



END-OF-PROJECT EVALUATION
THE FARMING SYSTEMS SUPPORT PROJECT
IQC CONTRACT No. PDC-1406-I-00-7007-00

PREPARED FOR:
USAID/S&T/AGR

PREPARED BY:

Albert L. (Scaff) Brown, Team Leader
James A. Chapman, Agricultural Economist

CHEMONICS INTERNATIONAL CONSULTING DIVISION
2000 M Street, N.W., Suite 200
Washington, D.C. 20036

February, 1988

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EXECUTIVE SUMMARY

This document presents the results of the End-of-Project Evaluation of the Farming Systems Support Project (FSSP). The main purpose of the evaluation is to analyze the accomplishments of the first phase of FSSP since the mid-term evaluation was carried out in June, 1985. Specifically, this document assesses three things: (1) the project's compliance with the objectives stated in the original project paper; (2) the tangible and intangible results that influence AID field missions and host country institutions implementing farming systems research and extension (FSR/E) programs, and (3) the managerial and technical effectiveness of the support institution in providing technical assistance, training, networking and reporting under the terms of the project paper and cooperative agreement.

Project Goals

The goal of the Farming Systems Support Project was to strengthen LDC agricultural research and extension programs in order to increase the productivity, income, and quality of life of small farmers. The project was designed to provide technical assistance to missions and LDC agricultural research and extension programs for the design, implementation, and evaluation of farming systems projects. These projects aim to facilitate the development and transfer of new technology appropriate for the small or limited-resource farmer, while at the same time building institutional capacity within those countries through training and networking. The stated purpose of the Cooperative Agreement was to develop, strengthen and expand the capacity of the University of Florida, the recipient, and collaborating institutions (the Support Entities) to provide technical assistance, training and guidance to FSR/E programs in developing countries.

Mid-term Evaluation

The external mid-term evaluation contained a long list of recommendations for modifying the objectives and activities of FSSP. The principal recommendation, which was both implicitly and explicitly contained in the detailed activity-specific recommendations, was that the FSSP core staff and the various stakeholders within AID develop a consensus as to what objectives and strategy should be followed during the final years of the project.

Attempts at consensus-building failed to provide a strategy for future project activities acceptable to AID. As a result, AID decided to modify the project activities, to severely reduce project funding, and to terminate the cooperative agreement as scheduled at the end of 1987.

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Accomplishments

Despite its inability to adequately address the needs and concerns of AID/W, the project did produce a number of potentially useful products and support a number of processes that may serve to influence the direction and nature of farming systems work over the coming years. These included:

- o The implementation of several training courses and workshops in the United States and abroad, including: an introduction to the farming systems approach, three-week courses on farming systems methods and practice, and courses treating special farming systems topics in greater depth. Course quality was initially weak, but improved substantially as the trainers gained experience and better training materials were developed.
- o The preparation of training manuals and other materials to be used as aids and guides in developing and presenting the training courses. The materials are generally of good quality. Future training capability will be limited by the availability of trainers with prior experience in farming systems work who can effectively select and present the materials.
- o A limited amount of technical assistance in project design and evaluation. The quality of assistance provided was generally considered favorable by missions, though the demand for this service was considerably less than originally anticipated.
- o The establishment of a Support Entity Network to help provide technical assistance and training. This network consisted of 21 U.S. universities and four consulting firms. FSSP also participated substantially in the development of a subject area network (crop-livestock interactions) in West Africa, and provided support to the West African Farming Systems Network in trying to help WAFSRN select leadership and establish a home base.
- o The development of a number of publications, including the FSSP Newsletter (circulation about 5000 worldwide), two internal network newsletters, and a series of networking papers on technical topics in farming systems. These publications kept network members and others informed of current events, field implementation experiences of practitioners, and advances in methodology.
- o Through subcontracts with Kansas State University and Michigan State University, the publication of an annual annotated bibliography of literature dealing with farming

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systems, and support for the development of a statistical package for the design and analysis of on-farm agronomic experiments (MSTAT). The project also established within S&T/DIU a documentation center for farming systems literature.

Lessons Learned

Work in a poorly-defined subject area, such as farming systems, was, and continues to be, inherently risky. Much is left open to interpretation, and difference in views and opinions are commonplace and not easily reconcilable. It does, however, seem that this type of work is appropriate for a science and technology organization whose objective is to support the advancement of the state of the art of development methodology.

A key factor here is the mechanism chosen for contracting and managing the project. The cooperative agreement chosen implied a sharing of implementation decisions by AID and the cooperators on a more or less equal basis. The staffs of both the cooperators and the sponsor must be flexible, patient and able to work together well. In the case of FSSP, the relationships established between Florida and AID were conflictive almost from the beginning. In a sense, Florida treated the project like a grant which would have given the grantee wide latitude in deciding courses of action, while AID treated it as a contract, retaining more decision-making power for itself.

There are two ways in which this situation possibly could have been avoided. First, more care should have gone into the design of the project so that responsibilities, roles and relationships were more clearly understood. A clearer emphasis on Africa, if that were to be the case, and greater participation in project design by the Africa Bureau would have been advisable. Second, greater care should have gone into the selection of a cooperator. The cooperator should be sympathetic to the difficulties inherent in activities in an underdeveloped subject area and willing to work closely with AID to find mutually acceptable areas of work. In short, the cooperator needs to be client-oriented toward AID as well as toward the limited-resource farmer.

As stated above, farming systems is a poorly defined concept and probably will continue to be so for the foreseeable future. Different practitioners will continue to use different terminologies and place emphasis on different areas. There is no need to try to limit this diversity, as the concepts and learning are still evolving. What is central to the process of technology generation and transfer is the basic client orientation of the approach, and in this practitioners should persevere.

I. Introduction and Background

The purpose of this document is to present the results of the End-of-Project Evaluation of the Farming Systems Support Project (FSSP). The main purpose of the evaluation, as stated in the scope of work (appendix 1), is to analyze the accomplishments of the first phase of FSSP since the mid-term evaluation carried out in June of 1985. Specifically, this document assesses: (1) the degree of compliance of the project with the objectives stated in the original project paper, (2) the tangible and intangible results that affected AID field missions and host country institutions implementing farming systems research and extension (FSR/E) programs, and (3) the managerial and technical effectiveness of the support institution in providing technical assistance, training, networking, and reporting under the terms of the project paper and cooperative agreement.

Another purpose of this exercise is to assess the usefulness of FSSP accomplishments with a view toward future AID support for similar farming systems efforts.

A. What FSSP Was Supposed to Accomplish

According to the project paper, the goal of the Farming Systems Support Project is to strengthen LDC agricultural research and extension programs in order to increase the productivity, income, and quality of life of small farmers. The project aims to provide technical assistance to missions and LDC agricultural research and extension programs as they design, implement, and evaluate projects for the small or limited-resource farmer. At the same time, the project builds institutional capacity within those countries through training and networking.

The stated purpose of the cooperative agreement was to develop, strengthen and expand the capacity of the recipient (the University of Florida) and collaborating institutions (the Support Entities) to provide technical assistance, training and guidance to FSR/E programs in developing countries.

Over its initial five-year life, the project was expected to undertake and accomplish eight major activities:

1. Technical Assistance

At mission request and with mission collaboration, provide technical assistance for project design and evaluation, as well as for the resolution of specific problems during implementation of FSR/E projects. The development of a roster of FSR/E practitioners both in the U.S. and abroad would be a secondary outcome of this work.

2. Field Recommendations

Publish field recommendations based on knowledge gained through technical assistance in specific problem areas and through limited applied research, and distribute these recommendations to missions, LDC agencies, and practitioners.

3. Courses

Conduct 12 courses for LDC field practitioners and a like number of courses for policy makers, administrators, and educators in the principles and methods of farming systems research and extension work.

4. Regional Networks

Establish seven regional networks of FSR/E practitioners.

5. Workshops

Sponsor annually in each region a workshop whose theme and location would be determined by FSR/E practitioners in the region.

6. Newsletter

Publish a quarterly newsletter that reports the insights gained during technical assistance, the evaluations performed under the project, and the results of the regional workshops.

7. Bibliography

Publish and distribute an annual annotated bibliography.

8. Documentation Center

Establish, within S&T/DIU, a documentation center for FSR/E literature that will, upon individual request, provide copies of uncopywritten works not only during the life of the project, but after the project ends as well.

B. Summary Results of the Mid-term Evaluation

In June, 1985, a five-person team conducted a mid-term evaluation of the FSSP. That exercise, the results of which are summarized below, formed part of the information base used to undertake the End-of-Project Evaluation, which concentrates on events following the mid-term evaluation.

1. Activities

The FSSP, in response to the cooperative agreement, carried out several activities designed to further project goals and objectives. The activities involved technical assistance, training, networking, and state-of-the-art synthesis.

a. Technical Assistance

The FSSP was envisioned as a field support project which would take its guidance from USAID field missions and assist in design, implementation, and evaluation of projects involving FSR/E. The exact nature of the support would be determined by the missions, but it would be financed through mission "buy-ins."

FSSP's response to missions requests in this regard has, in general, been rapid and of good quality. However, the demand for activities of this type was much less than originally anticipated. According to AID records, from the time of project startup in September, 1982 through July, 1986, there were two mission buy-ins for project design, three for evaluation, and one for general technical assistance, for a total value of US\$249,641. The bulk of that assistance (four out of six buy-ins) was provided to missions in the Latin America/Caribbean region.

b. Training

Early on, training activities concentrated on domestic workshops, which introduced FSR/E concepts to U.S. university faculties and other interested parties. Twenty-one training courses were presented overseas; they were of high quality in Latin America, but variable in Africa. African courses were initially seen to be weak with regard to African content, relevance and quality, though significant improvements were made over time. The mid-term evaluation judged that FSSP was trying to do too many things in the area of training rather than a few things well.

c. Networking/Publications

In this area, FSSP was particularly successful in developing a network of professionals interested in

farming systems work. They were located in 21 U.S. universities and four private consulting firms (called Support Entities). The necessity of establishing such a group was dictated by the dispersed nature of farming systems expertise. It was used to mobilize resources for technical assistance and training as well as to communicate current events and experience. Of special importance was the Annual Farming Systems Symposium, which, while not directly an FSSP activity, provided a forum for the sharing of farming systems experiences in the U.S. and worldwide; it became, in fact, the single most important gathering in the world of farming systems practitioners.

Overseas networking at this point in the project was mainly exploratory, the major accomplishment being the establishment and support of an animal traction network based on an initial workshop in Togo.

