significant achievements of the SAFGRAD II Project has been the establishment of professional linkages to exchange information and materials between the NARS and IARC scientists, across national boundaries, and between francophone and anglophone scientists.

3.2.2. Interpretation and application of results

Introduction: A second component of implementation includes those activities involved in analyzing and interpreting results and delivering the research findings to the beneficiaries.

The Coordinators collected the Network trials and analyzed results from individual locations. No analysis across locations or years has been done nor have attempts been made to interpret results and draw implications for future research. One noteworthy exception is the publication by the Maize Coordinator of the origin of maize varieties and hybrids included in Network trials.

In terms of delivering the research finding to the beneficiaries, the Coordinators have tracked "acceptance" of varieties and agronomic findings by the "pass-through" beneficiaries, the NARS. However, the acceptance or suitability of the research product by the "end-user" beneficiaries, the small scale farmers, has not been evaluated by the Coordinators or the NARS. The only measure of acceptance has been acceptance of varieties by seed multiplication organizations and "wind shield" surveys. The evaluator is convinced that some of the research produced by the SAFGRAD Project has been adopted by the small scale farmers. However, the lack of empirical data about the biologic and socio-economic condition of farmers hampers planning an effective and efficient research program at the national and regional level and prevents accurate evaluation of its socio-economic benefits.

Conclusion: The concept of lead center research has been accepted by large, medium, and small NARS as an effective and efficient means for generating research of benefit to all countries.

Recommendation: The amount of lead center research should be increased so long as findings are shared among countries, the funding is additive to the NARS and not subsidizing, and programs complement IARC research.

Conclusion: A significant portion of Network funds has been allocated to NARS programs to support regional research activities.

Recommendation: Future regional research projects should build on the successes of the SAFGRAD Project in financing and dissemination of NARS research for the benefit of other countries in the region.

Conclusion: SAFGRAD networking activities have developed professional relationships among scientists across national and language boundaries.

Recommendation: The concept and operating procedures defined by SAFGRAD networks should be supported by African and donor organizations in regional agricultural research programming.

Conclusion: SAFGRAD Networks have been effective and efficient in implementing regional research but need to strengthen interpretation of results and describing their implications for further research and their expected impact on crop production.

3.3. Evaluation

The third major component of the research management process is evaluation of the research management system. The effectiveness and efficiency of research planning and implementation is assessed. The quantity and quality of the product of the system (the research findings) is evaluated, as well as the acceptance of the research findings by the beneficiaries. An assessment is made of how well the institution achieved its internal and external goals. From these assessments come modifications in the research management process and adjustments in goals and objectives which produce the research findings.

In general, SAFGRAD has done a great deal to assess the institutional framework and relationships but very little to examine the efficiency and effectiveness of the research system or the products of the system.

An analysis has been made of the operations and organization of the SCO itself. This analysis concentrated on the functions and staffing of the SCO.

Analyses were made of the networking system (13,31,35) to provide a plan for the future structure and management of networks. The PP proposed that the NARS "take over leadership of the networks". Discussions about establishing, managing, and institutionalizing networks revolve around three major issues. One is the Coordinator position itself; the second is management of the network system; and the third is the institutional relationships.

Conclusion 23: The institutional development and relationships in the SAFGRAD Networks has been evaluated; evaluation of the system of research management as followed by the Networks for planning and implementation has not been done.

Recommendation 23: Evaluation of both the institution and the system of research management should be an annual routine activity of the Network Coordinators, the NARS Steering and Oversight Committees, and the Safgrad Coordination Office.

4. SAFGRAD AS AN INSTITUTION

The institution responsible for research management in the SAFGRAD Project is the SAFGRAD Coordination Office and the four Network Coordinators who are employed by the IARCs, IITA and ICRISAT. The SAFGRAD Committees of NARS representatives can be considered as a part of the institution insofar as they exercise a participatory role in research management. This evaluation assesses the viability and sustainability of that institution.

SAFGRAD is an organized entity in that it has a fixed location for a Coordination Office. There are well defined roles for the SCO, Network Coordinators, the Oversight Committee, the Steering Committees for each of the Networks, and participation by NARS scientists.

The SAFGRAD entity has a defined objective, which is to research food grains production in the semi-arid tropics. The objective of SAFGRAD is not well known outside the institution itself, as, e.g., among the NARS.

SAFGRAD has human and physical resources such as equipment and vehicles. It has funds from the OAU/STRC and from various donor-funded Projects which it administers.

SAFGRAD can and does produce a product, the research findings for maize, sorghum, cowpea, and millet production in semi-arid areas. It does deliver this product to the NARS in member countries.

The sustainability of SAFGRAD, as it is currently organized, is uncertain because of limited financial support from the political/administrative entity, the OAU Scientific and Technical Research Committee. The preponderance of funds for the SCO comes from external donors, as do all of the funds for technical program staff and their operating costs.

Conclusion: SAFGRAD has established a functioning institution which can administrate regional agricultural research. Sustainability of the administrative and program activities depends on funding by the OAU/STRC and external donors. It is unlikely that countries within the semi-arid areas will contribute funds to support SAFGRAD. There are at present no farmer associations or organizations which could provide funding for regional research programs.

Recommendation: The OAU/STRC and donors should consider providing adequate sustained funding for an umbrella institution like SAFGRAD which has a demonstrated capacity to operate regional research networks across national and language boundaries.

5. SAFGRAD TRAINING

Training of NARS scientists has been an important part of the network program. Included under the broad rubric of training are monitoring tours and workshops, although they are important techniques for implementation, evaluation, and reporting. A summary of the training, workshops, and monitoring tours, categorized by Network, is shown in Table 1.

The four Networks have conducted nine training sessions with a total of 173 participants. Subject matter has ranged from computer analysis to the six month maize production sessions for maize technicians.

The Networks organized eight monitoring tours with a total of 87 participants. The tours included multi-country visits to evaluate research at lead centers and network trial sites. The Coordinators organized eight workshops with a total of 343 participants. The workshops provided a forum for international and NARS scientists to present reports of research, evaluate progress, and plan. Both monitoring tours and workshops were important in terms of professional contacts established and developed between NARS and IARC scientists. The NARS and IARC scientists interviewed stated that the monitoring tours, along with the workshops, were perhaps the most significant

contributions by the Project, because they promoted professional development of NARS scientists and established contacts across national and language boundaries. As a result of these monitoring tours and workshops, many NARS scientists have maintained contacts for the purpose of exchanging research materials and information.

Training in the Project was frequently cited by NARS and IARC scientists interviewed as one of the most significant contributions to improvement in quality and effectiveness of research. One of the concerns raised by NARS scientists concerned the lack of long term academic training in SAFGRAD Project II. Long term training is perceived as a pressing need if the NARS are to maintain capacity for meaningful research.

Conclusions: NARS scientists have received ad hoc training in areas which promoted effective implementation and analysis of Network research. Monitoring Tours and Workshops have provided opportunities for professional improvement of NARS scientists.

Recommendations: Monitoring Tours, Workshops, and short term training should be an integral part of regional research programming.

6. SIZE AND LOCATION OF NETWORKS

There are 26 countries included in the semi-arid areas of Sub-Saharan Africa serviced by SAFGRAD. All eight countries in Eastern Africa are in the sorghum and millet Network. All 18 Countries of West and Central Africa are in the maize, cowpea, or sorghum network.

The 26 countries fall into two groups based on long term political associations, development orientation, agro-ecological similarities, and communication linkages.

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The Eastern and Southern group of eight countries includes, from the North, Sudan, Ethiopia, and Somalia; continues South through Kenya, Uganda, Tanzania, and Zambia; and ends with the southernmost, Botswana. These eight countries include small, medium, and large NARS. All of the countries except Somalia are well linked by telecommunications, roads, and airline routes which facilitates travel and communication. They share a common language.

Conclusions: The number of countries and types of NARS in the East African Sorghum and Millet Networks comprise an effective and efficient group for the objectives of the project. The number of countries and communication difficulties in the West and Central Africa area prevent the Coordinator from effectively implementing, monitoring, and evaluating the research program.

