

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE  Semi-Arid Food Grain Research and Development (SAFGRAD)			2. PROJECT NUMBER 698-0393	3. MISSION/AID/W OFFICE USAID/Upper Volta
6. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 686-83-01	
A. First PRO-AG or Equivalent FY 77	B. Final Obligation Expected FY 83	C. Final Input Delivery FY 84	5. ESTIMATED PROJECT FUNDING A. Total \$ 21,300,000 B. U.S. \$ 16,475,000	
			7. PERIOD COVERED BY EVALUATION From (month/yr.) 5/77 To (month/yr.) 6/81 Date of Evaluation Review 3/83	

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>(Note: This PES has been prepared based on a July 1981 external evaluation and on AID IG audit (report 7-698-83-1 of November 1982). The actions identified below represent a melange of outstanding items from the evaluation, the audit, and other observations of the USAID/Upper Volta staff. It is also important to note that, while the evaluation reviewed all aspects of the SAFGRAD activity, the IG audit limited itself to the management and financial operations of the SAFGRAD coordination office in Ouagadougou.)</p>		
A.	B.	C.
1. The Evaluation, the audit and recent meetings between the OAU principals (OAU/USAID/ICARS) all called for an expanded role of the OAU/STRC in implementing SAFGRAD. Such an expanded role requires:		
A. approval of an expanded FY83 budget for both the Ouagadougou and Lagos operations;	Becker/Hughes	4/15/83
B. approval of an expanded FY 84 budget for both the OAU Ouagadougou and Lagos operations; and	Becker/Hughes	7/1/83
C. transmittal of USAID guidance on host country procurement of goods and services.	Becker/Hughes	4/15/83
2. The Audit highlighted the importance for USAID to clarify implementation monitoring responsibilities between the field and Washington and transmit such clarification to OAU/STRC.	Naylor (AFR/RA)	5/1/83

(continued on next page)

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT	
<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)	A. <input type="checkbox"/> Continue Project Without Change	
<input type="checkbox"/> Financial Plan	<input checked="" type="checkbox"/> PIO/T	_____	B. <input type="checkbox"/> Change Project Design and/or	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)	<input checked="" type="checkbox"/> Change Implementation Plan	
<input checked="" type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____	C. <input type="checkbox"/> Discontinue Project	
11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)			12. Mission/AID/W Office Director Approval	
July 1981 evaluation team: Herbert S. Hughes    Leopold Fakambi John D. Hyslop        Robert W. Duell, Team Leader Elon Gilbert			Signature <i>Lawrence C. Williams</i>	
USAID/UV evaluation Officer: Michael Rugh			Typed Name Emerson J. Melaven	
			Date April 21, 1983	

Project emphasis has been on regional-level research with little effort given to the oversight of that work in terms of relevance to SAFGRAD's target group: the small farmers of sub-saharan Africa.

The July 1981 evaluation made 14 recommendations to improve project implementation. As of March 1983, the status of these recommendations is as follows:

Recommendation 1: SAFGRAD policy and guidance functions should be strengthened by revitalizing the Consultative Committee (CC) and Technical Advisory Committee (TAC) and institutionalizing their roles within the project.

Status: This has not happened, and was subject of recent audit recommendation. AID-OAU meetings of February-March 1983 have resulted in a first cut at revised management protocols for SAFGRAD. However, simply "revitalizing" the CC and TAC may not be the best route to strengthened management. The roles of both will become clearer when they convene in May 1983.

Recommendation 2: Greater relative emphasis should be placed on coordination of national with regional-level research efforts and relatively less emphasis placed on direct research at the regional level.

Status: There has been a small improvement. The present project manager, who was part of the evaluation team, believes it was a weakness of the evaluation in attempting to make policy-shift decisions in mid-stream. Such a shift is difficult to carry out quickly. Purdue has made an effort to refocus and expand from national to regional emphasis in its activities. It is unrealistic to expect a major shift within the present project; Phase II design should address this point.

Recommendation 3: Attention should be given to the permanence of SAFGRAD, i.e. institution-building.

