

CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE Improvement of Postharvest Grain Systems			2. PROJECT NUMBER 931-0786	3. MISSION/AID/W OFFICE S&T/AGR/AP
5. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Case, Fiscal Year, Serial No. beginning with No. 1 each FY)	
A. First PRC-AG or Equivalent FY <u>80</u>	B. Final Obligation Expected FY <u>84</u>	C. Final Input Delivery FY <u>85</u>	<input type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	
6. ESTIMATED PROJECT FUNDING			7. PERIOD COVERED BY EVALUATION	
A. Total \$ <u>5,600</u>			From (month/yr.) _____	
B. U.S. \$ <u>5,600</u>			To (month/yr.) _____	
			Date of Evaluation Review _____	

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, FIC, which will present detailed request.)

A. ACTION DECISIONS	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Prepare project for a five-year extension	R. Jaffan	12/1/84
2. Change project design as follows:		
✓ a. Include an integrated, problem solving and applied research component.	R. Jaffan	12/1/84
✓ b. Establish a feedback system for measurement and evaluation of impact of services provided.	R. Jaffan	12/1/84
✓ c. Increase emphasis on institutionalizing training activity in recipient countries.	R. Jaffan	12/1/84
✓ d. Design a system to increase outreach to potential users of services available. ("Ribbon Project")	R. Jaffan	12/1/84
✓ e. Expand both assimilation and dissemination of PHDS	R. Jaffan	12/1/84

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input checked="" type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify) _____
<input checked="" type="checkbox"/> Financial Plan	<input checked="" type="checkbox"/> PIO/T	_____
<input checked="" type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A. Continue Project Without Change

B. Change Project Design and/or

Change Implementation Plan

C. Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

S&T/AGR/AP: RI Jackson Date 9/28/84

S&T/AGR/AP: RJaffan Date 9/29/84 Project Manager

S&T/AGR, JARoyer Date 10/2/84

S&T/PO: Vanderson Date _____

12. Mission/AID/W Office Director Approval

Signature Anson R. Bertrand

Typed Name Anson R. Bertrand, Director

Date _____

13. Summary:

Current Situation: The Food and Feed Grain Institute (FFGI) at Kansas State University has a long record of service in meeting LDC needs for assistance in reducing post-harvest grain losses. The Cooperative Agreement with USAID through which FFGI supplies technical assistance, training and research support to programs of missions, regional bureaus and S&T/AGR has provided for a major part of this assistance to LDCs. While the output of these activities has not been quantified, the basic design of the overall project is generally sound and the inputs into it generally of very high quality. The present Cooperative Agreement, with certain modifications, should be extended for five years.

Estimates of post-harvest grain losses vary widely but levels ranging from 15-30 percent are apparently commonplace. The need for continued programs aimed at loss abatement is evident. There is also need for more attention to tracking the effects of loss-abatement programs. Although quantitative measures of savings generated by FFGI programs will be difficult to achieve, case-study estimates can and should be made from mission feedback and from follow-up analyses by FFGI staff.

While the demand for traditional technical assistance and training service performed by FFGI has grown, funds allocated for their performance have declined. Moreover, the need for an expanded program of applied research integrated with the outreach efforts, has become increasingly apparent. Funding, either from USAID or from other sources, must be increased if the added requirements are to be met. The Institute is encouraged to redouble its effort to find increased funding. USAID is encouraged to give high priority to the project in its allocative process.

There are also opportunities for increasing the efficiency with which

services are rendered. Ways should be explored for improving communication with AID/Washington, with the missions and with other organizations which have a role in "post-harvest" work. Ties with GASGA are extremely helpful in this respect and should be continued. The CIGRAS project is a good example of integrative work which has long-run potential for yielding widespread benefits. The Honduran project (a mission-financed effort) has similar potential.

Greater attention to training of individuals who will in turn train others will multiply the long-term outreach of FFGI. The production and distribution of slide-tape and video-tape lessons and presentations will similarly extend the Institute's outreach and will make training programs more effective and more efficient.