FSSP publications, including three newsletters (one in three languages plus two minor ones), bibliographies, and the "Networking Papers" series, were useful and of generally high quality. However, they were seen as dispersing core staff effort and financial resources, thus lowering the overall performance of the project.

d. State-of-the-Art (SOTA) Synthesis

A number of problem areas and issues in farming systems were selected by FSSP core for examination and synthesis. However, the means and mechanisms to accomplish this were never clearly defined, and strategizing and priority setting was largely internal and subjective. SOTA output, mainly contained in issues of the newsletter, in networking papers, and embedded in training materials, needed improvement in its quality.

2. Organization and Management

FSSP consisted of a small core staff at the University of Florida complemented by support entities (SEs), a structure that evolved from an original project design which was vague in expected results and strategy. Decision-making regarding FSSP activities appeared to be centralized within the core group, often with minimum participation of AID, the SEs and the standing committees. Many SEs felt that they did not receive their fair share of opportunities to participate in FSSP activities. This mode of operation inhibited the building of a consensus regarding priorities and activities, especially with AID, which continually affected perceived project performance and relevance. The absence of a consensus on strategy resulted in misinterpretations and conflicting signals, and in a relationship between AID and the core staff that is best described as adversarial rather than collaborative.

From the inception of the project, problems on the AID side were evident as well. Initial expectations regarding the benefits/results of FSSP were probably unrealistic, given the prevailing view of farming systems as a solution to agricultural development problems. Responsibility for project management and guidance was dispersed among S&T Agriculture, S&T Rural Development, and the Africa Bureau, with no uniformity in strategy or purpose evident. This complicated communication and collaboration with the core staff at Florida, and engendered very high levels of frustration on both sides, to the point of severely reducing desire to collaborate.

3. Conclusions and Recommendations

Overall performance of the project as of the Mid-Term Evaluation was found to be uneven, ranging from poor to outstanding. In most areas, improvement came as the staff and closely collaborating individuals gained experience.

Certain difficult, unresolved problems tended to pervade all activities, fostering and feeding the adversarial relationships mentioned above. These were:

- o The lack of a consensus within AID and between AID and the other FSSP participants as to the appropriate role, responsibilities and activities of FSSP
- o The absence of a long-term strategy that would serve as a basis for determination of FSSP priorities and programs
- o The FSSP core staff's unilateral decision-making regarding project activities, given the lack of consensus and strategy

Based on these observations, the evaluation team put forth a series of 31 recommendations, some of which were supported by the analysis presented, while others appeared to be based on little or no expressed rationale. The key recommendation, which was expressed several times among many of the more specific recommendations, was for AID, the FSSP Core Staff, and the Support Entities to get together and forge a consensus leading to an operational strategy for FSSP, which would be manifest through the revision of the project design.

C. Some Additional Background

While the Mid-Term Evaluation Report was fairly comprehensive in scope and content, it did not provide much information about why the project evolved as it had. The following is an account pieced together from interviews with AID and FSSP staff, of some early events in the project's development

and implementation which seem to have influenced its success during its nearly five-year life.

1. Initial Uncertainty Regarding Project Focus

The idea for a centrally-funded project in support of farming systems work was conceived some time in 1980, just as the term "farming systems" was emerging as a new methodology for developing and transferring new technology to (mainly) small, limited-resource farmers. Although several discussions took place over the ensuing year, no consensus was arrived at regarding what such a project should look like, and so it was given relatively low priority.

In 1982, the Senior Assistant Administrator for the Science and Technology Bureau allocated funds to undertake and support agricultural research in Africa. It was decided in S&T that the approach that was to become FSSP would respond well to that purpose; the project paper, then, was rapidly developed and approved. The paper provided fairly clear guidance as to the types of activities to be undertaken, but very little guidance as to how the project would be structured and implemented. Therefore, a cooperative agreement was reached which allowed for flexibility in the development of institutional capacity and specified activities, similar to that normally allowed under a grant; but this arrangement would have more AID participation and control, not unlike that provided for under a contractual relationship.

Unfortunately, the project design did not respond well to the Senior Assistant Administrator's original intent, especially regarding the Africa focus. Rather, it was worldwide in scope, and emphasized support to missions and host country institutions rather than research. Only in passing did the project paper mention that the Africa Bureau would be the major recipient of support services provided by the project (see page 20 and appendix C of the project paper). Notwithstanding this vagueness of the project paper, Africa Bureau personnel understood the focus of FSSP to be on Africa and, accordingly, developed specific expectations for the project. Staff from the Science and Technology Bureau, meanwhile, viewed the project as global in intent, as did the University of Florida.

It was not until several months later, after the cooperative agreement had been completed and signed, that the Senior Assistant Administrator for S&T discovered that FSSP did not meet his original intent. Several attempts were made to reorient the project more toward Africa by upper management of S&T, apparently with limited success. Eventually, somewhere near the time of the Mid-Term Evaluation in 1985, funding for the project was cut back and a clear mandate for work in Africa was expressed.

The initial geographical division for FSSP was taken to be 50 percent Africa and 25 percent each for Asia and Latin America. By late 1983, FSSP had hired three core staff members, each with a technical and geographical responsibility. All were highly motivated, young social scientists with limited experience in farming systems and management of AID projects. While all three had substantial experience in Latin America, each had very little experience in Africa, and, except in one case, very limited knowledge of French.

2. Early Implementation Problems

Beginning in August 1983, after establishing the support network and hiring most of the core staff, Florida was requested to undertake activities in support of farming systems work in West Africa for which it was ill prepared, given the background and experience of its recently hired staff.

a. Mali

The first implementation problem occurred with the organization of an orientation in Washington, D.C., for a team of experts contracted to design a farming systems project in Mali. FSSP performance was severely criticized by AID staff members, both in memos and verbally.

b. Upper Volta

The second major problem was the implementation of a training workshop in Ouagadougou, Upper Volta (now Burkina Faso). This was a first attempt by FSSP to conduct training in Africa, and the core staff was relied upon heavily for both logistical and technical support. Although one outside consultant was brought in, this was insufficient to correct the problems with logistics, language, course content and Africa focus. AID/W severely criticized FSSP performance in handling the workshop.

c. Liberia

A third problem arose when FSSP was asked by the Africa Bureau to recruit and send a team to Liberia to undertake a rapid appraisal as part of a redesign of a follow-on FSR-type project then being implemented by Louisiana State University. FSSP initially balked at the assignment, claiming that a rapid appraisal by outsiders violated normal FSR procedures; the appraisal should have been done by the

implementing team. The request languished for several weeks before it was decided to respond.

d. Training Materials

In addition to the above problems, AID early on rather severely criticised the poor quality of the initial training materials Florida developed. In particular AID said they were not professionally done and that there was too much emphasis on Latin American examples, where Florida, as it happened, was most experienced. Again it appeared to be a case of hastily putting materials together to respond rapidly, rather doing a more professional job, which would have further delayed the response to training requests. Training materials with an Africa focus were not generally available at the time.

The significance of these early problems lies not with the events themselves, but rather with their effect on working relationships, particularly between FSSP core staff and AID/Washington. AID, especially the Africa Bureau, had high expectations regarding the expertise and training materials of farming systems, expectations the Florida group was not prepared to live up to. The very harsh criticisms caused Florida to become "gun shy" vis-a-vis AID/W, which resulted "de facto" in a decision to reduce efforts to develop a consensus with AID/W. Whether explicit or intentional, the decision was made that USAID field missions and host country institutions would become the key clients of the project, with the desires of AID/Washington assuming secondary importance.

3. The Support Entity (SE) Network

Once the Cooperative Agreement was signed in September 1982, the lead institution set about building a support network of institutions supposedly possessing interest and expertise in farming systems work. It was decided in mid-1983 to close off membership in the network, leaving 21 universities and four firms eligible to collaborate with FSSP. Members consisted mainly of lead institutions that had achieved this distinction by participating in the initial competition. All members of the support network signed Memoranda of Agreement, which allowed FSSP to use their services as needed in return for being kept informed of new developments and opportunities through periodic meetings and newsletters.

Although the MOA carried no guarantee of participation in project activities, many of the SEs developed expectations which went unrealized. This was due both to a lower than expected level of demand for technical assistance, and to the fact that the staffs of most of the SEs lacked appropriate field experience. Interest among most SEs in FSSP eventually waned, leaving seven universities and two consulting firms as the real

support group. The support itself was manifest through the participation of certain key individuals in repeated training and technical assistance assignments.

II. Response to the Mid-term Evaluation

Before the final report of the mid-term evaluation was issued, AID/S&T issued a Project Evaluation Summary (PES) (appendix 2), which generally agreed with the thrust of the evaluation, but stopped short of calling for collaborative re-design of the project. Instead, it called for a refocus, including arriving at a rationale and setting priorities for activities. Delivery would be keyed to West Africa and accomplished during the preparation of the 1986 work plan. But as the evaluation made clear, consensus-building via work plan development had not produced satisfactory results up to that point.

Specifically, the PES directed the FSSP core staff to:

- o Develop materials to support training in Africa, including information on economics of farming systems and a strategy for orientation of non-practitioners to the FSR/E approach
- o Limit project assistance to Africa, with assistance to other regions on a strict buy-in basis
- o Develop a strategy for addressing state-of-the-art topics over the remaining life of the project
- o Develop an explicit project implementation strategy that identifies key staff, their locations, and financial data on program activities
- o Develop an improved budgeting and financial management information system

The FSSP core staff provided two separate responses to the mid-term evaluation. The first (appendix 3) was a series of brief responses to a preliminary draft of the recommendations from the mid-term evaluation. The second, more formal response came in the form of the 1986 Project Work Plan (appendix 4). The plan claimed to reflect the views of a task group of the AID/S&T project management team, the FSSP core staff, and the AID/Africa Bureau.

The plan explicitly provided for training and networking oriented toward West Africa; it also presented a general strategy for the development of state-of-the-art activities to be followed up by a technical committee long-term plan for SOTA. Unmentioned was the development of an economics of farming systems training

unit, or training courses on FSR/E for non-practitioners (for example, administrators, policy makers, discipline-oriented educators). Also going unmentioned was an improved budgeting and financial management information system. In general, the sections of the plan that describe implementation appear to lack the detail and integration called for in the PES.

In a letter to the FSSP director in March of 1986 (appendix 5), S&T/AGR responded to the 1986 work plan. It stated that it had reviewed the plan with Africa Bureau representatives and concluded that the plan failed to meet minimum requirements. S&T then okayed the implementation of six activities upon AID approval of a detailed budget for each; and generally endorsed six other activities provided AID received and approved a revised work plan presenting the rationale and course of action for each activity, along with appropriate budgetary information. S&T rejected the use of AID funds for seven activities, viewing them as being of little or no value to AID.

The letter further stated that the FSSP core staff should not engage in activities called for in the cooperative agreement, which required action beyond the September, 1987; termination date of the agreement. Any further AID project support would be decided after an End-of-Project Evaluation was completed and renewed competition had taken place.