Status: Until the evaluation, the permanence of SAFGRAD was of secondary concern. The USAID emphasis was, rather, on mobilizing research and transferring the information expeditiously to the member states. The evaluation pointed out that this would necessarily be a long-term process involving greater participation of African institutions. As a result, OAU/STRC initiated two major actions. First, they reviewed their own support of the coordinator office and subsequently have expanded their Lagos backstop for the project. Second, the OAU/STRC has taken a leadership role in SAFGRAD and is bringing the office into line with other OAU/STRC institutions throughout Africa by introducing full OAU management procedures.

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Recommendation 4: OAU should be more active in pursuing donor support for SAFGRAD.

Status: As a result of the evaluation, AID/Washington advised OAU/STRC that the long-term viability of SAFGRAD was contingent on other donor participation. As a result, the new Executive Director of OAU/STRC, Prof. A.O. Williams, launched a campaign for SAFGRAD support from several international donor agencies including: the European Development Fund, the International Fund for Agricultural Development (IFAD), and the French FAC. In addition, he also pursued greater participation by the Institut de Recherches Agronomiques Tropicales.

Recommendation 5: Consideration should be given to empowering OAU/STRC as the contracting body for technical assistance activities.

Status: The USDA project manager believes this recommendation was ill-advised. Recent audit findings would superficially tend to support this position and no doubt an expanded role for OAU/STRC should await the arrival of a new management team in the coordinator's office. Nevertheless, if efficient SAFGRAD operations and management are to be based on several different donors, then it is appropriate that a uniform system of contracting be introduced (an OAU/STRC system).

Recommendation 6: The autonomy of the OAU/STRC Coordinator in Ouagadougou with respect to OAU/STRC headquarters in Lagos should be maintained in the making and implementation of operational decisions.

Status: This runs contrary to 1982 audit findings. Recent events support a view that OAU should set up a system whereby headquarters has more input and operational control and it is in this direction that the project will head.

Recommendation 7: The operations of the Ouagadougou office should be strengthened by adding: (1) a Coordinator of Research responsible for the management of all technical research matters; and (2) one or two persons to the staff of the OAU/STRC Coordinator so that fiscal matters can be professionally handled.

Status: The OAU/STRC simultaneously began the search for a Director of Research as well as support for such a position soon after the evaluation was completed. Based on the expression of interest of IFAD in this area, the OAU/STRC, with the help of other participating SAFGRAD supporters, selected a Director of Research in March, 1983. To improve the management of fiscal matters, an accountant was hired with AID funds in March, 1982. Since then, the OAU/STRC as a result of audit findings have begun to introduce their own accounting systems as well as financial management and control procedures.

Recommendation 8: OAU/STRC, with AID support, should negotiate with the other donors and implementing agencies they fund to bring them more closely into the SAFGRAD fold and achieve greater SAFGRAD influence over their research activities.

Status: The OAU/STRC began discussions with the ICARs on this matter upon the arrival of Prof. A.O. Williams. However, the greatest progress to date took place in Brussels (March, 1983) where the role of the CC and TAC were discussed. All participants agreed more coordination of SAFGRAD research activities was required and the OAU/STRC through its expanded Coordinator office would take the lead.

Recommendation 9: AID and OAU/STRC should consider placing the regional research centers under full SAFGRAD management to avoid questions of national sensitivity.

Status: No action taken and none envisioned. It is believed the evaluation team was not in agreement over the inclusion of this recommendation. We believe placing regional research centers under full SAFGRAD management would be counter-productive to those research efforts and would certainly offend the governments of the countries in which they are located.

Recommendation 10: Greater regional-level emphasis should be placed on soil and water research. Breeding work should be aimed at varieties adapted to farmers' current management and levels of output.

Status: Some progress has been made. ACPOs are placing more emphasis on agronomy. To the extent the opportunity has arisen to change personnel and policy, the movement has been towards emphasizing soil and water research. Lack of a TAC hindered making progress towards meeting both points in this recommendation.

Recommendation 11: The FSU team should concentrate on the adaptive farm trials component of its program for the remaining life of the current SAFGRAD project.