The Postharvest Documentation Service (PHDS) has the potential for being of great value in extending and solidifying the impacts of other FFGI outreach efforts. It has the potential for improving the efficiency with which the efforts are accomplished. It clearly merits further encouragement and increased efforts toward expansion of the data base. At the same time, alternative means for putting the "listings" part of the output "on-line" should be explored.

14. Evaluation:

Methodology: An In-Depth Review was conducted from June 11-14, 1986, in Washington, D.C. and Manhattan, Kansas, of KSU/Food and Feed Grain Institute (FFGI) USAID-supported activities under project 931-0786. Purpose of this comprehensive evaluation, convened at the request of USAID by the National Science Foundation, was to assist AID in determining the future direction and magnitude of the project and to advise AID regarding its extension.

The scope of work called for discussion of the following:

- "1. To determine the effectiveness of project design in contributing to the broader objective that is to increase the quantity and quality of food in cooperating LDC's.

2. To examine the methodologies or mechanisms used for completing the outputs.
3. To highlight unforeseen internal or external factors that have specific impacts on postharvest grain systems.
4. The successfulness of identifying technical or scientific matrix that are common to LDCs or the specific region - "Common Theme Research."
5. The successful effort to transfer appropriate technologies, taking into consideration specific socioeconomic, political and ecological situations.
6. The successful efforts of transferring research concepts and training programs to LDC situations on improving their technological infrastructures and to generate national motivation.
7. Should alternative mechanisms be addressed to disseminate research data and information to LDCs?
8. To consider alternative avenues of exchanges with international organizations such as GASGA on international research and problems related to postharvest grain systems.
9. Constraints and suggestions for developing Costa Rica University the Regional Research Center for postharvest grains systems.
10. Prospects and opportunities for future project design."

The Evaluation Team was briefed in Washington on June 11 by NSF staff members Irwin Pikus and Mildred Bosilevac. During the visit to Manhattan, Kansas, June 12-14, the Team examined all major activities performed by FFGI under the Cooperative Agreement, including technical assistance, research, on-campus training, in-country training, library and information systems and "other activities," including GASGA, CIGRAS and SEARCA. Discussions were held with FFGI staff, University administrators and USAID staff covering each of these areas of work and tours of facilities were provided to acquaint the team with physical facilities available for project use.

The team was comprised of the following four individuals, each of whom has experience in post-harvest loss-reduction activities and considerable prior knowledge of FFGI programs:

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KSU staff and administrators were serious and generally helpful to the review team. The review process did not, however, proceed as efficiently as it might have. Not all of the presentations were as effective as they might have been. Some of the more important background materials were not available to the reviewers prior to oral presentations. The voluminous material which was supplied, prior to and over the course of the review, was not summarized in a way such that pertinent program details and results could always be readily identified. The repetitious nature of material in the documents received raises questions as to whether all of the paper work generated by the project is necessary. The project director should consider ways by which reports can be streamlined and undue duplication avoided.

The review team originally agreed to a three-day review format--a day in Washington and two days in Manhattan, Kansas. FFGI was expecting the activities at Manhattan to extend over three days and had scheduled events accordingly. Some last-minute rescheduling was effected and most team members stayed on in Manhattan for a third day of interviews and examination of file materials.

15. External Factors:

External factors affecting the KSU contract include the following:

1. The demand for FFGI services (technical assistance, training, research, documentation) by missions and USAID/Washington continues to grow. Given the apparent critical need for these services, continued in-

creases in demand may be anticipated.

2. Demands upon FFGI expertise come from beyond as well as within the scope of the Cooperative Agreement. Budgetary constraints faced by S&T/AGR may make the solicitation of support from "outside" sources a key factor in maintenance of FFGI's critical mass of expertise in the post-harvest realm.
3. A reduction in 1982 of \$1.4 million in funding allocations from the original \$5.6 million budgeted for the five-year project has occasioned the need for a sharp reduction in program activities. Support for SEARCA and for graduate research assistants have been the major casualties.
4. The emergence of the Asociacion Latinoamericana de Postcosecha de Granos (ALAGRAN) presents an excellent opportunity for exchange of information and coordination of technical assistance and training activities in Latin America.