In December 1986, S&T reviewed its decision to discontinue FSSP after the current cooperative agreement (appendix 6) expired. It found that FSSP had some significant accomplishments to its credit in 1986, and suggested that additional time and funding were necessary to consolidate progress and assure pay-off to AID investment to date. As a result, the project was given a three-month extension to December 31, 1987, and an additional \$300,000 in funding. These funds, however, did not become available to FSSP until July of 1987, which forced the project to "borrow" from the University of Florida in order to keep activities going.

III. FSSP Accomplishments Since Mid-term Evaluation

As a result of several factors--the mid-term evaluation, directives from S&T in response to the 1986 work plan, and a reduction in core funding for 1986 and 1987 from a planned \$4 million to just over \$1 million--the size of the FSSP core staff was reduced, several activities were dropped, and resources were concentrated in fewer activities. The activities were designed to either capitalize on and consolidate previous work or to spin off to longer-term activities of other agencies.

Following is a summary of FSSP's activities and accomplishments since June 1985, broken down by category. The information is based on a review of annual and quarterly reports,

responses by selected support entity representatives to questions about strengths and weaknesses of the project (appendix 8), and supplementary information provided by the FSSP core staff.

A. Technical Assistance

Due to a less-than-anticipated level of demand and a significant reduction in resources available to the project, the technical assistance to AID missions declined substantially after June 1985. Only five missions were undertaken, all of which were located in Latin America and the Caribbean, and presumably were 100 percent funded by local AID missions.

The lack of demand for technical assistance other than training was due primarily to two factors. First, a number of missions cited the "buy-in" process as cumbersome and expensive. The view was expressed that mission resources were short and that they would like to see the centrally funded project pick up all costs. Secondly, by 1985 most West African countries where FSSP was to focus efforts had farming systems projects staffed by technical advisors. Thus, the need for additional services other than training was minimal. Two missions responded to an inquiry about the quality of technical assistance (appendix 11), rated it favorably generally but with some weak points.

B. Training

1. Training Courses

From June 1985, to the present (September, 1987), the FSSP either organized and presented or participated in 13 training courses, short courses, and workshops. The training consisted of three basic types, depending upon the level of prior knowledge and experience of the participants with FSR/E concepts and methodologies. These were:

a. Short courses (4-7 days), providing an overview of the basic concepts, philosophy and skills of FSR/E. Five such courses were presented, one in Latin America, two in West Africa, and two in the United States.

b. Longer, more in-depth treatment of methodologies and issues of FSR/E, taking approximately three weeks and extensively using the emerging training materials put together by FSSP. Two courses were held in 1986 in Gambia (in English) and Mali (in English and French). They covered diagnosis and problem definition, design, analysis and evaluation of on-farm experiments, and such special topics as institutionalization of FSR/E, links with commodity-focused research, gender issues, and analysis and research-extension linkages. During 1987, courses of this type were held for professionals from Niger, Honduras, Cameroon, Ivory Coast and

Guatemala, either in-country or at the University of Florida. In developing this type of course, FSSP drew considerably from CIMMYT's experience in East and Southern Africa, and included as trainers and resource persons people from West Africa, Asia and Latin America.

c. Specific topics or activities within the FSR/E framework. Two workshops focused on gender issues in FSR/E, one involving training of trainers. Two others, given to members of the Bean-Cowpea and Sorghum Millet CRSPs using buy-in funds, provided training on specific sub-topics, such as design and analysis; and organization and management of FSR/E.

The quality of the training programs improved considerably as more and better training materials were developed and the cadre of trainers acquired experience. The training units enabled more trainee participation through individual and group exercises, which reinforced underlying concepts. This was a major improvement over earlier training approaches which utilized mostly passive techniques, such as presentations and lectures.

The missions' evaluation of training courses presented during the past two years ranged from satisfactory to excellent. A review of evaluation reports from a sampling of FSSP training courses revealed a generally strong positive response from the trainees, with LDC trainees registering a stronger positive rating than domestic (US) trainees.

Typically, trainees favored direct participation in group activities (analyses, field practice) as opposed to lectures, slide presentations, and the like. It is also evident from the evaluations that one of the objectives of the training sessions was to test and improve the training units. In terms of criticism, there generally was a feeling that too much material was being presented with too little time for background reading and "digesting." Some aspects of FSR were covered in too much detail, while other more complex issues (e.g. statistics) received insufficient attention.

2. Training Materials

Among the project's major tangible products are sets of training materials which eventually resulted in marked improvements in the quality of training provided FSR/E practitioners and students.

By way of background, during the time the project began, there was much talk of farming systems but precious few materials available with which to teach not only philosophy but also the "how-to-do-it" nuts and bolts of FSR/E. The lack of didactic material explains in part why the initial training courses were less effective than those held later on.

Three types of materials were developed:

a. Slide-Tape Modules

The slide-tape modules represented FSSP's first attempt to quickly and cheaply develop visual materials which presented introductory material as well as some of the analytical techniques and processes germane to FSR/E. For the most part, these were developed at the initiation of project activities, and were used in FSSP's initial training courses and presentations. The modules reflected the prior experience and background of the Florida staff, with the majority of slides coming from Latin America. While these materials were appropriate for some purposes, they were not "stand alone" because they represented mainly passive learning and because they were not Africa-specific. At the time they were developed, however, they were state-of-the-art. Since then, the more participatory approach to training incorporated in the training materials has meant that reliance on the modules has declined, although many--especially the introduction to FSR/E modules--are still in use and being requested of FSSP by interested parties.

b. Training Units

In July 1986, two volumes of training units were developed and released by the farming systems network. They have been tested extensively in training courses, and, in response to constructive criticism and advancements in FSR/E scope and methodology, are in the process of being expanded and revised.

Volume I is entitled "Diagnosis in Farming Systems Research and Extension," and contains nine units. Each outlines one step in the diagnosis process, from putting together a multi-disciplinary research team to drawing conclusions from formal and informal surveys and developing an on-farm research program.

Volume II, "Techniques for Design and Analysis of On-Farm Experimentation," contains five units which examine test selection and design through analysis of experimental results. A sixth unit presents techniques for management and administration of a farming systems research and extension program at the field level.

The units are in loose leaf form so that material may be added or deleted as more is known. They contain guides for students which present basic concepts and then require students to participate in practice exercises, often in group situations. These are accompanied by notes for trainers, which are complemented by publications produced outside of FSSP for more

in-depth information on specific topics. No one volume represents a training course per se, but is meant to be used as resource material from which to prepare customized courses for the specific group or situation being addressed.

The intellectual material provided in the training units was not developed exclusively by FSSP. Rather, it represents the collective and individual thoughts and lessons learned by a broad group of farming systems practitioners. The major FSSP contribution has been the pulling together of the material, organizing and presentating it in an appropriate training format.

In general, the training units appear to be well-developed and useful in implementing training courses. Some significant gaps have been uncovered, namely a lack of material on economic analysis and crop-livestock interactions. These are being incorporated into the revised version. However, a problem with any materials is that they will become dated if not continually revised. There are a number of important subject areas relating to farming systems work which have not been adequately addressed, such as improved farmer participation in the process, linkages with policy analysis, and others that will be identified in the future.

Another problem is that the materials are not "stand alone" in the sense that people with limited knowledge of farming systems would be able to self-train or develop courses for others. In order to use these materials effectively, there must still be a significant amount of effort to build up a cadre of local trainers who can properly select materials and present courses to professionals involved in implementing the farming systems approach.

As mentioned above, the training units are being revised, with some modification of existing material, plus major additions of new material on crop-livestock interactions, economic analysis, and management and administration of FSR/E. The revised set of training units will be organized as follows and should be available in English and French.

- Volume I - Diagnosis of FSR/E
- Volume II - Design of On-Farm Experimentation
- Volume III - Analysis of On-Farm Experimentation
- Volume IV - Management and Administration of FSR/E

Selected portions of the materials have been translated into Spanish by ICTA and others in Guatemala, and into Portuguese by FSSP.

C. Networking/Publications

For purposes of this evaluation, a network is defined as a collection of individuals and/or institutions with interests and capabilities in a specific subject area, and with an organizational structure that facilitates interaction and communication among the network participants.

As part of its original strategy, FSSP undertook to develop what became known as the Support Entity (SE) Network, a collection of 21 U.S. universities and four consulting firms. Each SE signed a Memorandum of Agreement with the FSSP that served as a formal vehicle for subcontracts and funding for specific tasks. The activities of the SE network centered around a set of communications mechanisms, including: the FSSP Newsletter, two internal newsletters (On-Demand and On-Networking), the publication and distribution of a Networking Papers series of workshop reports and technical documents, and the Annual Farming Systems Symposium held at Kansas State University since 1981. The SE Network was, in turn, part of the broader population of farming systems practitioners and interested parties, which had no formal organizational structure but was served by FSSP principally through the Newsletter and, to a lesser degree, the Annual Symposium.

The Support Entity networking activities were established and functioning before the mid-term evaluation, and are discussed and evaluated in some detail in the Mid-Term Evaluation Report and in appendix 9. However, as part of the final evaluation process, a group of SE representatives selected by the FSSP Core staff was surveyed for their opinions on the strengths and weaknesses of FSSP, especially over the past two years. Of the 20 individuals contacted, 12 responded. The responses are contained in appendix 8.

In general, SE representatives gave high marks to the major outputs of FSSP, namely general networking of FSR/E practitioners in the U.S. and abroad, the newsletter, the development of training materials, and support for the Annual Farming Systems Symposium. They also felt that the SEs were underutilized, with the bulk of project activities being undertaken by the core staff or a few select individuals from the SEs.

The FSSP core staff at Florida considers the establishment and maintenance of the SE network a major accomplishment of FSSP. However, making it a closed network implied that there were many individuals and institutions in the network with no particular expertise or experience in farming systems work, while at the same time a number of entities with experience and expertise were left out. Most notable here are professionals in the IARCs and some LDC institutions in Asia and Latin America, many of whom had a major hand early on in developing farming

systems methodology. Thus, FSSP chose to ignore some proven professionals in favor of trying to build up expertise in the universities through training courses during the first years of the project.

Networking over the past two years has involved a continuation of previous activities, plus some specific efforts in West Africa.

In March of 1985, a workshop on animal traction was held in Togo. Out of this effort grew interest and support for an animal traction network, which was eventually formed as a sub-network of the West African Farming Systems Research Network (WAFSRN). In September, 1986, FSSP cosponsored a second regional workshop on animal traction in cooperation with the West African Integrated Livestock Systems Committee, a sub-group of WAFSRN. These "networkshops" brought together people with similar backgrounds and professional interests, and facilitated interchange of research results and ideas.