Recommendations: The network operations among the 17 West and Central African countries should be divided into two groups such that there would be a mix of small and large NARS and representation of both Anglophone and Francophone countries. One Coordinator could manage two commodity networks among the smaller groupings of countries.

Conclusions: The number of countries and types of NARS in the East African Sorghum and Millet Networks comprise an effective and efficient group for the objectives of the project. The number of countries and communication difficulties in the West and Central Africa area prevent the Coordinator from effectively implementing, monitoring, and evaluating the research program.

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Conclusion: The present system of NARS participation in network planning and evaluation requires too much time out of country for the NARS scientist.

REC 10: Steering committees should meet annually after the network has been organized and functioning, perhaps in conjunction with other networks or training sessions. Workshops and monitoring tours could be scheduled at the same time on a biennial basis.

7. COST EFFECTIVENESS OF NETWORK OPERATIONS

Funds for implementation of the SAFGRAD Phase II Project were budgeted for the SAFGRAD Coordination Office, IITA, ICRISAT, and an Accelerated Crop Production Officer (see PP Amendment). The two IARCs were responsible for establishing the Coordinators and providing operational funds.

7.1. Expenditures for Lead Centers

Every Network assigned responsibility for some components of Network research to NARS lead centers. A total of 22 lead centers were designated which involved 157 scientists (Table 2). Allocation of funds ranged from \$912 to \$5726 per ~~trial~~ (Tables 3-8).

7.2. Expenditures in the Maize and Cowpea Networks

Of the \$4,222,148 in the IITA budget for the Maize and Cowpea Networks (Table 2), 69.0% was budgetted for overhead and direct support for the Coordinator's positions and 31.0% for Network activities. The Network activities included the Coordinators' research, Network trials, Lead Center trials, the Steering Committee, Workshops, Monitoring Tours, and Training.

Participating NARS were budgetted 15.7% of the funds for Network research for an average of \$904 per Network trial and \$912 per lead center trial (Table 3). The two Coordinators were allocated 1.8% each for their Network research.

Each Steering Committee meeting cost \$7,289 for the five members to assemble and plan the Network activities.

The Workshops and Monitoring Tours were conducted at an average cost of \$31,330 each or \$1,264 per participant.

The Training sessions cost \$15,604 per session or \$1,986 per participant.

7.3. Expenditures in the West and Central Africa Sorghum Network

Of the \$1,680,000 in the ICRISAT budget for the West Africa Sorghum Network (Table 5), 69.0% was budgeted for overhead and direct support for the Coordinator's positions and 31.0% for Network activities. The Network activities included the Coordinators' research, Network trials, Lead Center trials, the Steering Committee, workshops, Monitoring Tours, and Training. Participating NARS were budgeted 12.9% of the funds for Network research for an average of \$396 per Network trial and \$2,787 per lead center trial (Table 6). The Coordinator was allocated 1.2% for his Network research.

Each Steering Committee meeting cost \$7,599 for the five members to assemble and plan the Network activities.

The Workshops and Monitoring Tours were conducted at an average cost of \$99,650 each or \$2,402 per participant.

The Training sessions cost \$11,942 per session or \$1,138 per participant.

7.4. Expenditures in the East and Southern Sorghum Network

Of the \$1,680,000 in the ICRISAT budget for the West Africa Sorghum Network (Table 7), 69.9% was budgeted for overhead and direct support for the Coordinator's positions and 30.1% for Network activities. The Network activities included the Coordinators' research, Network trials, Lead Center trials, the Steering Committee, workshops, Monitoring Tours, and Training. Participating NARS received 14.0% of the funds for Network research for an average of \$1,240 per Network trial and \$5,726 per lead center trial (Table 8). The Coordinator was not allocated any funds for Network research.

Each Steering Committee meeting cost \$12,334 for the nine members to assemble and plan the Network activities.

The Workshops and Monitoring Tours were conducted at an average cost of \$45,922 each or \$919 per participant.

The Training sessions cost \$5,470 per session or \$244 per participant.

7.5. Findings:

- A significant percentage of Project funds (16%) was allocated for Network research; of these funds, 86% was allocated directly to the NARS.
- The Workshops, Monitoring Tours, and Training sessions were conducted at a low cost per participant (average of \$1,377)
- Only 3.6% of Network funds were allocated to planning/evaluation meetings of the Steering Committees compared to 16% allocated to Network research

7.6. Conclusions:

- The Project obtained a large amount of research for a small investment
- A large number of NARS scientists - 647 - received professional improvement at a very low cost per scientist
- The Network activities were conducted in an efficient as well as effective manner

7.7. Recommendation:

- The SAFGRAD Network system of using both Network trials and lead center research should be considered in any future regional agricultural research programming.

8. NARS PARTICIPATION IN MANAGEMENT

NARS scientists are involved in SAFGRAD Project management. This involvement is exercised through several committees (see Figure 1: SAFGRAD Organization). These Committees include the Council of NARS Directors, the Oversight Committee, and the Advisory Committees for each of the four Networks. The type and degree of involvement depends on the Committee functions. The Oversight and Network Advisory Committees are directly involved in research management aspects of the SAFGRAD Project. The type and degree of involvement in research management has evolved over the life of the Project.

8.1. Council of NARS Directors

The Council of NARS Directors met biennially to advise on SAFGRAD research policy ((26,27). The SCO organized the meetings and assisted with preparation and publishing position papers. The budget for these meetings is included in the Project allocation to the SCO (Table 9).

8.2. Oversight Committee

The Oversight Committee involves NARS scientists in SCO studies of SAFGRAD and Network structure and methods for involving NARS in rresearch management in the areas of planning, implementation, and evaluatoin. SAFGRAD Project policy and planning thorough the Oversight Committee was measured against these criteria:

The Oversight Committee discusses and votes on decisions about planning and evaluation of SAFGRAD Project research. The Committee decisions are binding on the SCO and advisory to Network Coordinators.

Network Committee decisions are advisory to the SCO and Network Coordinators. They are implemented within the context of SAFGRAD Project purposes and resources and SCO procedures.

There is no evidence that the Oversight Committee members do not represent the interests of NARS in the SAFGRAD Project area. NARS Oversight Committee members can be removed by electing someone else to the Committee.

The Committee cannot change the SCO management or Network Coordinators.

Conclusion: The Oversight Committee has been effective in planning studies and evaluation of SAFGRAD organization and Network operators.

8.3. Network ^{Steering} Advisory Committees

Each of the Networks has a Network Steering Committee. The Committee is composed primarily of NARS scientists elected by Network participants. The Committee identifies production constraints and chooses priority problems for Network research. They participate in decisions about objectives, involvement of other institutions and groups, development of the workplan, and allocation of resources. They are involved in implementation, monitoring, and analysis of results, but not in the day-to-day preparation and distribution of trials and results. They are involved only to a limited degree in evaluation of Network accomplishments and their implications for future activities.

Network Committee decisions are binding on Network Coordinators so long as they do not violate SAFGRAD Project purposes and resources, IARC guidelines, and SCO procedures.

Everyone interviewed felt that the Network Advisory Committees represented the NARS within the network. There is nothing in Project records and files that would indicate otherwise. NARS Advisory Committee members can be removed simply by electing someone else to the Committee.

The NARS cannot appoint or remove the Network Coordinators.

Conclusions: Since almost all Steering Committee members are African scientists from NARS, the NARS exercise leadership and management of the Networks. NARS scientists are choosing which research problems will be researched and which institution will do the research. The NARS scientists on Steering Committees are representing other NARS to the extent that they are elected to the Committee and can be replaced in a future election. Steering Committees are apportioning research among regional Network trials and research in NARS lead centers. The SAFGRAD Network system of research management has been effective in involving NARS scientists in selection of priority crop production constraints and programming resources to regional and national research institutions to conduct effective research on these problems.

Recommendation: The SAFGRAD system of Networking which involves NARS in leadership and management should be supported as an effective and efficient method for regional agricultural research.

Recommendation: The number of Steering Committee meetings should be reduced to one each year after the Networks are organized and functioning.