16. Inputs:

In addition to

FFGI's professional staff is highly experienced, capable, motivated to provide first-rate service, under the Cooperative Agreement and large enough to constitute a critical mass capable of meeting most project demands without resorting to assistance from outside consultants. Staff resources available for conduct of training and technical assistance are particularly impressive. Fewer resources have been available for research, partly because research was not a sanctioned activity during the earlier years of the Cooperative Agreement and because shortfalls in project funding allocations in 1982 cut heavily into support for graduate research assistants.

The staff of the Institute is backstopped by additional capable staff from the various academic Departments of the University, including Economics, Entomology, Agricultural Engineering and Grain Science and Industry. MSU has

the country's only Grain Science Department--a uniquely valuable resource, both in terms of highly trained staff and in its research and instruction facilities. Unique as well are the complementary research and training in the grain sciences under way at the nearby American Institute of Baking and the U.S. Grain Marketing Research Laboratory. The presence of all of these resources has made Manhattan, Kansas a world center of post-harvest scientific and educational activity.

The transfer of research and training facilities located on Browning Avenue in Manhattan, on the outskirts of the campus, to another site on Kimball Avenue was mandated by the University Administration soon after development of the original site on Browning Avenue was undertaken. While the new site will be as adequate as the old one once it is fully developed, the Administration thus far has failed to provide promised funding for relocation or replacement of affected buildings and equipment. In the meantime, partial development of the new site has been accomplished but most facilities and associated project activities remain at the old location. The inability of FFGI to consolidate these USAID-supported facilities at a single location is hampering the conduct of both research and training. An early resolution of the problem is urged.

The Postharvest Documentation Service is now fairly well established. Its ability to respond to client requests for hard-copy materials has been bolstered by acquisitions which have grown at an increasing rate during 1983 and early 1984. The size of the file is still quite modest, however. Plans to develop on-line computerized access for users of the system will not be fulfilled at present levels of funding.

Interpretation and translation capabilities and performance have been upgraded with the presence of a staff linguist and local hiring of interpreters for short courses. Foreign language capabilities of the technical staff are

strongest in Spanish, but on the whole are limited.

17. Outputs:

The reviewers recognize that post-harvest problems being addressed are of enormous magnitude and are not susceptible of short-term solution. Post-harvest losses are a significant problem even in the developed nations. Their solution in the LDCs will require a concerted effort over a very long period. While the project has been a significant one it has not been provided with sufficient resources nor have LDC cooperators had sufficient resources to assure rapid and widespread success. One of the key assets of the project, however, has been the persistence, building as it has on work which commenced in 1967, of directed activities, a feature not found often enough in assistance efforts. It is a feature which clearly merits preservation. At the same time, accountability could be strengthened through increased attention to followup of induced changes in host-country post-harvest systems.

1. Technical Assistance:

Evaluations of technical assistance activities as called for in the Project Paper (but not in the Cooperative Agreement) have not been carried out. No information was available to the review team on mission evaluation of either TA or training activities carried out by the Recipient. Nor are the records of these activities provided by the Recipient as complete and as timely as they might be. Trip reports reportedly have at times been slow in reaching Washington and the incidence of Technical Assistance Reports which provide a more detailed documentation, where appropriate, of assistance efforts has declined markedly. Volume of the latter was 19-20 per three-year period during 1968-76, 13 during 1977-79 and only 8 during 1980-82. Additionally, nine Technical Assistance Reports dating as far back as 1977 are listed as being "in-progress;" these should be completed or removed from the listing. The assignment of TA numbers well in advance of the completion of these reports seems a bit

presumptuous.

2. Research:

Research is clearly the weakest segment of the project and understandably so in light of its former discouragement by AID/Washington. Funding permitting, substantial problem-solving research thrust should be developed in support of the technical assistance and training programs.