In March of 1986, FSSP helped organize and participated in the first meeting of WAFSRN in Dakar, Senegal. Agreements were reached for stronger bonds between the network and FSSP. With subsequent cuts in funding and level of effort, the major FSSP contribution has been the facilitation of non-USAID funding support for WAFSRN and help in establishing a home base and full-time network leadership.

In its networking activities in Africa, FSSP intended to organize around specific topics of interest, such as animal systems, on-farm experimentation, general FSR/E methodology, and training in African Universities. While significant progress was made on the animal systems theme, organization along other topic lines is still nascent or non-existent. There was some ambiguity regarding the on-farm experimentation focus, due to a preference by some AID/Washington officials for networking along commodity lines.

D. Synthesis and Analysis

One of the major weak spots of FSSP performance found by the mid-term evaluation team was the lack of a strategy to capture the essence of lessons learned and changes and improvements in FSR/E technique and methodology. In response to this criticism, FSSP charged its technical committee to come up with a strategy for synthesis and analysis. Such a strategy was to focus on comparative analysis of FSR/E experiences, determining which methods have been successful, which have not, and why. The effort did not call for the creation of special projects, but rather practitioners' synthesis of their own work.

The principal products of the synthesis/analysis process were the training units. As described previously, these units present the basic concepts and methodology of FSR/E, which are based on practitioners' experience and thought. The major topics synthesized in the training materials were crop-livestock interactions and the economic analysis of on-farm experiments.

Another example of synthesis done by FSSP was the preparation of a report for the Office of Technology Assessment of the Congress of the United States. The report provides an overview of farming systems methodology and philosophical underpinnings, as well as comparing FSR/E with the conventional model of agricultural research and extension.

In collaboration with the Population Council and the Ford Foundation, FSSP organized a set of case studies, which examined intra-household decision-making and the role of gender in FSR/E. The lessons learned have been incorporated into the set of variables used to diagnose problems in existing systems, and to design more appropriate research and extension strategies.

Finally, though perhaps not its specific intent and purpose, the Networking Paper Series contains a total of 15 articles authored for the most part by farming systems field practitioners (appendix 7). Among the topics dealt with are: implementation problems, rapid rural appraisal, lessons learned from a decade of on-farm research, on-farm trial design, draught animal systems, and farmer participation in FSR/E.

E. Other Activities/Products

A number of other activities of the FSSP are not easily classifiable into the above categories. For the most part, they responded to the needs of AID, the FSSP core staff, or the broader FSR/E network. Each is briefly described below.

1. MSTAT

MSTAT is a statistical package for on-farm experimental design and analysis, which has been developed by Michigan State University for use on personal computers. The FSSP signed a subcontract with MSU for development and dissemination of MSTAT, contributing a total of \$230,000. This financial support ended in 1985 with cutbacks to the FSSP budget. The MSTAT developers have offered several training courses and have continued refining the basic programs, which are now available in French and Spanish as well as English. The final report of MSTAT to FSSP is included in appendix 10. According to MSU estimates, MSTAT is currently being used by several thousand agricultural researchers around the world, including most bilateral farming systems projects in addition to the IARCs.

2. FSR/E Practitioner Biodata Base

To provide technical assistance to FSR/E, the FSSP developed a data base of farming systems practitioners, selected mainly from the faculty and staff of the support entities. The roster was used extensively by FSSP, AID, consulting firms and universities to identify candidates for both short- and long-term field assignments for farming systems projects. However, the data base ceased to be maintained after the mid-term evaluation due to the low priority and cutoff of funds by AID/Washington.

3. Farming Systems Project Directory

To encourage communication among farming systems practitioners worldwide, the FSSP began identifying projects with farming systems components being implemented not only by USAID but by other donors as well. The projects and programs were grouped by country and geographical region, and information was provided regarding the nature of the project, time frame, key personnel, and donor. A draft directory was printed and sent to all those who had contributed information. Again, the activity was suspended due to low priority given by AID Project Management.

4. Africa Orientation Books

FSSP, reacting to an apparent paucity of ready information for orientation of FSR/E technical assistance teams in West Africa, funded the University of Florida African Studies Center to produce orientation materials for Zaire, Burundi, Liberia, Burkina Faso, The Gambia, Sierra Leone, Mali and Rwanda. These materials are available in looseleaf notebook form from the African Studies Center at the University of Florida.

5. Guidelines for Evaluation of FSR/E Projects

FSSP also set up a task force to develop and field test a strategy for examining not only short-run projects but also longer-run institutional strengthening processes. This effort was a response to a perceived lack of a systematic methodology for evaluating FSR/E Projects. Some AID staff members viewed it as not particularly useful, since AID already has well established procedures for project evaluation. It was, however, energetically promoted by one of the AID FSSP co-managers. At any rate, the results of the task force's work are contained in a draft document dated August, 1986. Work was discontinued due to budgetary restrictions.

6. Project Handbook

The FSSP core staff developed a handbook which was printed and distributed in 1985. The handbook describes the

principles of FSR/E and offers comments and guidelines regarding the development, design, implementation and evaluation of agricultural research and extension projects, with emphasis on FSR/E.

7. Farming Systems Library/Documentation

Supported by a subcontract from FSSP, the Farrell Library at Kansas State University has established and maintained a collection of farming systems research documents. A cumulative bibliography lists the materials, and all are available from the library on microfiche. In addition, KSU has collaborated with AID/S&T/DIU on an "Annotated Bibliography of Readings on Farming Systems," producing the first volume in 1984. The FSSP Technical Committee selected the titles, which reviewed over 800 documents. The first three volumes are in English and Spanish, and the fourth and last to be supported by FSSP is available only in English.

While all of these activities were generally well executed and to some extent useful, they reflect the lack of a sense of priorities. Scarce resources need to be allocated to highest payoff activities rather than being spread out among a large number of activities.

IV. Conclusions

A. Main Recommendation

The external mid-term evaluation contained a long list of recommendations for modifying the objectives and activities of the FSSP. The principal recommendation, which was both implicitly and explicitly contained in the detailed activity-specific recommendations, was that the FSSP core staff and the various stakeholders within AID develop a consensus as to what objectives and strategy should be followed during the final years of the project. The consensus was to redesign the project and to revise the logical framework, reflecting these in a detailed work plan for 1986.

B. Why No Consensus Was Reached

As is evident from discussions in the first two sections of this paper, neither the consensus nor the redesign took place. The FSSP Core presented a work plan for 1986 which, similar to those of previous years, largely described current or planned activities, but was short on their overall strategy and interrelationships. AID dissatisfaction with the plan, as outlined in the March, 1986 letter, prompted the acceptance of some activities, the rejection of others, and a decision to severely reduce project funding and not extend the cooperative agreement past its termination date.

Stating exactly why a consensus was never reached is no simple matter. It is our view that this was primarily due to three factors:

1. Unknowns

There was a good deal of ambiguity as to nature and status of farming systems research just prior to project design, which was reflected in a general lack of clarity in the original project paper. Many people also assumed that a significant cadre of professionals with experience and talent in farming systems work was readily available to provide technical assistance, which was not the case. In addition, contrary to expectations, very few training materials adapted for language and cultural differences were available, especially for Africa.

2. Differing Expectations

The project paper did not conform well to the original objectives of the Senior Assistant Administrator to support agricultural research in Africa. Various AID stakeholders developed different expectations about running the project and what the accomplishments should be. For example, some people expected a very strong focus on Africa, almost to the exclusion of other areas, while others subscribed to the broader worldwide view as expressed in the project paper and cooperative agreement.

3. Conflicts Among Staff

At least in part as a result of the above factors, there were some incidents early on that set a somewhat negative tone to the relationship between the Florida group and AID/Washington. Some core staff took AID's criticism of their early efforts personally, and some personality conflicts developed. Each side perceived the other as not being willing to be flexible and compromise. Moreover, the different actors within AID were not totally consistent and in agreement in expressing their desires and concerns to the core staff. Given the criticism and ambiguity, some of the core members explicitly chose not to pay further attention to AID/W, turning to other client groups, including AID field missions, host country institutions, and the network of support entities and farming systems practitioners.

The result was somewhat of a paradox. On the one hand, AID gave the project a very negative rating, while at the same time it was rated fairly well by missions, especially in Africa. And while it was unable to adequately address the needs of AID/W, the project did produce a number of useful products and support a number of processes that may influence farming systems work over the coming years. But to what extent this will happen depends at

least in part on whether AID decides to continue to fund a centralized support operation for farming systems work, and on the nature and intensity of activity such support would involve.

C. Evaluation

Since the project was not redesigned explicitly, the only real basis for evaluation are the original intentions as expressed in the cooperative agreement and the project paper. Referring back to the expected project outputs and activities presented in the introduction to this document, we conclude that overall a creditable job was done in some areas, while in others performance was lacking. Specifically:

1. Training

Training, while initially weak and somewhat unorganized, improved significantly over time, aided by the development of the training materials and expertise the trainers gained with experience. The total number of training courses held or directly supported by FSSP for LDC field technicians exceeded the number called for in the PP. Few courses, on the other hand, have been held specifically for LDC policy makers, administrators and educators.

2. Technical Assistance

The demand for technical assistance was considerably less than originally expected due to the proliferation of projects, each with its own set of advisors and difficulties some missions had with buy-ins. Nevertheless, with a few exceptions, the quality of the technical assistance provided to AID Missions was well regarded.

3. Publications

Publications containing field recommendations, which were originally envisioned as products of the synthesis/analysis of lessons learned, were not produced as such. Rather, individual practitioners made recommendations based on their own experience in the newsletter and the "Networking Paper" series. In addition, the important aspects of the evolving state of the art of farming systems were incorporated into the training units.

4. Networks

The project paper called for the establishment of seven regional networks. Over its five-year life, the FSSP created one network consisting of support entities from the United States. FSSP also participated substantially in the development of a subject area network (crop-livestock

interactions) in West Africa, and provided support to the West African Farming Systems Network in helping WAFSRN select leadership and establish a home base. It is not clear just how many networks would have been optimum, especially given the nearly exclusive focus on West Africa during the second half of the project. The FSSP core staff did not view its role as establishing networks, but rather in supporting those already in existence.

5. Workshops

Several workshops and "networkshops" were held. Few of them, however, were based on a determination of need coming from farming systems practitioners in the countries. Most involved orientation to FSR/E, while others concentrated on methodology or specific issues such as gender participation or livestock-crop interactions.

6. Newsletter and Bibliography

The FSSP complied in publishing a quarterly newsletter that reported insights gained by practitioners and generally kept the broader farming systems interest group informed of activities and advancements in FSR/E. Through a subcontract with Kansas State University, it published an annual annotated bibliography of literature dealing with farming systems. It also established within S&T/DIU a documentation center for FSR/E literature that, upon individual request, has provided copies of uncopywritten works. The center is to continue after the project ends.