Status: The FSU team has fully complied with this recommendation and intensified its efforts on adaptive farm trials. Their current research directions will greatly enhance their final product.

Recommendation 12: (Concerns follow-on Phase II project and relates to design team and FSU when Phase II is implemented).

Recommendation 13: The ACPO role as liaison between national research and national extension should be his only mission. The permanent research staff of the national centers should take over responsibility for regional trials.

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Status: Recommendation has been partially fulfilled. ACPO contracts now emphasize their role as liaison and suggests they facilitate national research trials to be done by the nationals of the country in which ACPO is located.

Recommendation 14: ACPOs should be assigned to national farming systems programs in order to provide "leverage" to the farming systems' extension activities beyond the immediate areas in which they are working.

Status: Partially implemented. The Upper Volta ACPO has been urged to work with the FSU as there is not a national systems extension group. Also, the new Benin ACPO position is fully integrated with the national farming systems research effort.

#### 14. Evaluation Methodology

The purpose of the evaluation was to determine: (a) the effectiveness of the funded research coordination, extension and training efforts; (b) the degree of adherence to the project plan and objectives; (c) to recommend revision of the project documents, if necessary; and (d) project and recommend a U.S.-supported follow-on project. Field work for the evaluation began in Ouagadougou in May 1981 by the five-member team, and encompassed visits to the primary sites of SAFGRAD regional activities in Senegal, Mali, Nigeria and Upper Volta.

Discussions were held with representatives of international and national research and extension organizations, expatriate researchers, and farmers in villages at points throughout selected participating SAFGRAD countries. The evaluation concentrated more on process than on products and outputs due to the fact that, at the time of the evaluation, the project was only half way through its projected five-year life.

#### 15. External Factors

Not pertinent at this time.

#### 16. Inputs

AID-funded staffing for the project, with exception of the ICRISAT team at Samaru, Nigeria, was realized in a relatively timely manner. Construction at Kamboinse, Upper Volta, and procurement of project vehicles also was realized without a detrimental delay to project implementation. Long-term training start-up experienced selection/placement delay due to varying selection procedures in participating countries, and coordination through the OAU/STRC mechanisms. The evaluation did not find any major problems directly related to input delivery.

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## 17. Outputs

The SAFGRAD project log frame cites seven major outputs:

### Output 1: Regional Crop Research (varietal improvement/soils management).

The evaluation found SAFGRAD's major emphasis has been on varietal development research at the regional level, with most progress being on maize development by IITA at Kamboinse. AID-funded work on sorghum by ICRISAT at Samaru, Nigeria, was delayed due to initial contractor staffing problems and the lack of an agreement with Nigeria. The evaluation recommended greater regional emphasis be placed on soil and water research, and breeding work be aimed at varieties adapted to farmers' current management and levels of input.

### Output 2: Regional farming systems research.

The Farming Systems Unit (FSU), implemented through a contract with Purdue University, was intended to give SAFGRAD a capability for basing its research and development activities on an understanding of the farmers' decision-making environment.

The FSU team concentrated its efforts on village-level studies in Upper Volta, almost exclusively. Its work plan called for detailed socio-economic surveys in the villages to provide data for models of production-consumption behavior. Management problems in data gathering and a lack of computer for tabulating and analyzing the data resulted in a failure to complete the planned formal analysis.

Partial analysis of the data and experience in working with villagers permitted the team to begin an on-farm agronomic trials program. The evaluation recommended the FSU team concentrate on the adaptive farm trials component of its program for the remainder of the SAFGRAD project, and that it should have a regional, rather than national, orientation (see 13 for further clarification).

### Output 3: National field trials/demonstration activities.

This element of the project is the responsibility of the ACPOs (Accelerated Crop Production Officers) serving as a link between the crop researchers and the FSU team on one hand, and farmers and national extension units on the other. The role of each of the four ACPOs in place at the time of the evaluation has been based on an accommodation between that delineated in the PP and the constraints and opportunities presented by the institutions and resources in each SAFGRAD country.