The team is in close agreement with the apparent new emphasis by AID/Washington on research as an integrated component of technical assistance and training programs. FFGI also concurs in the need for increased attention to such research activity. Research areas should be chosen, however, with care. If not already in place, formal procedures should be established for reviewing project proposals, procedures requiring at minimum representation by each of the academic departments involved in each proposal.

Several of the FFGI projects (the number underway has ranged from 17 to 20 since FY80-81) appear to be rather high-risk, long-term efforts. Shorter-term projects applied to specific host-country needs are more closely in line with overall project goals. The Review Team lacked the time required for a deliberate, project-by-project analysis of past, present and prospective research activities of the FFGI. The comments to follow reflect the Team's tentative consensus on some of the appropriate research directions.

The Indonesian project involving natural air drying of rough rice is an example of problem-oriented research with high potential payoff. There is merit in adapting on-farm driers to local conditions but probably not in research aimed at further efficiency improvements in the basic concept. In-country applied research projects on quality changes during storage, on use of indigenous fuels for drying and on improved marketing systems are especially important and should receive prompt and significant attention. Supporting

research such as computer simulations of physical and economic systems and development of engineering data bases applicable to LDCs should be pursued, perhaps most logically with separate sources of funding. In all cases, attention needs to be given to integrating research with technical assistance and training and to coordination of research projects to achieve goals which are beyond the reach of a single discipline.

Graduate research assistants were the first to go as funding allocations were reduced in 1982. A cut of \$1.4 million, two-plus years into a five-year budget of \$5.6 million, represents a reduction of 25 percent over the life of the project, 46 percent over the remaining life, and was of course not easily absorbed. It is understandable but unfortunate that research activities were especially hard hit by the reduction. Fulfillment of the CIGRAS/Costa Rican mandate requires that more rather than less research be undertaken. Efforts should be expended toward extending research capabilities with additional outside sources of funding. Plans for collaborative research are commendable. Existing contacts (e.g., CIGRAS; IHMA in Honduras; CLSU, UP and IRRI in the Philippines; and previous short-course collaborators) should be exploited and new ones developed not only for furthering research goals but for the TA and training coordination benefits which such contacts can provide.

3. Training:

Training is a strong and generally effective activity. Two members of the review panel who have had previous contact with the summer short course noted improvements which have been made over time. Lesson plans are kept current for repeat sessions. Computer exercises which were clearly too advanced have been replaced, for example. Social activities are also planned for the participants. Another improvement is the addition of a tri-lingual assistant who lives in the dormitories with the participants and can help them in overcoming adjustment problems.

Detailed student evaluations of the current short course at KSU make it clear that participants are pleased with the training they have received. In-country courses are tailored to suit local needs. A total of 11 of these courses have reached 241 participants since FY 1981. Based on reviews from a recent course in Peru, the results seem to be favorable. Additional attention needs to be given to evaluation of these efforts, however.

The present orientation is toward supplying trainees with basic analytical and managerial tools for their own professional use. Over the longer term, LDCs must acquire their own training capabilities. Training of trainers is a particularly appropriate way to encourage the diffusion of project benefits and should receive additional emphasis in future project design. Training plans should be left with the graduates at the conclusion of the course. In this connection, there is a critical need for a "train-the-trainers" manual which presents the basic material in lesson-plan format and which spells out the steps to be taken in the conduct of such training. The course approach should be participatory rather than lecture. Personnel with experience in modular training formats should be utilized in the development and presentation of such courses. Regional trial runs should be conducted to assure that the materials are effective in each cultural setting.

Increased attention should also be directed toward reaching the private sector, including both marketing middleman and farmer participants. Larger numbers of these participants can be reached if in-country training as opposed to on-campus courses is emphasized.