V. Recommendations

A. Lessons Learned

An evaluation must not only establish performance, but also causation: What went wrong? Is it avoidable? What lessons can be learned? In this case, there appears to have been a variety of unresolved issues which originated in project design, but were exacerbated in implementation and continue to impede efforts to achieve continuity. The two major problem areas have to do with the uncertainty of the subject matter and the difficulty of adjusting S&T programs under conditions of severe funding constraints.

1. Definition of Subject Matter

FSSP was born in the midst of controversy over definition of FSR/E (Farming Systems Research and Extension). Most of the early work on FSR/E was done by production researchers, working with agricultural economists. By 1980, the leading edge had become social science, and FSR/E had become a

buzzword--a simple answer to complex development problems. A wide variety of professionals, including production researchers, agricultural extensionists, agricultural economists, rural sociologists, anthropologists, and humanists of all kinds joined the bandwagon, in the belief that the FSR/E concept supported their operational approaches. With so many different interests, no mutually acceptable, limited definition was found.

Work in a poorly-defined subject area such as farming systems was and continues to be inherently risky. Much is left open for interpretation, and difference in views and opinions are commonplace and not easily reconcilable. It does, however, seem that this type of work is appropriate for a science and technology organization whose objective is to support the advancement of the state of the art of development methodology.

2. Management

A key factor here is the mechanism chosen for contracting and managing the project. A cooperative agreement was chosen which implies a sharing of implementation decisions on a more or less equal basis on both the AID and cooperator's sides. The staffs of both sides must be flexible, patient and able to work together well. In the case of FSSP, the relationships established between Florida and AID were conflictive almost from the beginning. In a sense, the Florida staff treated the project like a grant which would have given wide latitude in deciding courses of action, while AID wanted to treat the project as a contract which would have given more decision-making power to AID. The conflicting positions had so solidified by the time of the mid-term evaluation that the project was not redesigned as recommended, nor was it possible to generate an agreed-upon work plan.

There are two ways in which this sort of situation might have been avoided.

a. Project Design

More care should have gone into the design of the project so that responsibilities, roles and relationships were more clearly understood. For example, a clearer emphasis in the paper project on Africa would have been advisable, if that were intended, with greater participation by the Africa Bureau in project design. In fact, that emphasis surfaced only following the mid-term evaluation, although several observers believed that it had been originally intended. This might also have helped create a more informed and unified AID management team.

b. Selection of Cooperator

Greater care should have gone into the selection and orientation of a cooperator. A cooperator was needed that appreciated the difficulties inherent in pre-specifying activities in an underdeveloped subject area and was willing to work closely with AID to discover mutually acceptable areas of work. In short, the cooperator needed to be client-oriented toward AID as well as toward other interest groups.

The problem was complicated by the fact that little real expertise in FSR/E existed. Although the leading experts had little difficulty communicating and understanding each other, each was located in a different institution. This dispersion would make it difficult to identify any critical mass of expertise and to define the limits of the subject matter. Most AID staff were favorably disposed to the FSR/E concept but unaware of the thinness and dispersion of both expertise and proven methodology.

3. Tolerance of Uncertainty

Farming systems remains a poorly defined concept and probably will continue to be so for the foreseeable future. Different practitioners will continue to use different terminologies and place emphasis on different areas. There is no particular need to try to limit this diversity, as evolution of the concepts and learning are still taking place. The basic farm family-client orientation of the approach is key to the technology generation and transfer, and should continue. However, both AID and its cooperator must be willing to and capable of understanding and collaborating with each other while working within this climate of uncertainty.

4. A Comment on the Programming of Centrally Funded Projects, and Expectations for Mission Support

The primary mechanisms for carrying out S&T functions are development projects that access the capability of the U.S. and international science communities for priority areas of agency interest, such as FSR/E. Most S&T projects are carried out through a single institutional contractor, cooperator, or grantee. Such an institution may carry out the activities of the project itself, or coordinate the services of a network of institutions and individuals.

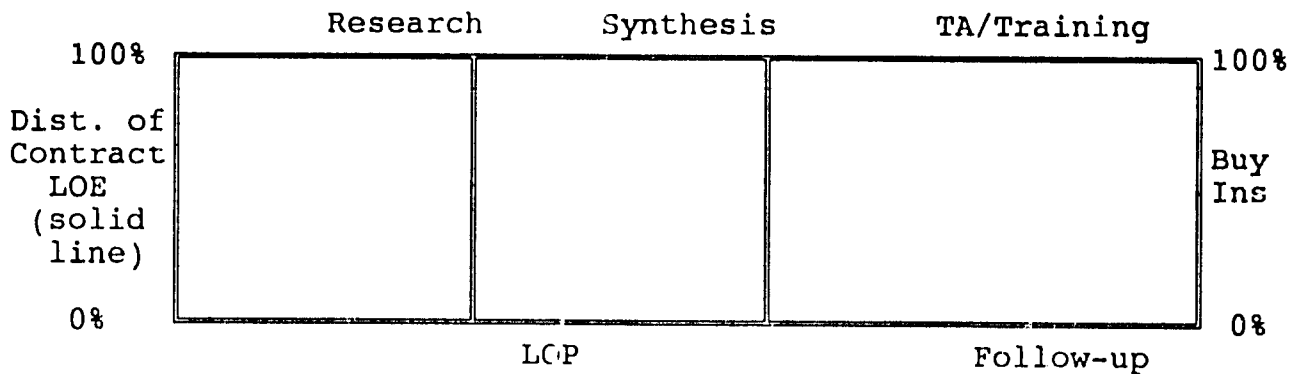
The fact that projects and contracts are virtually synonymous (one project=one contract) may simplify project management, but it limits flexibility in programming. More importantly, it tends to isolate objectives within the limits of a subject and the experiences of a single project manager and contractor, precluding a broader look at the problem and

alternative solutions. Without defining a larger objective, it is difficult to judge the contribution of a project to that larger objective, and to adjust funding accordingly. Instead, budget adjustments tend to be made "across the board," or, when funding is drastically curtailed, as at present, out-of-favor projects are eliminated. For this reason, most organizations have adopted program budgeting, which groups activities by their larger objective and defines a unifying strategy. This helps the manager make better decisions in allocating resources among the different project and subprojects of the program.

FSSP, as a project, has been denied funding, and S&T/AG's involvement in FSR/E is on the verge of being eliminated, despite broad agency interest in FSR/E. The budget to maintain the network FSSP established is less than \$200,000 per year, i.e., below the threshold for an independent project. Yet this effort (along with an extension, communications, and more conventional research component) might be a worthwhile part of a broader agricultural technology generation and support program.

Some 74 mission-funded or regional projects have an FSR/E component, and mission buy-ins were expected to provide significant support to FSSP. Insofar as these failed to occur the project failed, some say. However, buy-ins depend very much on perceived state of the art, and may not be a good gauge of the importance of a centrally funded activity. The following theoretical discussion indicates why many activities do not obtain mission funding, although their results may be of great value to those missions.

Each S&T project commonly includes the functions of research (advancing the state of the art); synthesis (scientific networking to recommend courses of action); and technical assistance and training (helping AID missions and cooperating countries implement those courses of action). Each of these three functions may be carried out to some extent by the contracted institution or network throughout (and hopefully following) the life of the project (LOP), although some projects are limited to one or two functions. The relative emphasis on each of these components at any given time reflects one's assessment of the state of the art, i.e., one's confidence in advocating a course of action, based on scientific understanding. This relationship can be diagrammed over time as follows:



AID's field missions are frequently asked to "buy in" to S&T projects, and there are three reasons why: (1) the size of the S&T budget limits what S&T can devote to any single effort; (2) a measure of mission interest in an S&T activity is the willingness of the missions to allocate their own resources to that activity; and (3) equity considerations suggest that regional bureaus and missions which benefit most from an S&T activity should share in its financing.

Mission buy-ins are normally inversely related to the distribution of the S&T contractor LOE and are indicated by the dashed line in the diagram. That is, missions are less willing to contribute to research and development than they are to TA and training. Missions are unable to spend their very limited discretionary funds (mostly PD&S) on anything that does not have a direct pay-off in project design. The only significant funds they might allocate to an S&T project are those included in one of their ongoing projects, the existence of which means that a high proportion of the state of the art has been incorporated in courses of action. This relationship is shown as a dashed line on the same chart.

We would expect, and information from the missions confirms, that they will continue to fund technical assistance and training, but they have no interest in supporting either the network or state-of-art research.

B. Recommendations for Future S&T/AG Activity in Farming Systems

AID has decided to end support of FSSP as of December 31, 1987, for reasons outlined in this report. However, the potential importance of farming systems work for agricultural development in general, and for the small farm sector in particular, continues to be recognized.

Despite the problems with performance and unrealized expectations, there is still a substantial group of people who believe in the basic validity of the farming systems approach. This group consists of a number of younger faculty members of

U.S. universities, mainly social scientists; research scientists employed at the IARCs who have incorporated aspects of the approach into their training programs and standard operating procedures; and professionals in developing countries working in national research and extension programs.

Moreover, there are still a number of ongoing projects and programs with farming systems components. By 1985, there were some 250 long-term projects worldwide carrying out farming systems work. Since 1978, AID has funded 76 bilateral, regional and centrally-funded projects containing either a farming systems orientation or clearly focused on farming systems work. Of these projects 45 were in Africa, 19 in Asia/Near East, 10 in Latin America and the Caribbean, and two with a worldwide scope.

Furthermore, significant progress has been made in training, networking and methodology development by FSSP, CIMMYT, IRRI and others. A few of the methods commonly associated with farming systems, especially the rapid rural appraisal or "sondeo," have been and are being adopted by other types of development efforts, such as the analysis of agricultural markets. In a sense, they have taken on a life of their own, yet properly result from work in farming systems. Clearly, whether or not farming systems survives as a methodology per se, its influence on agricultural development will be felt for a long time to come.

It is too early to pass judgement on the overall effectiveness of farming systems work worldwide, since many of the projects are ongoing and some just getting started. What does seem clear is that significant progress in technology development and transfer requires more time than is usually allotted to projects. Farming systems projects tend to be downgraded because tangible results in terms of increased productivity and incomes are not evident until two or even four years into a project. What farming systems does offer is a philosophically and logically appealing process, but with no guarantee of the final result.

Clearly, whether or not S&T/AG funds farming systems activities at the present time, work in this area will continue for the foreseeable future. This is true for three reasons: (1) There are several projects with farming systems components currently underway or in the planning stages, supported by AID (within AID, the Africa Bureau continues to place priority on farming systems work as an integral part of its plan for agricultural research support); (2) there is stable or increased support from other organizations, such as The World Bank, IDRC, and the International Centers (3) the products of work during the previous five years, especially the training materials, are just emerging, providing the opportunity to further capitalize on previous investments.