Two ACPO issues cited in the evaluation are: (1) SAFGRAD regional versus national responsibilities; and (2) integration of the ACPOs' national work into a farming systems research program. The evaluation recommended the ACPOs' SAFGRAD regional field trial responsibilities be given to the national research program. At the ACPO level of the SAFGRAD project, the role in strengthening linkages is paramount in furthering the objectives of increased production of farmers. His time and material resources which

are allocated to SAFGRAD regional trials are not available to build up necessary bonds between research and extension.

The ACPO has been working primarily with results produced by crop researchers and not integrating his operations into national farming systems research.

Output 4: African scientists and technicians trained on the job.

The evaluation found African officials asserting the view that the training element was an indisputable and unequivocal positive project contribution. Thirteen degree-level participants were enrolled and three additional were being processed for training. The PP had envisioned a long-term training total of 160 student-years. Thus, while a positive element, the level is lower than planned and has started much too late to make a contribution to this phase of the SAFGRAD project. Short-term training is being managed by the international research institutes. Because AID funds were "pooled" with other training money, it was difficult to fiscally isolate training done with SAFGRAD funds. An estimate of 40 is believed reasonable. (The PP log frame indicator anticipates 40 person-years). SAFGRAD headquarters is attempting to gather together more definitive information to ensure more complete documentation.

Output 5: Systematic exchange of crop research information among scientists

Workshops were held in each of the crop research sectors and had participants from a wide selection of SAFGRAD countries. The workshop reports were well produced and distributed but appeared to lack significant technical input. The evaluation team noted that it was unclear how or to what degree workshop recommendations are distributed or acted upon outside the circle of workshop participants. The evaluation also noted information exchange gets a very perfunctory treatment both in the PP and in reality. Conference proceedings are published and distributed, as are IITA and ICRISAT reports, on the basis of fixed distribution lists on a one-time basis. The evaluation recommends a more formal system of information acquisition, storage, and retrieval as a logical element of SAFGRAD's coordinating function. The SAFGRAD Newsletter was viewed by the evaluation as excellent and beneficial in disseminating research information.

Output 6: System for regional research planning and coordinating

Policy and program guidance functions were vested in the Consultative Committee (CC) composed of African research and development officials and representatives of donor nations. The CC was to be assisted by a Technical Advisory Committee (TAC) of senior scientists from SAFGRAD member countries and international research agencies. Up to the time of the evaluation these two committees have been less effective than envisioned by the PP. The primary responsibility for convening the two committees rests with OAU/STRC.

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Meetings of the CC and TAC have been infrequent ( and a liberal interpretation of "meeting" is necessary to state they have met annually as is required by the Agreement). The evaluation team believed the inactivity of these two committees is a primary cause for the project's failure to evolve beyond the research priorities set in the PP, or to truly integrate the activities of the researchers, and concluded there is a clear need to implement and accelerate the functioning of the two committees.

At this date, USAID does not totally adhere or support to this recommendation. The urgent need to restructure the management of the project is acknowledged, but the CC and TAC as originally designed are probably too unwieldy and impotent to have a major impact on the project. Leaner, more functional mechanisms have to be found to manage SAFGRAD and to direct and disseminate research. OAU-AID-contractor negotiations on this important point have recently taken place, and new, more functional, CC and TAC mechanisms have been established.

Output 7:

Research station infrastructure, construction of offices and laboratories at Kamboinse has been completed as planned.

18. Project Purpose

"To: (1) develop improved cereals (millet, sorghum, maize) and legumes (cowpeas, groundnuts) and cultural practices which are compatible with small farm semi-arid farming systems and to promote their adaptations in participating countries; and (2) strengthen the coordination and capability of African Research within a regional framework". In July 1981, at the time of the evaluation, research efforts were in progress to improve cereals and legumes through manipulation of genetic materials enhancing both yield potential and diseases and pest resistance. Most of the effort was taking place at research stations as opposed to on-farm trials. Since the evaluation, ACPOs have been stimulating increased on-farm trials utilizing improved seed varieties. These are still in the guided demonstration stage of utilization by farmers. It is still too early to assess the direct impact of improved seed variety adoption on the potential beneficiaries.