Slide-tape and/or video-tape training sets covering the basics of postharvest grain management, in English, French and Spanish, should be produced. Topics which should be considered include: "Common Stored-Products Insects," "Rodent Control," "Management of Stored Grain," "Drying of Grain" and

"Moisture, Mold and Mycotoxins." Production of at least three such sets per year during the life of the contract should be expected. In addition to their obvious uses in FFGI training activities, these sets, along with implements of current technology appropriate for LDC use, should be left with host countries where they will remain available for subsequent use. Most of the basics can be presented via this format, freeing FFGI personnel to give attention to more specific kinds of training and TA problems.

Microcomputers are beginning to gain considerable acceptance in the LDCs and are clearly the wave of the future in countries lacking resources for purchasing and operation of main-frame computing equipment. Field applications of desk-top microcomputers to practical problems in the areas of economics, engineering and entomology should be expanded. There are many appropriate uses in both TA and training.

4. Library and Information Services:

The Postharvest Documentation Service (PHDS) provides a data base of materials covering all phases of harvesting and postharvesting activities. On request, the service provides document acquisition lists, subject bibliography searches and hard copies of documents to clients in the LDCs and elsewhere. PHDS provides unique and potentially very valuable services which clearly merit continued support.

Since 1979, documents collected and processed total 5,344, a rather modest number considering that one Review Team member alone has in excess of 15,000 documents in his personal collection of materials on stored-product insects.

It is suggested that, to speed the process of document acquisition, a serious effort be made by the PHDS staff to obtain reprints from FFGI staff members for inclusion in the system. The stored product entomology section within the KSU Entomology Department has extensive holdings on insect pests of grain which have not been added to PHDS. The PHDS staff should make

arrangements to borrow one set of these files at a time. Such efforts will require additional labor, but the effort will greatly expand the current rather limited holdings of the service.

The uniqueness of the subject area requires specialization on the part of the PHDS management, probably necessitating that the service be located at a center of subject expertise such as KSU. On the other hand, the retrieval of bibliographical information might best be part of a centralized and on-line service such as AGRICOLA. The proliferation of small, specialized services is a handicap to access and is likely to be expensive relative to more centralized alternatives. The potential costs and benefits from association of the retrieval service with an existing on-line service should be explored.

Office files on country conditions and needs should be updated and expanded. An important resource is being lost when little more than official trip reports are available to document past experience in host countries. In some cases the latter are not even available. Travelers often return with publications, maps and the like which should be preserved for future reference. Travelers should be encouraged to purchase with project funds country- and area-specific materials which would be of future value to the project.

A centralized file of 35mm transparencies documenting postharvest problems and successes has potential for becoming a valuable resource for the development and updating of slide-tape sets. FFGI is encouraged to expand the collection and use of these materials.

While a debriefing for returnees from overseas assignments, during FFGI staff meetings, is certainly a useful activity, there are times when a formal seminar, open to the University community at large, would be appropriate. Occasional seminars, involving either Institute staff or visitors, would strengthen ties between the Institute and the academic departments of the

niversity, ties which will become increasingly important if research is to be given additional emphasis.

More efforts should be made to maintain contact with trainees and to track their professional progress. These trainees are the core of what is becoming an international cadre of post-harvest specialists trained at KSU. A newsletter published perhaps twice yearly would be helpful in keeping graduates informed of FFGI activities, in updating them on new developments in post-harvest technology, and in enhancing their interest in keeping KSU updated on what is happening in the field.

5. Other Activities:

A major strength of KSU efforts has been the generally careful attention given to the appropriateness of recommended technologies. Available evidence indicates that major efforts have been directed toward assessing local needs and resource endowments in the design and implementation of research, training and technical assistance efforts. Economic realities have been more carefully accounted for than have social and cultural variables, although the Review Team is not aware of specific resulting deficiencies.

Participation in GASGA, SEARCA and in the Costa Rican and Honduran (the latter mission-funded) collaborative activities are commendable examples of efforts to exchange technical fundamentals and insights into local conditions and requirements. These exchanges should be continued and expanded upon. It is apparent that only limited progress has been made toward development of the regional center in Costa Rica; this project needs additional attention if its considerable promise is to be realized.