Given this situation, AID should decide what level of support, if any, will be allocated to farming systems. Following are four alternatives that could be considered.

1. Alternative Mechanisms for Supporting Farming Systems Work

a. Discontinue support

An argument could be made that the farming systems approach has matured, developed a widely accepted set of concepts and operating procedures, is currently being supported by other donors, and thus requires no further support from S&T. However, the current consensus among practitioners as well as other donors is that there are a number of areas in which farming systems work needs improvement, as outlined in a previous section of this paper. Thus, given AID's leadership role in promoting and supporting farming systems early on through bilateral projects, synthesis of experience, and funding of the FSSP, it seems logical that at least modest support should continue to be provided.

b. Maintain Support at Previous Levels

Given the continuing importance of the farming systems approach as a strategy for development and transfer of agricultural technology to limited-resource farmers, it may be wise to fund a second phase of FSSP at a level and with a scope of work similar to the first phase. Questions arise regarding the follow-on, such as what activities are to be undertaken, the concentration of efforts in a region or regions, and who should implement the project. Most important is the availability of funds for such an effort in an apparently ever-worsening budget situation. Since available funds are already programmed, there would be a considerable lag period--perhaps as long as three years--before a new project could get underway.

c. Fold Farming Systems Into Other Projects

The basics of the farming systems approach are applicable to other subject areas as well as complementary to more general initiatives in agricultural technology generation and transfer. Thus, it may be possible to continue to support farming systems work under the "umbrella" of another effort. Two possibilities currently under consideration come to mind. Congress has mandated increased attention to the sustainability of current and future agricultural systems with regard to resource use and conservation, consistent with maintenance of acceptable family income levels. Conceivably, many elements of the farming systems approach could be used to concentrate on

sustainability issues, especially with respect to the limited-resource farmer client group.

Another possibility would be to specifically include farming systems in a new effort, the Agricultural Technology Initiative, now being designed (concept paper stage) for possible funding and implementation by S&T. The purpose of the initiative is to assist AID field missions and developing countries in the improvement of national systems for agricultural technology development, transfer and education. Work already done on farming systems would certainly make a significant contribution to the achievement of this objective, as well as provide continuity from previous efforts.

d. Establish a Farming Systems Secretariat

Given modest budgetary support--\$100,000 to \$300,000 per year--it would be possible to set up an independent secretariat to act as an information clearinghouse and promote future farming systems work. The secretariat would consist basically of a small professional and administrative staff, including a program leader, a data base management specialist, a grantsmanship advisor, and a secretary. Some of these people might perform their duties on a shared time basis. The activities of this core staff would be overseen by an advisory board consisting of highly-respected farming systems practitioners and donor representatives.

The functions of the secretariat would be as follows:

(1) Act as a central clearinghouse for farming systems-related information.

(2) Establish a new Farming Systems Network consisting of all individuals and institutions interested in continuing farming systems development work worldwide. Membership in the network should be greatly expanded beyond the current FSSP Support Entity Network to include the IARCs, RARCs, NARS and others who have made significant contributions to the development of farming systems methodologies and are in a good position to collaborate on future efforts.

(3) Establish and maintain links with AID and other donors in order to assure continued financing for maintenance of the secretariat core activities as well as support for specific initiatives.

(4) Help coordinate the supply of and demand for expertise in farming systems by:

- o Helping Farming Systems Network members locate funding sources from the interested donor community to support farming systems development and networking activities
- o Maintaining a data base of individuals and institutions with proven farming systems expertise, especially in the areas of training and technical assistance
- o Stimulating the demand for farming systems expertise by promoting the basic ideas and concepts of farming systems development in the donor community and the potential adopters of farming systems methodologies

In general, the secretariat is envisioned as a coordination mechanism rather than an implementation mechanism as was FSSP. Insofar as possible, it should try to maintain an impartial and independent stance regarding implementation and funding, with all interested and capable parties given equal access to information and consideration for tasks that the secretariat may help generate.

2. Other Recommendations

The major ideas and concepts underpinning farming systems work continue to enjoy strong support and acceptance from the international donor community and the cadre of individual and institutional participants who have been involved in farming systems activities in recent years. Given AID's leading role in promoting and funding the approach, as well as the original ten-year scope of FSSP, S&T would be remiss if some support were not forthcoming. On the other hand, budget realities and a lack of political support for high-level activity in farming systems would tend to preclude a second phase of FSSP. Furthermore, given bilateral technical assistance projects and strong interest of other donors, current support for ongoing activities may eliminate the need for another large project.

a. Farming Systems in Broader Projects

The farming systems approach should definitely be considered for incorporation in new projects and programs which deal with agricultural technology and limited-resource farmers. Specifically, the approach should be part of an overall technology development and transfer strategy that looks at all parts of the research and development-extension-evaluation-adoption continuum. Such an approach would offer a way to develop the key institutional and informational links which heretofore had not been present in traditional research-extension systems.

Farming systems could also offer a methodology for examining and possibly helping to resolve issues related to long-term

sustainability of agricultural systems. Its client-oriented focus would illuminate farm family needs and behavior.

b. AID Funding for Secretariat

Far more important than the survival of the term "farming systems" is the incorporation of experiences and lessons learned from attempts to implement the approach into the standard operating procedures of individuals and institutions involved in agricultural development. However, as stated previously, a number of activities are needed to fully realize the progress already achieved. And a number of areas should be developed further to make the technology development process more efficient and effective. It is in the interest of S&T/AG to be involved and provide leadership in these areas. Therefore, it is recommended that AID seriously consider funding a secretariat similar to that described above to act as a focal point for ongoing activities and networking related to farming systems.

Specifically, S&T would provide "seed" funding in the form of a grant to establish the secretariat, including rental of office space and equipment, employment of core staff, travel and other operating expenses for the first year. AID would maintain minimal direct control of the operation. If AID resources are insufficient to fully fund this activity for a year, then AID should solicit collaboration from other donors such as The World Bank, Ford Foundation, Rockefeller Foundation, and IDRC. In fact, even if funds are available, collaborative funding may be advisable in order to ensure broad interest and participation. The costs of starting up the secretariat could be reduced by placing it within another institution, such as the CGIAR Secretariat. In any case, care would have to be taken to ensure the operational independence of the secretariat, encouraging broad participation from all major practitioners and donors.

One of the first tasks of the new secretariat would be to work to ensure its longer-run survival. Self-financing mechanisms should be in place by the end of the first year, and could include:

- o Establishment of network membership dues
- o Long-term funding pledges from international donors and member institutions
- o A referral fee charged to network member institutions that receive new business as a result of the secretariat's promotional efforts.
- o Proceeds from sales of subscriptions to network newsletters and other publications

3. Setting Priorities for Future Farming Systems Activities

Should AID decide to continue financial and intellectual support to farming systems work worldwide, there is a need to establish priority work areas and mechanisms through which support can be channeled.

It is obvious that different groups with legitimate interests in farming systems work will have different priorities for future activities. Such groups include, but are not limited to, AID field missions, AID regional bureaus, and U.S. universities. Also included are those who participated in the Support Entity Network, the national research and extension systems that have received assistance in establishing and operating farming systems projects and programs, and other donors.

Since budget limitations dictate that AID can neither support all activities nor place equal emphasis on those activities supported, choices must be made. Following is a suggested course of action for AID, based upon information provided by some of the interested groups, taking into account the limited resources available to AID for farming systems activities.

This section is based on the premise that AID will indeed continue to support farming systems in some form. It suggests a set of priority activities derived from the views of various parties interested in strengthening and fostering the farming systems approach. Specific information on the preferences expressed by the support entities of FSSP is included in the appendices, along with a selection of AID field missions.

a. Conduct of an Impact Assessment

Although many projects and programs using the farming systems approach have been undertaken, information on their impact on technology adoption, farm incomes, and national research and extension system performance are scarce. A comprehensive and objective examination of the successes and failures of several programs and projects should be undertaken to further clarify the expected benefits of the approach, and also suggest where to concentrate further work. Such a review should include not only AID projects, but efforts supported by other donors and the activities of the IARCs.

b. Farming systems training

A great deal of the FSSP effort has gone into preparing training materials drawn from the collective experience of farming systems practitioners worldwide. There remains at the

field level substantial interest in providing technical assistance in training, and the capability to deliver that assistance has been built up through FSSP and the IA.Cs. S&T/AG can further support training by facilitating publication and distribution of training materials and keeping field missions aware of where they can call upon technical expertise as needed. Provisions need to be made to update materials as new lessons and information emerge.

c. Institutionalization Of the Farming Systems Approach In National Research and Extension Systems

Virtually all farming systems projects are linked with national research and extension systems. Often they are independent units with separate budgets because of the high recurrent costs of on-farm field work and the danger of diversion of funds to other activities. As projects terminate, farming systems units will have to find ways to compete for scarce resources with other parts of the system. Difficult choices will need to be made between employing more people and maintaining a smaller force but with adequate tools to do the job. As mentioned previously, ISNAR is currently taking a look at this issue. The results should be carefully examined to determine what steps need to be taken in the future.

d. Transfer of Farming Systems Technology

For more cost efficiency, the technological recommendations stemming from site-specific farming systems work should be transferable to other areas with similar ecological and socioeconomic conditions. Technologies developed in one country may in fact be applicable in other countries, and can be incorporated into the research-transfer continuum at a later stage of development. What seems to be lacking at this point is a mechanism to properly catalog new technologies, including complementary information on the conditions under which they are effective. AID should look into ways to catalog technologies so that they can be easily disseminated within countries, across borders, and perhaps even across continents.

e. Linkages Between Farming Systems and Policy

In conducting farming systems research, researchers often obtain data and other types of farm-level information that is potentially valuable to agricultural policy analysts. In the same vein, farming systems researchers could benefit from a clearer understanding of how agricultural policies influence technology design and adoption. Very little has been published in this area. It must be determined what has been done and what can be learned from experience so far. From there, a conceptual framework could be developed to demonstrate how best

to accomplish these links and their potential contribution both to farming systems work and agricultural policy analysis and formulation.

f. Communications Among Practitioners

The functions previously performed by FSSP, collectively called networking, kept practitioners and other interested parties informed of developments in the field and provided an outlet for research results and other experiences. The mechanisms used were the newsletter, the annual symposium, technical publications called networking papers, and "networkshops" which brought together practitioners in a region to discuss specific topics of mutual interest. These types of communication mechanisms are essential if individual experiences are to be shared and group resources mobilized to work on pressing problem areas and opportunities.