9. TRANSFERRING LEADERSHIP OF THE NETWORKS TO THE NARS

One goal of the SAFGRAD Project is to organize networks of NARS scientists for collaborative research in food grains of the semi-arid tropics. An associated goal is to transfer leadership of the networks to the NARS.

Five networks have been organized under the leadership of the SCO and the four Network Coordinators. Scientists from the NARS have been involved in this process through two committees - Oversight and Network Steering. Their involvement has been to participate in decisions about research planning implementation, and evaluation.

What types of leadership are required for the NARS to take over leadership of the Networks? Are there any NARS scientists who now have the skills to exercise this leadership? Can the NARS scientists exercise these types of leadership in regional Networks?

9.1. Technical leadership

This type requires the NARS scientist to provide substantive technical subject matter assistance to NARS in other countries. There are now NARS scientists who have the competence and skills to provide technical assistance and they are doing so during monitoring tours, workshops, and arranged visits.

9.2. Organizational leadership

This type requires the NARS scientist to plan, implement, and evaluate research. Some NARS scientists are providing the assistance through the policy and Network planning committees

9.3. Operational leadership

This type involves operational activities in implementation, monitoring Network trials, and analysis and interpretation of research results. Some NARS scientists are capable of performing these activities, but they do not have the mandate or funding support required to enable them to devote their time to regional work.

9.4. Conceptual leadership

This type involves the ability to analyze the situation and formulate plans for new directions in regional research programming. Some NARS scientists are capable of analyzing and planning as evidenced by their own national program by participation in the SAFBRAD Council of NARS Directors and the Oversight Committee.

9.5. Sponsoring leadership

This type requires the ability to initiate, arbitrate, and fund regional research programs. It requires an entity which is recognized and accepted as having the prestige, a disinterested approach, and the ability to obtain funding for programs. None of the NARS have the ability to perform this function within themselves.

9.6. Conclusions

There are NARS scientists who now have the technical, organizational, operational, and conceptual skills to perform as Network Coordinators. However, he could not perform this role unless he was employed by an international entity funded independently of the NARS. Such an international entity (QUA/STRC, IARC, INSAH, ECOWAS, SACCAR, etc.) must have a regional agricultural research program mandate and be recognized as having both the prestige and the ability to obtain adequate funding for the purpose. The current coordinators are employed by IARCs. Two Coordinators, Maize and Sorghum, are housed outside IITA. Both the West and East Africa Sorghum Coordinators are housed in an ICRISAT Sub-Center.

The advantages of the Coordinator being employed by the IARC are:

- Coordinator is considered "international" and not the representative of any one country
- If located away from the IARC itself, the Coordinator can benefit from the association yet be considered more independent of the IARC
- Coordinator has greater access to IARC logistic and technical backstopping
- Greater coordination between IARC and national research programs

The disadvantages of the Coordinator being employed by the IARC are:

- Coordinator is considered to be subject to some degree to the IARC agenda and research program
- Research workplans and reports, and finances are delayed by IARC reviews and processing

The Coordinator would have to be recognized for technical competence and perceived as unbiased toward all countries in the Network, whatever the employment affiliation. The Coordinator would have to be located outside of his Country and NARS. Because of the need to perform some relevant research with the crops in the semi-arid agro-ecological zone, he should be located in one of the Network countries.

10. INSTITUTIONAL RELATIONSHIPS

One of the basic premises of the Project was development of institutional relationships (see Table 10: Logistical Framework).

The SCO developed an organogram (Figure 1) which describes the institutional relationships within the SCO and with Network Coordinators. After study of the existing relationships in the SAFGRAD Project, an organogram was constructed which depicts the various organizational and institutional entities involved and their role in research management (Figure 2).

The institutional relationships within the SAFGRAD Project and associated organizations was analyzed. A listing of the organizational and institutional entities involved in the Project is shown in Figure 2. The management role exercised by each is matched with the research management component of the Project which each affects.

The SAFGRAD Coordination Office (SCO) is established by the OAU/STRC which sets policy for the SCO. Funding for the SCO is provided partly by the OAU and USAID. The USAID component includes funds for the participation of NARS representatives on the Council of NARS Directors which sets policy and the Oversight Committee which conducts planning and evaluation studies. The SCO coordinates but does not direct implementation of the Network component of the Project.

Funding for the SAFGRAD is provided by USAID which exercises Project Management through the Mission in Burkina Faso. USAID/B.F. advises on the planning, implementation, and evaluation components of the Project. Because it approves funding, USAID also controls implementation.

The responsibility for implementation is assigned to the two International Agricultural Research Centers, IITA in Ibadan and ICRISAT in Hyderabad India, which employ the four Network Coordinators. The Coordinators are thus responsible for directing Network activities and implementing the workplan. They direct and implement planning and evaluation of the Network research which includes both regional trials and NARS lead center research. The IARCs approve the workplan and reports of the Networks. The IARCs have another role which is advisory, as they provide technical backstopping for Network planning, implementation, and evaluation.

The NARS are also involved through the Steering Committees for each Network. They are elected to the Steering Committee by NARS scientists which participate in the Network. They exercise a strong advisory, almost directive, role in the planning and evaluation of Network activities.

The NARS participants in the regional trials and lead center research are responsible for implementing research.

Relationships with relevant external organizations are developed and managed both through the SCO and the Coordinators. These entities include such diverse entities as donors other than USAID, IRAT, the CORAF Maize Network, and other Networks managed by the SCO.

Conclusions:

- The SAFGRAD coordination Office cannot exercise direction of the SAFGRAD Project; it can exercise influence over research management only to the extent that the Network Coordinators and NARS representatives recognize the professional competence of the Director of Research and the International Coordinator.
- The NARS are in a strong position to exercise leadership and influence the direction of the Networks through their advisory capacity on research management.
- The IARCs have been involved directly with the NARS in regional agricultural research.
- The Network Coordinators are in an excellent position to develop permanent collaborative research and technical support relationships between the IARCs and the NARS.

Recommendations:

- Any donor project to support regional agricultural research should attempt to simplify the relationship between the donor, the SCO, and the organization responsible for project implementation.
- The structured advisory role of the NARS should be retained in future regional agricultural research activities.
- Any regional agricultural research activity should include structured involvement of all relevant IARCs.

12. CONCLUSIONS ABOUT PURPOSE AND END OF PROJECT STATUS IN RELATION TO RESEARCH MANAGEMENT:

The USAID provided \$11.25m in regional funds to support the SAFGRAD Phase II Project. Funds were designated for the SAFGRAD Coordination Office (SCO), Project management and technical assistance, network coordinators, and evaluations.

An effective functioning African coordinating organization has been established which contributes to achieving almost all components in the end of project (EOP) status. However, adequate and continuous financial support for the SAFGRAD institution by the OAU and donors is uncertain.

A SAFGRAD Oversight Committee meets annually to establish goals, analyze the situation, and make plans for the future. Four collaborative research networks (West Africa Sorghum, East Africa Sorghum/Millet, and West Africa maize and cowpeas) are operating. Network research is planned annually, allocated to Network trials and lead centers, and implemented by the Coordinators and NARS. However, explicit long term objectives and short term targets for research problems have not been explicitly stated. The results from a small percent of the trials are not returned by some NARS. Trials are analyzed but not adequately interpreted nor are the implications for future research and farmer impact assessed. The system of research management has not been periodically evaluated. The network planning meetings are augmented by workshops and monitoring tours which facilitate exchange of research information and materials, increase dialogue between anglophone and francophone scientists, and focus efforts toward common goals. The "lead centers" in the NARS have been established to conduct research on special problems which is additional and complementary to IARC research. Several varieties of all four crops have been accepted by the NARS, and, of those accepted, some have been released to farmers. However, very little crop and soil management research has been conducted. Both IITA and ICRISAT have participated in network planning and provided technical support for training and monitoring tours. However the level of backstopping should be increased especially in the areas of monitoring research and analyzing and interpreting results.