Recipient should explore the potential for enhanced collaborative relationships with other agencies such as the constituent research centers of IRIAR, individual missions, FAO, IBRD, the regional development banks, USDA, the RSP's and private consulting firms. It is appropriate that USAID missions be

ected to participate more in the funding of project activities. The Honduran project is an example of one such major effort. Support such as has been received from FAO, World Bank, Care and Peace Corps is mutually beneficial and should be expanded upon. Participation in GASGA is a most worthwhile activity and ties with this organization should be continued. Opportunities for other more direct kinds of collaborative activity, especially in research, should be progressively searched out.

7. Purpose:

Purpose of the project as stated in the Project Paper is "to improve the capability of small farmers, agribusiness, and government agencies in cooperating countries in the design and implementation of improved postharvest systems for cereal grains and pulses." This basic purpose for AID-supported FFI programs predates the current Cooperative Agreement and is a well-accepted focus for FFI activities. The project purpose is to be achieved through "(1) improving the FFI's institutional capacity to provide assistance in dealing with the problem [postharvest losses of cereal grains and pulses]; and (2) applying the FFI's expertise through outreach activities."

The main thrust of project activities has fallen under number (2), above. Improvement of institutional capacity has occurred more through experience gained by Institute staff than through activities designed specifically for the purpose. Additional emphasis should be placed on the institution-building action in the extended project. Specifically, there should be explicit support for short-term, research directed toward specific and critical problem areas where probability of substantial payoffs is high. Support for such applied research should be aimed directly at solving critical problems and at strengthening recipient's capabilities to carry out, in the most efficient and lightened manner, its technical assistance and training mandates.

The extended project should also charge FFGI with identifying appropriate measures of project success and of applying these tests at appropriate intervals during the life of the new project. More on this topic is found below in the section on "Special Comments or Remarks."

Attention should also be given in the design of the extended project to finding ways of streamlining the scheduling and coordination of training and technical assistance initiatives. Common-theme research, which should be a key aspect of the new research thrust, will help in identifying outreach approaches which require a minimum of tailoring for specific conditions. Preparation of slide-tape and video-tape training presentations will reduce the lead time needed to meet requests for training sessions. Increased emphasis upon educating locals who will in turn train their countrymen will reduce lead time to the extent that those being educated are expected to make many of the adaptations to their own local needs and conditions.

Finally, project management in Washington and project direction in Manhattan should explore ways of streamlining project administration and implementation so as to enhance FFGI's planning abilities without impairing Washington's oversight abilities.

19. Goal-Subgoal:

The basic goal of the present project is the enhancement of the quantity and quality of food grains and pulses available in cooperating LDCs. The goal is to be achieved through assistance aimed at reducing postharvest losses occasioned by substandard handling, storage and marketing systems.

The Review Team concurs in the appropriateness of these objectives. While the precise magnitude of losses is unknown, it is most certainly very large relative to resources expended toward finding solutions. The Team also agrees with the assessment of the December, 1979 project reviewers who stressed that the goal must be one of finding economically feasible means for achieving loss

reductions. We would add social and cultural acceptance to their economic caveat. There is a clear implication for multidisciplinary conduct of Institute functions.

Finally, the Review Team agrees with the conclusion of the 1979 reviewer that the "goal indicators" or measures of project achievement found in the project paper are generally susceptible of quantification only in a case-study context and that the incidence of acceptance of recommended practices may be more appropriate general measure. The implications for project design implementation are again clear.

20. Beneficiaries:

Ultimate Project beneficiaries are LDC farmers and consumers of grains and pulses. Others who will benefit, in many cases even more directly, include LDC marketing intermediaries; government educational, research and marketing personnel; and institutions and government policy makers.

It should also be recognized that benefits will accrue to the United States. Staff of FFGI will gain experience which may be transferred in turn to their domestic students. Moreover, students may participate directly in project-sponsored research activities. Finally, the project provides a clear potential for the improvement of international relations and thereby for enhancement of prospects for world peace.