APPENDIX 1

SCHEDULE

ARTICLE I - Title

Agriculture Technology, Research and Development (Farming Systems Research and Extension)

ARTICLE II - Objective

The objective of this delivery order is two-fold: First, conduct the final evaluation of the first phase of FSSP; and second, prepare a concept paper to determine the appropriateness of developing an FSSP Project Paper Amendment for a second phase activity. This document will build on the evaluation of FSSP and contribution, if feasible, of the CRSP Programs and the following Savings for Capital Formation, and Marketing Systems. This broader focus is proposed to relate more directly to the Agency's new agricultural focus statement.

ARTICLE III - Statement of Work

The contractor will provide the services of a senior institutional specialist (agricultural research and technology transfer) with extensive experience in the development and design of agricultural research and extension projects, a senior agricultural economist with extensive experience in Farming Systems Research and Extension (FSR/E), and five (5) senior agricultural project/design specialists to contribute to the design of the concept paper. Details are as follows:

1. FSSP Evaluation. The contractor will evaluate the existing FSSP following the guidelines provided in the annex to this order. The evaluation will be based on interviews of key FSSP staff and the review of documents available in the files of S&T/AGR and FSSP headquarters in the University of Florida, Gainesville. These document will include: the Project Paper, the Cooperative Agreement and its amendments, together with University of Florida reports and other outputs, reports of FSR/E workshops and seminars, and mid-term project evaluation. The evaluation report will serve as background for FSR/E concept paper, and as an annex for the final document.
2. Review of Assessment of FSR/E related projects. The contractor will assess the likely contribution of relevant CRSP's programs to FSR/E activities in selected countries. The contractor will also review relevant documents of the following projects: INTERPAKS, CTTA, Marketing Systems, Rural Savings for Capital Formation and Agricultural Policy Analysis. This information will serve as background for the concept paper.

3. Expert Panel for Concept Paper Design. The contractor will organize an Expert Working Group of up to five senior agricultural development professionals to contribute to the concept paper. It is anticipated that this panel will include at least two experts in farming systems research and extension; and up to three agricultural development experts. Panel members will be selected jointly by the S&T representatives and the contractor. This panel will review selected documents and participate in two workshops with the Contractor and the Farming Systems Research (FSR) Technical Sub-committee, of the Agricultural Sector Council, (S&T, PPC and A.I.D. Regional Bureau Representatives). The first of these workshops will focus on the evaluation of FSSP and likely contributions of the CRSP's, INTERPAKS, CTIA and other relevant S&T projects and programs and will provide guidance on concept paper content and parameters. The second workshop will focus on the draft concept paper, and will suggest ways in which it might be improved.
4. Draft Concept Paper. Following the first expert panel workshop, the contractor will present, within 20 working days, an outline for a revised concept paper, annotated with the major points of panel consensus and concern, together with a work schedule. Upon approval by Dr. Roberto J. Castro, the S&T representative, the contractor will proceed to draft the concept paper and its annexes.
5. Concept Paper Review. The contractor will present a draft concept paper to the FSR Technical Sub-Committee, appropriate S&T staff and the Expert Panel for technical review; their comments will be discussed at the second workshop. At the same time, it will be submitted to the S&T Program Office for review and suggestions.
6. Concept Paper Revision. The contractor will edit the draft concept paper jointly with the responsible S&T Project Officer, Dr. Roberto J. Castro, and the S&T Program Office to incorporate needed changes. This final draft is the ultimate product for this delivery order.

Article IV - Reports

1. FSSP Evaluation - The contractor will provide, within four weeks of the delivery order signing, the first draft (ten copies) of the FSSP evaluation report, and a draft (assessment) of likely contributions of CRSP's, INTERPAKS, CTTA, Marketing Systems, and Rural Savings for Capital Formation to the concept paper. Both reports will not exceed 30 pages in length. A.I.D. will review both drafts within ten working days after submission and return them to the contractor for final typing. The contractor will submit the final reports within five working days after receiving the A.I.D. edited draft.
- 2/6

2. Analysis and Documentation for the Concept Paper. Twelve weeks after the signing of the delivery order, the contractor will submit the first draft of the required analyses and their documentation for the Concept Paper. The report will be approximately 30 to 40 pages in length. A.I.D. will review the draft within ten working days after submission and return them to the contractor for final typing. The contractor will submit the final report within five working days after receiving the A.I.D. edited draft.

Article V - Relationships and Responsibilities

The contractor will be working under the technical guidance of S&T/AGR/EPP, Agriculturalist, Roberto J. Castero.

Article VI - Term of Performance

1. The effective date of this delivery order is the signature of the Contracting Officer and the estimated completion date is December 31, 1987.
2. Subject to the ceiling price established in this delivery order and with prior written approval of the Project Manager (see Block No. 5 on the Cover Page), the Contractor is authorized to extend the estimated completion date, provided that such extension does not cause the elapsed time for completion of the work, including the furnishing of all deliverables, to extend beyond 30 calendar days from the original estimated completion date. The Contractor shall attach a copy of the Project Manager's approval for any extension of the term of this delivery order to the final voucher submitted for payment.
3. It is the Contractor's responsibility to ensure that the Project Manager-approved adjustments to the original estimated completion date do not result in costs incurred which exceed the ceiling price of this delivery order. Under no circumstances shall such adjustments authorize the Contractor to be paid any sum in excess of the delivery order.
4. Adjustments which will cause the elapsed time for completion of the work to exceed the original estimated completion date by more than 30 calendar days must be approved in advance by the Contracting Officer.

1. PROJECT TITLE Farming Systems Support	2. PROJECT NUMBER 936-4099	3. MISSION/AID/W OFFICE
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 NC 1 each FY) Team <input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		
5. KEY PROJECT IMPLEMENTATION DATES		7. PERIOD COVERED BY EVALUATION
A. First PAC-AG or Equipment FY <u>82</u>	B. Final Obligation Expected FY <u>86</u>	From (month/yr.) <u>10/82</u>
C. Final Input Delivery FY <u>87</u>	6. ESTIMATED PROJECT FUNDING A. Total \$ <u>9952</u> B. U.S. \$ <u>7887</u>	To (month/yr.) <u>6/85</u>
		Date of Evaluation Review <u>6/24/85</u>

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., program, SPAR, PIO, which will present detailed request.)

B. NAME OF OFFICER RESPONSIBLE FOR ACTION

C. DATE ACTION TO BE COMPLETED

The mid-term PSSP External Evaluation and AID's internal assessment of PSSP highlighted the need for project refocus. This will entail a rationalization and prioritization of all project activities, with delivery keyed to West African countries. The 1985 work plan will be the instrument that addresses a number of strategic planning, management, and implementation activities:

- Refine and consolidate appropriate training support materials for a delivery focus in Africa.
 - o In addition to the three training units being finalized, an economics of farming systems training unit will be developed/adapted.
 - o Formulate a strategy for the development and delivery of the PSR/E approach to non-PSR/E practitioners (policy makers, administrators and discipline oriented educators).
- Limit project assistance to African countries only. Provide assistance to non-African countries on a buy-in basis only.
- Formulate a strategy for addressing selected state-of-the-art (SOTA) topics for the remaining life of the project.
- Develop an implementation strategy (what, how, and where) that identifies key professional staff, their locations and financial data associated with various program activities.
- Develop an improved budgeting and financial management information system.

C. Andrew	7/1/86
C. Andrew	2/10/86
C. Andrew	5/1/86
C. Andrew	3/15/86
C. Andrew	7/1/86

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan &L, CPI Network	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____
<input 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/EPP, D. Osburn *276*
S&T/AGR/EPP, R. Curtis *R.C.*
S&T/AGR, F. Li
S&T/PO, V. Anderson

12. Mission/AID/W Office Director Approval

Signature _____

Typed Name

Anson R. Bertrand, S&T/FA

Date _____

FSSP PES
Evaluation Methodology

The purpose of the evaluation was: (1) to assess project performance and effectiveness to date and review plans for the remainder of the contract period and (2) to review the current validity of the project concept and approach and recommend new direction if warranted.

Members of the evaluation team were Raymond Kitchell, Development Management, Inc.; Patrick Fleuret, Africa Bureau, AID; Charles Francis, Professor of Agronomy, University of Nebraska; Edwin Price, Director, Office of International Agriculture, Oregon State University; and Donald Winkelmann, Director General, CIMMYT.

The AID Project Paper states that the goal of the FSSP is to strengthen developing country agricultural research and extension programs in order to increase the productivity, income, and quality of life among small farmers. The purpose of the project is to provide technical assistance to missions and LDC agricultural research and extension programs for the design, implementation and evaluation of projects intended for the small or limited-resource farmer while, at the same time, building institutional capacity within those countries through training and networking.

The cooperative agreement has the standard AID objective to develop, strengthen and expand the capacity of the recipient and collaborating institutions to provide technical assistance, training and guidance to FSR/E programs in developing countries. The recipient is to perform as the lead entity and will coordinate the inputs of collaborating institutions with similar interests in FSR/E.

AID field missions were queried by cable for their views on (1) most positive features of FSSP; (2) most negative; (3) recommended changes; and (4) what impact FSSP activities had on mission funded farming systems efforts. In addition, at the request of the Evaluation Team Leader, questionnaires were sent all FSSP support entities (SEs). Adequate responses from both queries were received, analyzed and made available to the team.

An issues paper was also prepared by AID project staff for team guidance on the substantive points of most interest to AID. The team first assembled in Washington for two days of orientation and briefings which included interviews with appropriate officials in both S&T and the regional bureaus, as well as BIFAD. Appropriate documentation was provided.

The team then conducted its on-site investigations at the University of Florida. It began with a well-conducted oral presentation by the FSSP Director and core staff, supplemented by a written presentation on progress and plans on producing outputs as previously requested by the team leader. In addition to FSSP and University of Florida (UF) staff, also at the team's request and on short notice, a representative of the FSSP Advisory Council and the Chairperson of the Technical Committee met with the team in private sessions in Gainesville. FSSP staff also provided the team examples of their products, supplemental documentation and special presentations requested by the team.

Cooperation during the evaluation exercise by all parties to this agreement was commendable. Aside from the limited time available, the lack of site visits on the use and effect of FSSP services by developing country clients was the only weak point in the exercise. Nevertheless, the team was able, without great difficulty, to arrive at a consensus regarding its assessment of performance to date and recommendations for the future. The evaluation team concluded that project accomplishments to date have been spotty, ranging from poor to very good. They recommend that project activities be prioritized, reduced in number and that quality of deliverables be enhanced.