12. SUMMARY (cont'd)

It is not clear that network research priorities are included as priority research in the NARS. What has happened is that the NARS have modified portions of the research agenda of the IARCs toward crop varieties which are more relevant to farmers in the semi-arid zone. The IARCs are providing more effective support for the small NARS research programs in terms of materials and technical backstopping. Effective linkages have been established with the Southern Africa (SADCC) sorghum network. Leadership has been exercised by the SCO and the Coordinators in an apolitical manner. However, it is unlikely that the SAFGRAD Coordination Office and Network Coordinators will continue without additional OAU and donor support. Strategies have been developed by the SCO for the network system and for the evolving relationships among the NARS, IARCs, and the SCO, but this has not developed into significant diversity of donors or financial support for the SAFGRAD Project and the research Networks either at regional or national levels. The SCO needs to improve subject matter documentation and develop wider contacts to inform those outside SAFGRAD about the achievements.

In terms of achieving the Project Purposes, commodity research networks have been formed and they have operated effectively to plan, implement, and coordinate research among the NARSS and with the IARCS. The service capacity of the SCO has been strengthened in terms of organizational and institutional planning and in facilitating NARS participation in networking between countries and with the IARCS. While the SCO has generated some additional donor support for other networks, the sustainability of the SCO and the SAFGRAD food grain research Networks appears uncertain.

ANNEX A: DOCUMENTS REVIEWED IN RESEARCH MANAGEMENT EVALUATION

1. An Outline of Medium and Long Term Plans of SAFGRAD (A Working Document). Feb 1989. Second Conference of the National Agricultural Research Directors of SAFGRAD Member Countries,. SAFGRAD Coordination Ouagadougou, B.F.
2. Annual Report: 1987 SAFGRAD. 1987. IITA, Ibadan, Nigeria. 33p + 7 annexes of 305p.
3. Annual Reports of Research of the Eastern Africa Sorghum and Millet Research Network for the years 1987-1990. ICRISAT/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
4. Annual Reports of Research of the West and Central Africa Cowpea Research Network for the years 1987-1990. IITA/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
5. Annual Reports of Research of the West and Central Africa Maize Research Network for the years 1987-1990. IITA/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
6. Annual Reports of Research of the West and Central Africa Sorghum Research Network for the years 1987-1990. ICRISAT/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
7. Basic Information: West and Central Africa Sorghum Research Network. Apr 1991. ICRISAT/SAFGRAD, Bamako, Mali. 16p + 2 Tables.
8. Evaluation of the Semi-Arid Food Grains Research and Development (SAFGRAD) Project. Sep 1988. Checchi and Company Consulting, Inc., Washington, D.C. P + 4 annexes.
9. Fajemisin, J.M. Regional Approach to Maize Research for Semi-Arid Zone of West and Central Africa. Mar 1991. In SAFGRAD Inter-Network Conference on Food Grain Research and Production for Semi-Arid Africa: Niamey, Niger. IITA/SAFGRAD, Ouagadougou, B.F. 22p.
10. Final Report: Resident Research: Phase II. Jan 1988. IITA, Ibadan, Nigeria. 69p.
11. Hazelwood, Leland R. Management and Institutional Analysis of the Semi-Arid Food Grain Research and Development (SAFGRAD) Coordinating Office (SCO). Mar 1990. USAID/Burkina Faso, Ouagadougou, B.F.

ANNEX A: DOCUMENTS REVIEWED IN RESEARCH MANAGEMENT EVALUATION
(CONT'D)

12. Highlights of SAFGRAD Network Activities. March 1991. Unpublished paper. SAFGRAD Coordination Office, Ouagadougou, B.F.
13. Internal Evaluation of SAFGRAD Networks: Sorghum, Maize and Cowpea in West and Central Africa, Sorghum and Millet in Eastern Africa. Jul 1990. Oversight Committee of SAFGRAD. SAFGRAD Coordination Office, Ouagadougou, B.F. 50p.
14. IITA Strategic Plan: 1989-2000. 1988. IITA, Ibadan, Nigeria. 108p.
15. Proceedings of the Cowpea Workshop: Country Reports and Other Activities, Lome, Togo. Mar 1989. IITA/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F. 27p.
16. Proceedings of Workshop for Establishment of SAFGRAD (Maize) Research Network in Central and Western Africa. Mar 1987. IITA, Ibadan, Nigeria. 26p.
17. Proceeding of Workshop on the Reorientaton of SAFGRAD Cowpea Research Network in Central and Western Africa. Mar 1987. IITA/SAFGRAD, Ouagadougou, B.F. 27p.
18. Program of Research-1987: IITA/SAFGRAD. 1987. IITA, Ibadan, Nigeria. 35p.
19. Progress Report: September 1986-May 1990. May 1990. West and Central Africa Sorghum Research Network. Apr 1991. ICRISAT/SAFGRAD, Bamako, Mali. 16p + Table + 4 Annexes.
20. Regional approach to Cowpea Research in West and Central Africa. Mar 1987. IITA/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F. 23p + 5 Annexes.
21. Reports of Advisory Committee Meetings of the East African Sorghum and Millet Research Network for the years 1987-1991. ICRISAT/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
22. Reports of Advisory Committee Meetings of the West and Central Africa Cowpea Research Network for the years 1987-1991. IITA/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.

ANNEX A: DOCUMENTS REVIEWED IN RESEARCH MANAGEMENT EVALUATION
(CONT'D)

23. Reports of Advisory Committee Meetings of the West and Central Africa Maize Research Network for the years 1987-1991. IITA/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
24. Reports of Advisory Committee Meetings of the West and Central Africa Sorghum Research Network for the years 1987-1991. ICRISAT/SAFGRAD, SAFGRAD Coordination Office, Ouagadougou, B.F.
25. Reports of Meetings of the Oversight Committee for the years 1987-1991. SAFGRAD Coordination Office, Ouagadougou, B.F.
26. Report of the Meeting of National Agricultural Research Directors of SAFGRAD Member Countries. Feb 1987. SAFGRAD Coordination Office, Ouagadougou, B.F.
27. Report of the Second Meeting of National Agricultural Research Directors of SAFGRAD Member Countries. Feb 1989. SAFGRAD Coordination Office, Ouagadougou, B.F.
28. SAFGRAD II: Proposal for Extension - West and Central Africa Cowpea Network. Nov 1990. IITA/SAFGRAD, SAFGRAD coordination Office, Ouagadougou, B.F. 24p + 4 Annexes.
29. Semi-Arid Food Grains Research and Development (SAFGRAD) Phase II Project Paper (698-0452). Aug 1986. USAID/Burkina Faso, Ouagadougou, B.F.
30. Semi-Arid Food Grains Research and Development (SAFGRAD) Phase II Project Paper Amendment (698-0452). Mar 1989. USAID/Burkina Faso, Ouagadougou, B.F.
31. Strategic Plan of SAFGRAD Networks. Aug 1990. SAFGRAD Coordination Office, Ouagadougou, B.F.
32. Strategy, Achievements, and Future Thrust: West and Central Africa Maize Research Network. Mar 1991. IITA/SAFGRAD, Ouagadougou, B.F. 22p.
33. Strategy for Transferring Network Coordination and Leadership to NARS. Mar 1991. SAFGRAD Coordination Office, Ouagadougou, B.F. 8p + Annex.
34. Synthesis Report on the SAFGRAD Project Activities: 1977-1991. Jun 1991. SAFGRAD Coordination Office, Ouagadougou, B.F. 78p.

ANNEX A: DOCUMENTS REVIEWED IN RESEARCH MANAGEMENT EVALUATION .
(CONT'D)

35. Taye, Bezuneh. An Overview of the Food Grains Collaborative Networks Strategic Plan. 1989. Unpublished paper. SAFGRAD Coordination Office, Ouagadougou, B.F. P.

36. Taye, Bezuneh. Progress Report on SAFGRAD Networks: 1987-1990. Oversight Committee of SAFGRAD. SAFGRAD Coordination office, Ouagadougou, B.F. 17p.