21. Unplanned Effects:

The demand for Institute services has increased in the face of a sharp reduction in funding allocations from USAID. Resulting loss of graduate research assistants and support for SEARCA have had direct effects on the programs and indirect adverse effects, because of their complementary nature for all Institute functions.

Existence of FFGI may have had some part in the attraction of t

International Grains Program to the KSU campus and of the American Baking Institute to the City of Manhattan. In any case, these activities are significantly complementary with the activities of FFGI.

22. Lessons Learned:

The loss, mid-term of the project, of a major part of budgeted funds underscores the need for flexibility in project management and for diversified sources of project funding and of the desirability of avoiding longer-term research commitments.

7. Special Comments or Remarks:

No evidence was found of adverse social or cultural effects from project activities. Nor is there indication that much attention has been given these potential effects either in project design or implementation. Increased attention to such factors is probably warranted. In particular, consideration should be given to the effects of project activities on women. Inasmuch as women in many developing nations carry out the preponderance of post-harvest activities, it is imperative that they be considered in the project design, both in terms of project effects and of their being reached by training efforts. FFGI is fortunate in having representation of women as well as of ethnic minorities in its professional staff; opportunities abound for their effective employment in USAID-sponsored activities.

Means of verification of project achievements as outlined in the Project Paper are generally unrealistic and in any case have been attempted only marginally by the Recipient. In fact, the Cooperative Agreement does not charge FFGI with designing or implementing a program for verifying program effects on grain losses. Assessment of post-harvest losses remains a very imperfect science. Evaluation of the results of FFGI programs demands that more attention be given both to finding better ways to assess losses and loss reductions attributable to project activities and to applying the methods in field studies. In the meantime, USAID/Washington should seek mission evaluations of the effectiveness of Recipient's field activities.

FFGI too must have a direct role in the evaluation process. Quantitative measures of project output are the most convincing evidence of productivity but are of course not always readily available. Increased attention should be given to monitoring loss estimates and other measures of project results, but where such estimates are lacking or incomplete, case-study examples of success can and should be reported.

Emergency requests for technical assistance and training should not be unexpected, but development of an early warning network by cultivating closer ties with missions and with other post-harvest professionals will assist FFGI in planning future activities as well as in anticipating shorter-term needs. Recipient is encouraged to maintain increased contact with missions, within guidelines set forth by AID/Washington, with the aim of enhancing efficiency and quality of response to mission needs. In this connection it seems reasonable that Recipient should be provided access to the CDSS filed annually by each mission.

Closer cooperation between FFGI and USAID/Washington should be a goal. Recipient has been tardy at times in submitting activity reports to S&T/AGR. It is imperative that the Project Manager have timely results of all project activities. Such reports are essential to effective project oversight in Washington. The value of trip reports and other evaluative instruments which go routinely to the project manager is diminished if the reporting is tardy. At the same time, FFGI and USAID should explore ways to make reporting procedures both simple and effective. One of the problems faced by reviewers during the present evaluative exercise was the lack of a single comprehensive report of project accomplishments. A revised-format report for fiscal 1983, delivered to reviewers near the close of the review, is a big step in the direction of summarizing annual activities in a meaningful way. Inclusion of a list of published materials, for example, was a highly beneficial feature of the revised report. The list should be formatted according to standard citation procedures, however, to clearly highlight publisher, date, authorship and precise title of the work. Journal articles and other external publications growing out of project activities should be cited along with graduate theses and other in-house reports. Failure to report publications will result in failure to be credited

or output of research or other project activities.

Development of slide-tape or video-tape documentation of what FFGI can do or developing countries would be extremely helpful. Such documentation should include examples of success stories and should be designed specifically for presentation to host country officials, USAID personnel and potential funding agencies.

The July, 1963 folder describing the FFGI/USAID project should be more widely distributed. To date, of the 3,000 brochures printed, 275 have been sent to AID Mission Directors and Rural Development Officers and 500 to AID/Washington. An additional 225 have been mailed out in information packets in response to requests. Visitors and staff on TA missions have taken others. About 2,000 apparently remain; these should be sent to previous trainees, former students and to other universities (U.S. and overseas) which may have an interest in these programs.