The OAU/STRC provides a broad regional framework within which research under the project is carried out. However, the CC and TAC have not played as active roles in strengthening regional coordination of African research as had been envisioned by the SAFGRAD project.

19. Goal/sub-goal

The project goal is "to increase the quantity and quality of staple food crops effectively available to the increasing populations in the semi-arid zone of Africa". Research efforts to improve food grain quality and production potential were in progress at the time of the evaluation. However, since improved food grain seed was being tested under controlled conditions and not being made available to farmers on a commercial scale, virtually no

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measurable progress was noted in achievement of the project goal. Research results, however, point to substantive future improvement of food crop production which, assuming farmer field trials convince the local farmer of their superiority, should improve quality and quantity of staple food crops. Further, the Purdue Farm Systems Research Unit has considerably expanded its on-farm program since the evaluation.

20. Beneficiaries

Of an estimated 165 million inhabitants in the SAFGRAD countries, an estimated 70-80% are engaged in small farm agriculture. Additionally, others cultivate cereals and grain legumes as their principal staples.

As noted earlier in this PES, the research now being conducted appears promising, but to date, few tangible benefits have accrued to the small-scale farmer as a direct result of project activities.

21. Unplanned Effects

None noted.

22. Lessons Learned

Relationship between donors and OAU were very poorly defined. The agreements made between USAID and participating contractors were also ambiguous and left many loopholes, creating pitfalls for effective project implementation at the program level.

The major implementation weakness has been the failure to fully utilize the project's policy and guidance structures. Inactivity on the part of the Consultative Committee and the Technical Advisory Committee has created a policy vacuum which was filled, in part, by the OAU/STRC Coordinator and the AID Project Officer. They neither can nor should take over the functions which should be carried out by these committees or suitable alternates. This failure has impacted on the regional-level research, and more effort should be given to the oversight of that work in terms of its relevance to SAFGRAD's target group of beneficiaries - the small farmers of sub-saharan Africa.

### 13. Summary

#### Background and Summary Project Description:

SAFGRAD represents a major initiative for addressing fundamental constraints to increased food production in the vast semi-arid zones of sub-saharan Africa. The project purpose is to develop improved cereal varieties (millet, sorghum, maize) and grain legumes (cowpeas, groundnuts) and cultural practices which are compatible with small farm semi-arid farming systems; and to promote their adaptation and use in farmers' fields. Project activities fall into two broad areas: first, regionally coordinated research on staple cereals and grain legumes at three selected African research centers; second, support to national research, field trials and outreach programs to further develop, test, and extend improved technologies to farmers.

Policy and program guidance was to be provided by a Consultative Committee (CC) comprised largely of African national crop research and development authorities. A technical Advisory Committee (TAC) was to provide technical oversight and planning. The Scientific and Technical Research Commission of the Organization of African Unity (OAU/STRC) was to perform the vital role of regional coordination and administrative support for the project. As such the OAU/STRC is the grantee. AID's original contribution to SAFGRAD was earmarked in the Project Paper as follows:

a. ICRISAT (Samaru, Nigeria)	\$1,800,000
b. IITA (Kamboinse, Upper Volta)	3,307,500
c. ACPO's (five)	2,562,500
d. Participant training	2,000,000
e. OAU/STRC Administration	236,500
f. Conferences	313,500
g. Commodities and Construction	443,000
h. Consultants	234,000
i. AID Project Officer	570,000
j. Contingencies and Inflation	<u>2,411,000</u>
	\$13,878,000

In FY 1982, the project authorization was amended to extend the project from May 1983 to a new PACD of March 1985. In addition, the authorized life of project cost was increased to \$16,475,000.

#### 1981 Evaluation and Recommendations

The Semi-Arid Food Grain Research and Development Project (SAFGRAD) was formally evaluated in July 1981. That evaluation found project implementation to be basically on schedule with timely staffing, and personnel of the various implementing organizations working in a vigorous and professional manner. The major implementation weakness had been the failure to fully utilize SAFGRAD's policy and guidance structures. This had impacted on project orientation.

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