37. Taye, Bezuneh, and G. Kingma. Regional Strategy to Strengthen NARS: The SAFGRAD Networks Experiences and Approaches. Mar 1991. 31p. In Inter-Network Conference on Food Grain Research and Production, Niamey, Niger. SAFGRAD Coordination Office Public., Ouagadougou, B.F. 31p.

38. Working Groups on Research Projects: West and Central Africa Sorghum Research Network. Apr 1991. ICRISAT/SAFGRAD, Bamako, Mali. 10p + Annex.

ANNEX B: PERSONS AND ORGANIZATIONS CONTACTED DURING RESEARCH MANAGEMENT
EVALUATION OF SAFGRAD PROJECT - PHASE II

1. SAFGRAD COORDINATION OFFICE, Ouagadougou, Burkina Faso

MENYONGA, Joseph M., International Coordinator

BEZUNEH, Taye, Director of Research

2. SAFGRAD NETWORK COORDINATORS

FAJEMISIN, J.M., Coordinator, West and Central Africa Maize Research
Network (WACAMAN), Ouagadougou, B.F.

MULEBA, Nyanguila, Coordinator, West and Central Africa Cowpeea
Research Network (RENACO), Ouagadougou, B.F.

THOMAS, Melville D., Coordinator, West and Central Africa Sorghum
Research Network (WCASRN), Bamako, Mali

3. COUNCIL OF NARS DIRECTORS

GOITA, M., Director General, IER, Bamako, Mali

YAYOCK, J.Y., Director, Inst. for Agr'l Res., Samaru, Ministry of
Science & Technology, Samaru, Nigeria

4. OVERSIGHT COMMITTEE

EMECHEBE, A.M., Dean, Ahmadu Bello University and Cowpea Pathologist,
IAR, Samaru, Nigeria

MARFO, K.O., Cowpea Breeder, Nyankpala Agr'l Res. Sta., Tamale, Ghana

5. NETWORK STEERING COMMITTEES

5.A. RENACO Steering Committee

GUILAVOGUI, National Coordinator for Cowpea Research, Entomologist,
Foulaya Agriculture Research Station, Kindia

5.B. WCASRN Steering Committee:

Moussa, Chairman of WCASRN Committee, Sorghum Breeder, IER,
Bamako, Mali

ANNEX B: PERSONS AND ORGANIZATIONS CONTACTED DURING RESEARCH MANAGEMENT
EVALUATION OF SAFGRAD PROJECT - PHASE II (cont'd)

6. NATIONAL AGRICULTURAL RESEARCH SERVICES

6.A. BURKINA FASO:

DA, Sansan, Sorghum Team Leader, INERA, CRRA, Bobo-Dioulasso

SANOU, Jacob, Maize Breeder, INERA, CRRA, Bobo-Dioulasso

6.B. CAMEROON:

NGOUMOU, Titus, Agronomist, IRA, Garoua
NARS member of WACAMAN Network

6.C. GUINEA:

DIALLO, Mamadou S., Director General, Institute for Agriculture
Research in Guinea (IRAG), Conakry

BANOU, Keith, Deputy Director General, IARG, Conakry

SQUARE, Kaba, Director of Foulaya Center for Agriculture Research,
Kindia

CAMARA, Sekouna, Maize Breeder, Killissi Agriculture Research Station,
Kindia

SEKOU, Beavogui, Chief of Program, Publication, and Training, IRAG,
Conakry

MORLAYE, Foumah, Chief of Legume Research Program, Foulaya Center for
Agriculture Research, Kindia

6.D. MALI:

DIAMOUTENE, Dotianga, Deputy Director General, IER, Bamako,
Formerly on the Council of NARS Directors

DOUMBIA, Yacouba O., Entomologist, IER, Sotuba Research Station,
Bamako, Principal Investigator of the WCASRN Project head bugs

COULIBALY, N., Maize Agronomist, IER, Sotuba Research Station, Bamako

ANNEX B: PERSONS AND ORGANIZATIONS CONTACTED DURING RESEARCH MANAGEMENT
EVALUATION OF SAFGRAD PROJECT - PHASE II (cont'd)

6. NATIONAL AGRICULTURAL RESEARCH SERVICES (cont's)

6.E. NIGER:

CLARK, John, INRAN, Niamey, Niger

6.F. SIERRA LEONE

DAHINIYA, Mohamed T., Director, Institute of Agriculture Research,
Freetown

7. OAU/STRC

JOHNSON, C.A., Assistant Executive Secretary, OAU/STRC Secretariat,
Lagos, Nigeria

8. INTERNATIONAL AGRICULTURAL RESEARCH INSTITUTES

8.A. INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE (IITA), Ibadan,
Nigeria

BRADER, Lucas, Director General

ECKEBIL, J.-P., DDG for International Cooperation

DEGANUS, Emmanuel, Coordinator for Special Projects, International
Cooperation Office

WINSLOW, Mark D., Director, Maize Research Program

DASHIELL, Ken, Actg. Director, Grain Legume Improvement Program (GLIP)

FLORINI, Diane, Plant Pathologist, GLIP

MESFIN, Theodros, Entomologist, GLIP

GASSER, Gasser, Director, Training, International Cooperation Office

SUH, Joseph B., IITA Liaison Scientist, International Cooperation

ANNEX B: PERSONS AND ORGANIZATIONS CONTACTED DURING RESEARCH MANAGEMENT
EVALUATION OF SAFGRAD PROJECT - PHASE II (cont'd)

8. INTERNATIONAL AGRICULTURAL RESEARCH INSTITUTES (cont'd)

8.B. INTERNATIONAL CENTER FOR RESEARCH IN THE INTERNATIONAL TROPICS

8.B.1. ICRISAT Sahelian Center, Sadore, Niamey, Niger

RENARD, C., Actg. Center Director and Team Leader, Resource Management
Program

OKIROR, Shad O., Regional Trial Officer, Regional Millet Breeding,
Pearl Millet Improvement Program, Coordinator for the ICRISAT
Millet Network

WILLIAMS, J.H., Principal Physiologist, Resource Management Program

NDUNGURU, Bruno J., Team Leader for Agronomy, Groundnut Improvement
Program

8.B.2. ICRISAT Research Center, Samanko, Bamako, Mali

Luce, Claude, Sorghum Breeder, IRAT Sorghum Team

Ratnadoss, Alain, Entomologist, IRAT Sorghum Team

9. USAIDs:

MCCARTHY, Dennis, Chief, Agriculture Development Officer,
USAID/BURKINA FASO, Ouagadougou, B.F.

KINGMA, Jerry, SAFGRAD Project Advisor, USAID/BURKINA FASO,
Ouagadougou, BF

TAYLOR II, George, Chief, Agricultural Development Office,
USAID/NIGER, Niamey, Niger

HAYNES, Steve, Deputy, Agr'l Dev. Office, USAID/NIGER, Niamey, Niger

ATWOOD, Tracy, Chief, Agricultural Development Office, USAID/MALI,
Bamako, Mali

ANNEX B: PERSONS AND ORGANIZATIONS CONTACTED DURING RESEARCH MANAGEMENT
EVALUATION OF SAFGRAD PROJECT - PHASE II (cont'd)

9. USAIDs (cont's):

ATWOOD, David, ADO, USAID/MALI, Bamako, Mali

TADESSE, Kibrael, Agriculture Project Manager, USAID/MALI, Bamako,
Mali

REDDY, S.K., RDO, USAID/GUINEA, Conakry, Guinea

GILBERT, Frederick, Director, USAID/REDSO, Abidjan, Ivory Coast

DeBOSE, Charles, Chief, Project Development Office, USAID/REDSO,
Ivory Coast

10. OTHERS:

SINGH, S.R., West Africa Department, IBRD, Washington, D.C. (formerly
Director of GLIP at IITA)

ANNEX C: STATEMENT OF WORK FOR THE RESEARCH MANAGEMENT
SPECIALIST

EVALUATION OF THE SAFGRAD PROJECT - PHASE II

STATEMENT OF WORK:

Team Composition:

The evaluation team will be comprised of three external evaluators and a resource person. The external evaluators, to be supplied under contract, will include an Agricultural Research Management Specialist, a Plant Breeder/Agronomist, and a Team Leader. The resource person, knowledgeable about the Project and acquainted about the West and Central African NARS, will be supplied by REDSO/WCA, and will assist the evaluation team in addressing the crucial issues of the evaluation especially those pertaining to the follow-on phase. Qualifications of external evaluators and summary Scopes of Work follow.