The review team believes that FFGI is selling its accomplishments short. Increased attention to reporting of progress will be helpful not only in justifying USAID-supported activities but will provide an improved basis for seeking funding from other sources.

Appendix A
Team Itinerary
11 - 14 June 1984

1 June 1984
9:30 a.m. Review Team convened at National Science Foundation to meet with NSF staff and AID officials and to review Scope of Work

2 June 1984
8:30 a.m. Review Team meeting with FFGI staff
Review of agenda
Historical review of FFGI by Dr. Deyoe

9:30 Tour of Dept. of Grain Science & Industry, and the Stored Product Research Section of Entomology Dept.

10:45 Meeting with Dr. John Dunbar, Dean of Col. of Agric.

11:30 Meeting with Dr. Duane Acker, Pres. of KSU and member of BIFAD

12:00 p.m. Luncheon meeting with Department Heads associated with FFGI (Deyoe, Grain Science; Manuel, Economics; Spillman, Agri. Engineering)

1:15 Review of Technical Assistance Activity (Borsdorf, Chung, Deyoe, Haque, Mills, Phillips)

3:00 Review of Research (Increase & Maintain Technical Capabilities Activities) (Burroughs, Chung, Deyoe, Haque, Mills, Phillips, Reed, Wright)

5:00 Visited field research facilities on Browning and Kimball Aves.

3 June 1984
8:00 a.m. Review of On-Campus Training Programs (Borsdorf, Haque, Reed, Wright)

10:30 Review of In-Country Training Activity (Burroughs, Deyoe, Haque, Reed, Wright)

1:15 p.m. Review of Library & Information Systems (Schenck-Kamlin, Peters, Reese)

3:00 Review of Other Activities (GASGA/CIGRAS/SEARCA) (Deyoe, Hugo, Phillips, Reed)

4:45 Review Team meeting

14 June 1984

8:00 a.m.

Final meetings with selected FFGI Individuals

10:00

Review Team meeting
Work on sections of the report

1:30

Visited Departments of Agricultural Economics,
Entomology and Grain Science & Industry
Worked on sections of the report

Appendix B
Personnel Involved in Evaluation

USAID

Dr. John M. Yohe, Agronomist, Chief, S&T/AGR/P
Dr. Raja Jaffan, Project Manager, S&T/AGR/P

University Administration

Dr. Duane Acker, President
Dr. John Dunbar, Dean, College of Agriculture
Dr. Charles Deyoe, Director, FFGI and Head, Grain Science
Dr. Charles Spillman, Head, Agricultural Engineering
Dr. Milton Manuel, Head, Economics

Food and Feed Grains Institute

	<u>Time</u>
Dr. Cornelius Hugo, Coordinator	.7
Dr. Roe Borsdorf, Ag. Economist	1.0
Dr. Rosemary Burroughs, Mycologist	**
Dr. Do Sup Chung, Ag. Engineer	.4
Ms. Kathy Foster, Linguist	.6
Dr. Ekramul Haque, Ag. Engineer	.8
Dr. Robert Mills, Entomologist	**
*Dr. John Pedersen, Entomologist	.2
Dr. Richard Phillips, Ag. Economist	.5
Mr. Carl Reed, Agronomist	.2
Ms. Donna Schenck-Hamlin, PHDS Coordinator	1.0
Dr. Valerie Wright, Entomologist	1.0
Ms. Denise Baumann, Clerk-Steno II	1.0
Ms. Barbara Peters, Word-Processor II	1.0
Ms. Rose Mary Reese, Clerk III	.8
Mr. Maitri Naewbanij, Graduate Assistant	.5
Mr. Pacheco Reyes, Graduate Assistant	.4

*Participation in annual GASGA meetings prevented Pedersen's presence at the review.

**No current Institute appointment.