Agricultural Research Management Specialist:

Qualifications: Ms.C. degree required, Ph.D. preferred, in an agriculture-related field. A minimum of ten years experience in managing a public or private agricultural research institution. Sub-Saharan Africa experience strongly desired. Prior experience with evaluations of USAID research projects preferable. French language proficiency required at S3-R3 level.

Specific tasks: The Agricultural Research Management Specialist will be under the general guidance of the Team Leader. He will

be responsible for submitting a draft report to the Team Leader seven days prior to the end of his contract. The report will address the specific issues outlined in Section III relative to overall research management relationships and duties, and will identify any major constraints which appear to impede project implementation or preclude attainment of project objectives, distinguishing between those which are critical to successful achievement and those which are not.

Evaluation Methodology and Procedures:

The Evaluation Team will report to the USAID Director or his nominee and will be under the technical guidance of the Chief of the Agricultural Development Division, USAID/Burkina. The Team Leader will serve as the spokesman for the team.

A. This evaluation is expected to take up to six six-day weeks. Any changes deemed necessary in the scope of work will be made at the time of finalization of work plans. Following a thorough review of the project documents, the team will meet with the three network coordinators and OAU/SAFGRAD officials. The proposed work plan and travel itinerary will be developed during the first three days of the team's arrival in consultation with the network coordinators and the SAFGRAD coordinator, and will be approved by USAID/Burkina. The first week will be devoted to developing work plans, travel itinerary, discussions with coordinators, SCO and USAID, and study of relevant documents.

B. The evaluation will be based on the following:

1. Review of documents and progress reports pertaining to, ~~the four research networks and their management structures.~~
2. Discussions with network coordinators, participating IARC representatives (IITA, SAFGRAD), USAID management, and OAU/SAFGRAD coordinator.
3. Site visits to selected NARS, meetings and discussions with national researchers especially those involved in the network management structures, e.g., Steering Committees, Oversight Committee and Council of Directors of Agricultural Research.
4. The team will identify not more than five (5) NARS (excluding Burkina Faso) for site visits, including two from the East African sorghum and millet network. In consultation with USAID and SCO, the five NARS will be selected for site visits based on the magnitude of their involvement in network activities, strength of the national research system and the limitations of available time. During the visits to NARS, the team should make every effort to contact the FSR units or their equivalent to make a windshield assessment of the extent to which research under the networks is linked with on-farm testing and technology transfer.

Specific Issues to be Addressed:

As stated in Article II (Objective) the main purpose of this final evaluation is to determine if the project has met it's objectives as stated in the Project Paper and Amendments and if there is a need for a follow-on Phase. Design features and

ideas of a possible follow-on phase must emerge from a thorough and critical analysis and evaluation of the main elements of the present project. These elements include project purpose and activities, effectiveness of implementation, delivery of project inputs, achievement of desired outputs, and whether the project activities and resulting outputs have contributed to the progressive attainment of the project goal and purposes.

Therefore, proceeding from (a) an analysis of the stated goal, purpose, activities undertaken, inputs provided, and outputs achieved to date, and (b) information gathered in the course of discussions with beneficiaries (National Research and Extension Systems and farmers' groups), the Evaluation Team will provide an objective assessment of the project's significant achievements or lack of achievements, and will make specific recommendations and guidance regarding the need for a follow-on phase to the project.

The Evaluation Team will address the following specific issues and any other issues the team considers relevant to fulfilling the Scope of Work.

1. To what extent network activities have achieved the project purpose to (a) increase the efficiency and effectiveness of agricultural research and production techniques for sorghum, millet, maize, and cowpeas in semi-arid Africa, and (b) improve the service capacity of regional and national institutions to assist with these efforts.

2. Assess the extent to which planned outputs (refer to Project Logical Framework) have been achieved and identify the reasons for any shortfall in the achievement of outputs.

3. Assess the effectiveness of the operation of research networks in terms of:

- (a) participation by NARS in the management structures of networks;
- (b) relevance of research agenda pursued by the networks to the crop production systems in the participating countries;
- (c) extent of technology transfer from IARCs to NARS and among the NARS themselves, facilitated by networks and the extent to which networks are relying exclusively on technologies/varieties coming out of IARCs and their collaborating entities;
- (d) the extent to which networks have promoted a balanced approach to development and transfer of improved germplasm and agronomic/crop management techniques (including soil-water management aspects);
- (e) the extent to which networks have succeeded in improving the relevance of the research agenda of participating IARCs to make the technology development more responsive to on-farm production needs.

4. An important concern of USAID management has been the extent of inter and intra-network coordination. While the networks have been organized on a commodity basis, small farmer production systems in Africa continue to be highly mixed cropped and inter-cropped. Almost all the varietal improvement programs are predicated on the productivity of mono-cropping systems under a high level of management. Therefore, an assessment is needed of the extent to which various issues pertaining to the improvement of inter-cropping have been addressed through inter-network coordination.

5. Role of SCO: Critically assess the role of SCO in facilitating the operation of networks in terms of:

- (a) administrative, logistical support and liaison with NARS;
- (b) effectiveness of SCO (and the Director of Research) in technical coordination and contributions to better conceptualization of production problems, needed research, and testing;

6. Sustainability of SCO: Assess the sustainability of SCO operations in terms of:

- (a) financial sustainability of SCO operations in view of the continuing dependence of SCO on project funds to sustain its operations; and
- (b)

the extent of SCO operations/activities not related to the operations of networks, and thus the potential use of project-provided resources for activities unrelated to networks.

In view of 5. and 6. above, make recommendations as to the (a) future role of SCO in facilitating network operations; (b) basis of project support, if any, to be provided to SCO (including arrangements such as cost sharing with OAU/STRC, fixed fee or actual costs plus a predetermined overhead, etc.; and c) alternate arrangements, if any, for facilitating network operations.

7. Location of Networks: Assess the issue of location of West African network coordinators (maize and cowpeas in Ouagadougou and sorghum in Bamako) and their effectiveness or lack of it in communicating and coordinating with participating NARS. Are there any significant differences in their effectiveness since two of them are located at the same place as SCO thus receiving greater support, while the third, located in Bamako away from SCO, and the fourth, located in Nairobi, apparently receiving marginal support either from SCO or OAU/STRC's regional office in Nairobi. This assessment is critical in view of the ultimate transfer of network management to NARS which would mean dispersal of network coordinators away from the location of SCO. Similarly, if the sorghum network, located in Bamako and overseen by the ICRISAT Sorghum Regional Center and a NARS strong in the relevant commodity, is as effective as the other two networks facilitated by SCO, can this serve as a future model to locate networks either at IARC regional centers or in relatively strong NARS?

8. Size of Network Operations: Assess the current size and complexity of network operations over a wide geographical area (17 countries) in terms of the following and recommend criteria which could be employed in determining the size of network operations in future:

- (a) effectiveness of research supervision and coordination;
- (b) cost effectiveness of operations;
- (c) diversity of research concerns; and
- (d) spread of research resources.

9. Effectiveness of NARS in Supporting Research Networks: Assess the effectiveness of NARS' participation in the network activities in terms of:

- (a) allocation of personnel on a full-time basis to network activities (number and quality of personnel) and other resources;
- (b) integration of network-sponsored research into the national research program; and
- (c) effectiveness of supervision of tests and quality of results.

Based on the above, recommend ways in which performance of NARS could be improved and also recommend criteria for the inclusion of NARS in the research networks in the follow-on project. It is strongly felt in some quarters that NARS must demonstrate their commitment to participate in the networks by concrete means.

10. Technology Transfer: Assess the extent to which networks at the level of national programs are working with FSR or on-farm testing units to test the technologies (improved cultivars and other practices) under farm conditions. Based on the assessment, recommend steps to improve the network linkages with on-farm testing through FSR/on-farm testing units in participating countries. It is felt that networks are excessively concentrating their testing on research stations/sub-stations/research sites although several of the cultivars, before their introduction into the network, might have already undergone testing at several research stations/sub-stations/sites within a participating country. A quantitative assessment of the number of on-station (including sub-station and research site) tests compared to the number of on-farm tests (both researcher-managed and farmer-managed) will be required for each network.

11. Evaluate the flow of network resources (magnitudes, timeliness, etc.) to the NARS vis-a-vis IARCs and SCO, and suggest ways and means of increasing the resource flows to the NARS within the limitation of project funds likely to be available in the follow-on project. In the same context, examine the periodicity and frequency of network meetings, workshops and observation tours, and assess to what extent they could be curtailed and/or combined with other network meetings and workshops.

12. Assess the extent to which the networks are supplanting rather than supplementing the national research resources for increasing the quality and quantity of research on priority problems. A related issue is the extent to which network-sponsored tests are coordinated with national program-sponsored tests to avoid duplication and/or expansion of programs into less critical geographic regions. Based on the above, suggest ways and means of: (a) rationalizing the number of tests allocated to NARS, and (b) improving coordination between testing programs sponsored by networks and the on-going programs annually implemented by NARS.

13. Review the progress made in the management of research networks by African national scientists, and assess the extent to which NARS are ready to take over the leadership. Key questions the team should consider are: (a) availability of a qualified and experienced individual to lead the network; (b) capacity of NARS to house the network and provide minimal support; and (c) the management and decision-making style of the NARS in general. (Rigid and centralized management structures lacking flexibility are not considered to be conducive to network types of operations.) The team should propose criteria by which one can determine if the NARS scientists are playing management leadership roles. This is especially important since past evaluations, reports and participating entities have interpreted the notion of "network management and leadership" in different ways. Based on the above, recommend steps for the increased role of NARS in the management and leadership of network research programs.

14. Network leadership and management responsibilities are currently shared by three entities: IARCs (technical coordination and backstopping), NARS (leadership of network management structures, i.e., Steering Committees, Oversight Committee, decision-making relating to programs and budgets), and SCO (facilitating, coordination of meetings including logistics/administrative support and research coordination). Assess the extent to which present arrangements are satisfactory and recommend steps, if any, required to realign and streamline the responsibilities and roles of the three entities with a view to increasing the effectiveness of research and increasing the cost effectiveness of research.

15. Monitoring and Evaluation (M&E) of Network Research: Assess the effectiveness of methods and procedures in place for: (a) reception and screening of technologies for inclusion in the network programs; (b) monitoring the implementation of research programs; (c) evaluation of research results and relevance of technologies tested; and (d) assessing the impact of network activities and inputs on the NARS and the production systems in general. A fundamental concern of the Agency is the extent to which network investments and activities are having an impact on the end-users of technologies, i.e., farmers. Also, evaluate the means employed to feed-back the results of monitoring and evaluation activities to the management of NARS, USAID and other interested parties.

16. Performance of IARCs:

- (a) Critically assess the performance of IITA and ICRISAT in (1) providing qualified coordinators; (2) technical backstopping of network research programs including their role in planning of research and review/evaluation of research results; (3) technical coordination of research; (4) training; and (5) effectiveness of logistical and administrative support to the coordinators.
- (b) Assess to what extent research coordination (as distinguished from coordination of logistics, reporting, planning and organization of network meetings) is duplicated and/or dispersed between participating IARCs (network coordinators) and SCO (principally through the Director of Research).
- (c) Specifically, assess the financial and operational efficiencies resulting from a merger of the CORAF and SAFGRAD maize networks, identifying areas of duplicative activities and operating costs which could be eliminated.

Based on an assessment of (a), (b) and (c) above, recommend ~~steps, if any, required to improve the performance of IARCs~~ [especially with regard to item 16(a), (1) and (2) and 16(c)] and to avoid duplication of research coordination if it exists.

17. Performance of SCO: Critically assess the overall performance of SCO: (a) in facilitating the operation of networks in the region; (b) effectiveness of its role in sensitizing participating governments to the need for increased budgetary support for priority national research programs; and (c) inter-network coordination. (Issues relating to SCO noted under 5, 6 and 17 may be discussed together in the report.)

18. Performance of USAID: Assess the performance of USAID management in terms of: (a) timeliness of release of funds; (b) provision of inputs; (c) timeliness of management decisions; and (d) feed-back on project implementation progress, issues and problems.

ARTICLE IV - REPORTS

The Team Leader will have overall responsibility for preparing the Evaluation Report, which will include a synthesis of the reports prepared by the other members, documenting the salient issues, progress and constraints identified during the course of this evaluation, as outlined in this Scope of Work. Detailed reports prepared by the team members will be provided as annexes. Any dissenting recommendations will be noted in the text and details given in the annexes.

The Team Leader will submit ten copies of the draft report to USAID's Evaluation Officer five days prior to the end of his contract. This report will include the following:

(1) an Executive Summary of three pages in length (including the purpose of the evaluation and the methodology used, findings, conclusions, lessons learned, and recommendations); (2) body of the report of no more than 30-35 pages (including a discussion of the purpose of the evaluation, the study questions and the significance of the resulting recommendations); and

(3) Appendices (including technical and management issues raised during the evaluation requiring greater elaboration, a copy of the evaluation Scope of Work, a brief annotated bibliography of the documents and reports consulted, and a list of the persons and agencies contacted).

Following the submission of the draft report, a preliminary working session will be held with the Evaluation Team, USAID and project entities to discuss findings and recommendations. The Team Leader will then incorporate in the final draft version of the report the subsequent consideration of any questions or issues raised during this initial review meeting. The Team Leader will submit ten copies of the final draft report two days prior to his departure. This final version will be reviewed in a meeting with the Mission Director, the Evaluation Team and other interested USAID staff.

ARTICLE V - RELATIONSHIPS AND RESPONSIBILITIES

The contractor will work within the OAR/Burkina Office of Agriculture based in Ouagadougou under the technical direction of the USAID/Burkina Agricultural Development Officer. General policy guidance will be provided by the USAID Representative.

The contractor will work in coordination with all participating bodies and organizations within the Semi-Arid Food Grain Research and Development Project (SAFGRAD).

ARTICLE VI - PERFORMANCE PERIOD

The preferred period for these services is April 1 - July 1, 1991.

ANNEX D: METHODOLOGY FOLLOWED BY THE AGRICULTURAL RESEARCH
MANAGEMENT SPECIALIST IN EVALUATION OF THE SAFGRAD
PHASE II PROJECT

The methodology followed by the Research Management Specialist to assess the SAFGRAD Project was to review the Project documents and interview persons associated with the Project to determine the system of research management and the SAFGRAD institution which has been developed to manage research.

The Project documents were extracted to develop an outline of the purpose, outputs, and end of Project status. The principle issues were identified and interview questions were formulated to elicit information about research management and institutional relationships (Attachment A).

A schedule of activities for the Research Management Specialist was developed (Attachment B). Travel was designed to visit as many institutions as practical to obtain data from documents and personnel associated with the Project. Five of the 26 SAFGRAD member countries, both IITA and ICRISAT (Sahel), three Network Coordinators, the SAFGRAD Coordination Office, and five USAIDs including REDSO/WCA, were visited in the process of data collection.

Ten different institutions and organizations are identified as having some degree of involvement in Project implementation. These entities include USAID/Burkina Faso, OAU/STRC, the SAFGRAD Coordination Office, two IARCs, Network Coordinators, three different advisory Committees of NARS scientists, and the National Agricultural Research Systems. Involvement of these entities in Project implementation ranged from control to direction to advisory to technical backstopping.

Next a list of key personnel was identified in these organizations and institutions for personal interview. In the interview process, each person was asked to name five key personnel who could provide accurate information about the Networks. A list of some 50 people was eventually developed. Almost all of these key persons were interviewed by the Research Management Specialist or the Plant Breeder/Agronomist Specialist.

The assessment of the effectiveness and efficiency of research management and the SAFGRAD institution was made from this data. A set of conclusions and recommendations is included in the Research Management report. The Team Leader assimilated the findings, conclusions and recommendations of the three Team members into a summary document.

ATTACHMENT A: FOR COORDINATORS OF SAFGRAD NETWORKS, NARS DIRECTORS, NARS MEMBERS OF SAFGRAD OVERSIGHT AND STEERING COMMITTEES, AND NARS NETWORK SCIENTISTS

Concerning SAFGRAD Project-Phase II between 1986 and 1991--

1. How has the method of planning network research changed?
2. How does the network identify the priority researchable problems?
3. How has the role of the NARS scientists changed?
4. How has SAFGRAD affected the method of planning and content of the research program of the NARSSs? How would the research program of the NARS be different now if SAFGRAD had not existed?
5. How has SAFGRAD affected the method of planning and content of the research program of the IARCs? How would the research program of the IARCs be different now if SAFGRAD had not existed?
6. Does each network trial include a long term qualifiable and quantifiable objective and an annual target? Are trial results analyzed, interpreted, and reported in a written form with implications for adoption by farmers and for future research?
7. What are technologies which have been accepted by NARSSs? Adopted by farmers?
8. How has the content of network trials changed? Have the network trials contained other than variety evaluation?
9. Are variety trials monocrop only or are there any intercrop trials?
10. Where do the entries for the trials come from?
11. How has this network trained NARS researchers? Ad hoc? Short term?
12. What has been the effect of "Lead Centers" in the NARS?
13. Concerning number of countries in the network-- Are there too many? Too few? About right? Why?

ATTACHMENT A: FOR COORDINATORS OF SAFGRAD NETWORKS, NARS DIRECTORS, NARS MEMBERS OF SAFGRAD OVERSIGHT AND STEERING COMMITTEES, AND NARS NETWORK SCIENTISTS (cont'd)

Concerning SAFGRAD Project-Phase II between 1986 and 1991--

14. Are the network coordinators located in the proper places in relation to the network countries? To the SCO?
15. Has the SCO been effective in providing technical and logistic support to the Coordinator?
16. What percent of time does the Coordinator spend on research?
17. Are there any scientists in the NARS who now have the skills to act as network coordinators?
18. Who are five people involved in any part of the network (other than the SCO) who can provide information about this network?

FOR THE IARCs, THE ABOVE 18 POINTS PLUS TWO ADDITIONAL POINTS:

19. How has SAFGRAD coordinated network activities with other relevant networks operated by the IARCs and other donor organizations?
20. What will be the direction and content of regional research programming during the next 5-10 years?

ATTACHMENT A: FOR USAIDS, THE SAFGRAD COORDINATION OFFICE, AND THE OAU/STRC:

Concerning SAFGRAD Project-Phase II between 1986 and 1991--

1. How has SAFGRAD affected the method of planning and content of the research program of the NARSs? How would the research program of the NARS be different now if SAFGRAD had not existed?
2. How has SAFGRAD affected the method of planning and content of the research program of the IARCs? How would the research program of the IARCs be different now if SAFGRAD had not existed?
3. What are technologies which have been accepted by NARSs? Adopted by farmers?
4. How has the content of network trials changed? Have the network trials contained other than variety evaluation?
5. How has this network trained NARS researchers? Ad hoc? Short term?
6. What has been the effect of "Lead Centers" in the NARS?
7. Concerning number of countries in the network-- Are there too many? Too few? About right? Why?
8. Are the network coordinators located in the proper places in relation to the network countries? To the SCO?
9. Has the SCO been effective in providing technical and logistic support to the Coordinator?
10. Are there any scientists in the NARS who now have the skills to act as network coordinators?
11. Who are five people involved in any part of the network (other than the SCO) who can provide information about this network?
12. How has SAFGRAD coordinated network activities with other relevant networks operated by the IARCs and other donor organizations?
13. What will be the direction and content of regional research programming during the next 5-10 years?

ATTACHMENT B: PLAN OF ACTIVITIES OF RESEARCH MANAGEMENT SPECIALIST FOR EVALUATION OF SAFGRAD PROJECT II

Objective	How	Where
1. Review Project documentation to understand goal, purposes, EOP status, outputs, & inputs	Original & modified Project documents in USAID & SAFGRAD	-AID/W -USAID/B.F. -SAFGRAD SCD
2. Develop the plan for evaluating the research management components of Project	-Summarize EOP status & outputs -Identify key Project personnel -Develop interview procedure -Select target persons and sites to visit -Coordinate plan w/other team mbrs -Modify plan with USAID/B.F. & SCD	-USAID/B.F. -Duagadougou -SAFGRAD SCD
3. Itinerary and plan to visit key personnel, consult with other Team members, & draft report	-Develop travel plan -Notify Project personnel & coordinate meetings thru use of fax, mail, and telephone	-Duagadougou -Duagadougou -Duagadougou
4. Determine whether Project goal, purpose, outputs, & EOP status have been achieved (First group of interviewees in May)	-Conduct interviews -Obtain documents -Modify key personnel interview list	-AID/W -USAID/B.F. -USAID/Mail -SAFGRAD SCD -Maize Coord. -Cowpea Coord. -Sorghum Coord. -NARS in Mail -ICRISAT/Mail

ATTACHMENT B: PLAN OF ACTIVITIES OF RESEARCH MANAGEMENT SPECIALIST FOR
EVALUATION OF SAFGRAD PROJECT II (cont'd)

Objective	How	Where
5. Determine whether Project goal, purpose, outputs, & EOP status have been achieved (Second group of interviewees in June)	<ul style="list-style-type: none"> -Conduct interviews -Obtain documents -Modify key personnel interview list 	<ul style="list-style-type: none"> -IITA-Ibadan -DAU/STRC-Lagos -ICRISAT-Niger -USAID/Niger -NARS-Niger -REDSO/WCA -NARS-Guinea/Con. -NARS-Burkina F.
6. All aspects of Project evaluated & recommendations made about future research program	<ul style="list-style-type: none"> -Share interviews -Discussion & review documents within Team -Review drafts w/USAID/B.F., SCO, & Coordinators 	-Ouagadougou
7. Prepare draft of findings & recommendations for future research programs	<ul style="list-style-type: none"> -All aspects of Project evaluated -Recommendations developed -Complete final draft & review w/USAID/B.F. & SCO 	-Ouagadougou

ANNEX E: TRAVEL AND ORGANIZATIONS VISITED
DURING THE EVALUATION

DATES	COUNTRY	ORGANIZATIONS
May 15-18	Washington, D.C.	AID/Washington AFR/TR/ANR & S&T/AGR
May 20-25	Ouagadougou, B.F.	USAID/Burkina Faso SAFGRAD Coordination Office SAFGRAD Network Coordinators
May 27-29	Bamako, Mali	SAFGRAD Network Coordinator IER - NARS Director IER - NARS Scientists ICRISAT Research Station USAID/Mali IRAT - ICRISAT Station
May 30-Jun 6	Ouagadougou, B.F.	USAID/Burkina Faso SAFGRAD Project Personnel
June 7-9	Ibadan, Nigeria	IITA Management IITA International Program IITA Maize Program IITA Grain Legume Program IITA Liaison Scientist
June 10	Lagos	USAID/Nigeria OAU/STRC
June 11-12	Niamey, Niger	ICRISAT Sahelian Center USAID/Niger
June 13	Abidjan, I.C.	USAID REDSO/WCA
June 14-15	Conakry, Guinea	IARG - NARS Director IARG - NARS Scientists
June 17-20	Ouagadougou, B.F.	SAFGRAD SCO SAFGRAD Network Coordinators
June 21	Bobo-Dioulasso, B.F.	INERA - NARS Scientists
Jun 22-Jul 1	Ouagadougou, B.F.	Prepare Evaluation Report Review with USAID Review with SAFGRAD Project personnel

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1991-07

RESEARCH MANAGEMENT ANALYSIS OF THE SAFGRAD PROJECT PHASE II

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