Summary

Because FSSP is a "support project", outputs are described more in terms of acceptable process activities rather than more tangible output or impact indicators. Activities of the project focus on technical assistance, short-term training, networking, and state-of-the-art (SOTA) research. The evaluation team compiled thirty-one recommendations. Key recommendations are grouped, by program activity, and summarized herein.

~~The goal of FSSP has not changed over time; hence, a formal project revision is not required.~~ The work plan will be the instrument used to focus and redirect project delivery and it will address strategic planning, management and implementation issues.

Technical Assistance and Support (Recommendations 1-8)

Technical assistance activities have been carried out, however, the demand for technical assistance did not materialize to the extent originally projected at the time of the project design. Mission response to queries about quality of this deliverable showed the assistance to be of high quality.

The major recommendation (#8) under this area is that technical assistance activities to non-Africa regions be provided by "buy-ins" only. This recommendation is being implemented.

AID concurs with other evaluation team recommendations regarding technical assistance and support, with two exceptions. Early problems with annotation services (see Recommendation #6) by AID/PPC/ODIE have been corrected, and it appears that services can be carried out in a cost-effective manner. ODIE should continue to perform the annotation services. The second exception is the merger of FSSP bio-data services with Winrock International's (WI) system (Recommendation #2). Merging the two bio-data systems would require new, large expenses and is not considered cost-effective at this point in time. The bio-data services will remain at the University of Florida with resources devoted to maintaining the services kept at a minimum.

Training (Recommendations 9-10)

Twelve domestic workshops had been held at the time of the evaluation. Most were of FSR/E orientation in nature. Twenty-one overseas workshops were delivered. In some of the workshops, FSSP was solely responsible for the proceedings, in others, responsibility was shared.

The two major recommendations regarding training activities are that the quality of training/support materials should be improved and that training unit development should focus on a limited number of methodological and field problem (technical) areas. The evaluation report notes that FSSP has made significant improvement in its approach to materials development activities, and that three training units (diagnosis, design of field trials, and management/administration) are being refined for dissemination and use in training workshops. AID concurs with the evaluation team's assessment of FSSP training activities and recommendations. In addition, AID project management strongly encourages the development of a "Economics of Farming Systems" training unit. Joint collaboration is underway to address this major deficiency in the overall training activity.

The recommendation to withdraw from "sensitivity" type workshops warrants comment. AID project management concurs with this recommendation with regard to U.S. domestic training activities. However, the orientation workshops could be effective in promoting the FSR/E approach when the training is delivered to agricultural policy makers, discipline oriented researchers, and field personnel not acquainted with FSR/E. Assessment of the demand and contribution that this type of training activity can make to technology generation and transfer should be made. Noteworthy is that the cooperative agreement calls for this type of deliverable.

Another type of training relates to the training needs of FSR/E practitioners in disciplines other than their own. For example, what are the essential knowledge bases from agronomy and animal science required by an economist? In like fashion, what knowledge and skills should an agronomist have from other agricultural disciplines? To take the economist as an example, skills in soil and water management techniques, coupled with plant-culture techniques seem appropriate. A variety of topics appear warranted, ranging from erosion control measures and crop residue management to soil fertility issues such as the role of pH and cation exchange capacity in agronomic on-farm trial decisions. In short, understanding basic soil, climatic and plant nutrient relationships are imperative.

Mixed cropping/ livestock systems require knowledge of livestock production and management principles. Possible topics that could be addressed include nutritional requirements of livestock enterprise alternatives, disease treatment and preventive measures, and livestock/cropping system relationships. The latter involves crop and forage/livestock system relationships: complementarity, supplementarity and competitiveness of enterprise combinations are some of the requirements.

Networking (Recommendation 15)

Networking is a high priority area but one cloudy in content. AID agrees with the recommendation that a strategy for networking activities must be formulated. Priority problems, countries and participants must be addressed.

Future resources devoted to networking activities should be in support of existing viable networks, and efforts to promote joint networking activities, (includes joint funding) are encouraged. A separate international FSR Network is not to be supported.

State-of-the-Art (Recommendations 11-14)

The evaluation team recommends a specific plan for SOTA activities be formulated, leading to a useful synthesis of experience in a small number of priority areas.

To the extent that funds allow, SOTA activities should be increased. Few resources have been allocated to this area, hence, little or no output. A recent technical committee report highlights that state-of-the-art work (synthesis and analysis) must move beyond simple synthesis or combining different methods and experiences. It must undertake comparative analysis of those experiences, draw lessons from them, determine what methods have been more successful than others, and determine the reasons why some methods have been more successful. SOTA activities can be very helpful to field practitioners in program implementation activities. The evaluation team notes that FSSP workplans discuss SOTA activities but do not reflect a consistent approach or consistent themes in conceptualization of the area of activity (p. 15). Each discussion tells what is being done but the steps aren't clearly related.

AID project management concurs with the evaluation report recommendations regarding SOTA activities. FSSP and AID can jointly formulate a SOTA plan. Noteworthy is the fact that the technical committee, after the evaluation, has made a significant contribution in identifying a small number of priority areas that should be addressed. In addition to the identification of priority areas, who can best address SOTA activities and the timing of deliverables must be specified. For example, would the funding of graduate students under the guidance of professors be a cost-effective approach in getting SOTA output or would the direct funding of selected professionals/core staff be more appropriate? Or both?

Program Development and Project Redesign (Recommendations 16-20)

The evaluation team proposed a number of recommendation regarding project redesign. The goal and purpose of FSSP has not changed; hence, a formal redesign activity is not required.

More sharply defined training activities, identification of selected FSR/E problem-focused SOTA activities, and a delivery focus on Africa suggest a major realignment of resources. This can, however, be accomplished with the required framework of annual work plan activities.

Management (Recommendation 21-31)

A number of recommendations regarding project management (FSSP and AID) were made by the evaluation team. AID concurs with the recommendation that core funding should be reduced and that core management activities should be focused on planning, coordinating and facilitative efforts. In addition, management techniques should be implemented to provide cost and benefit data (actual and budgeted) by program activity.

The evaluation committee recommends that AID project management responsibilities be maintained in one office with one project manager. AID concurs with the recommendation and management roles have been clarified and project management has obtained Africa Bureau input from appropriate management personnel.

Purpose

The purpose of the project is to provide technical assistance to missions and LDC agricultural research and extension programs for the design, implementation and evaluation of projects intended for the small or limited-resource farmer while, at the same time, building institutional capacity within those countries through training and networking.

The End of Project Status (EOPS) stated in the Logical Framework are not totally relevant as the project is refocused. In addition, EOPS associated with the training and networking activities in the support mode requires unique evaluation data gathering and documentation activities which were not implemented at the time the project started.

Goal/Subgoal

The goal of FSSP is to strengthen developing country agricultural research and extension programs in order to increase the productivity, income, and quality of life among rural farmers. Recipients of FSR/E technical assistance, networking, and training activities should have capabilities to design and deliver effective FSR/E field programs that ultimately impact on farm families.

Beneficiaries

Beneficiaries of FSSP include AID and host country projects. All projects benefit (FSR/E and commodity specific) from the FSR/E approach to identifying constraints that confront farmers and in turn the solution that are developed, tested and finally disseminated to farmers. Enhanced human resource capability of FSR/E practitioners is the means by which FSSP services ultimately impact on farmers.

Unplanned Effects

"Not pertinent at this time"

External Factors

The demand for technical assistance support activities did not materialize as expected. As a result, the size of this component of the project is less than originally planned.

Inputs

Resources devoted to the training component of the project should address the improvement of training support materials and the development of an economics of farming systems training unit. In addition, the training needs of policy makers, administrators, and FSR/E practitioners in disciplines other than their own should be addressed.

Outputs

Outputs and objectively verifiable indicators are described in terms of acceptable process activities or "intermediate outputs" rather than the more traditional output or impact indicators. Increased output relative to inputs should be enhanced during the latter part of the project life. Training and networking productivity was influenced by high resource requirements associated with research/development activities of training materials and other deliverables.

Lessons Learned

The recommendations of the evaluation report and reduced funding levels highlight the need for project planning and prioritization of project activities.

Special Comments or Remarks

Mid-term FSSP External Evaluation Report (138 pges) attached.

APPENDIX 3

FSSP Core Response to the Mid Term Evaluation Recommendations

Technical Assistance

1. Provide future technical assistance to non-Africa regions through "buy-ins" only.

Core comment:

High priority for 1985 and presently underway.

Further clarification

- a. Asia - (1) a memo to Asia missions has announced FSSP capability and (2) 10% of one FTE from core to coordinate present financial resources.
- b. Latin America - recommend same as for Asia.
- c. Bring world wide expertise to bear through the FSSP Africa Program.

Support

2. Handle bio-data services on a more-cost effective and comprehensive basis, e.g., merge with WI system and add additional "identifiers".

Core comment:

High priority for 1986 but needs further study. Bio-data systems simply are not cost effective. Transfer of the bio-data system to an SE is not cost effective in the short run and would cause conflict of interest concerns among other SE's. A bio-data system is indispensable for FSSP to function.

3. Include AID evaluation community participation in the Evaluation Task Force.

Core comment:

Not relevant. AID participation has been invited in all task forces but attendance has been spotty. Continued participation is encouraged. EFT representation did exist initially, meetings announced to representatives since that time (attendance took lower priority and early in November 1985 a meeting did include PPC representation.

4. Distribute current version of draft FSR/E project handbook in loose-leaf form. Do not allocate additional resources or staff time to this or similar activities of this type.

Core comment:

Is completed.

5. A careful review of documentation efforts should be undertaken by

FSSP management, in collaboration with the APMT, to reduce considerably the number, conserve core funding and prioritize staff time.

Core comment:

Needs clarification on term "documentation". If reference is to bibliography then task is accomplished.

6. Annotation services now provided by AID/PPC/CDIE should be done by FSSP, through an SE. S&T should address this problem as soon as possible.

Core comment:

Disagree. Part of initial agreement and problem is resolved.

7. Continue KSU publication of key papers and its documentation center role.
8. Continue support of annual KSU-FSR/E symposium.

Core comment:

- 7&8. High long term priority and agree with recommendations.

Training

9. FSSP management, on a priority basis, should address the identified weakness in current training methodology and materials—particularly for content relevance to Africa—by drawing on the technical resources of SEs and others actively engaged in FSR/E related activities.

Core comment:

High long term priority and process has been and is continuously underway.

10. Develop an overall training strategy which, inter alia:

withdraws from "sensitizing" type workshops;

emphasizes international training workshops with specific focus on priority African agricultural problems;

concentrates on development and refinement of priority training modules using the technical resources of the entire SE network and other institutions and individuals with unique capabilities; and

re-thinks miscellaneous training activities and reduces level of support.

Core comment:

FSSP has had a training strategy since inception of the project and has revised same as needed.

- a. Low priority but disagree with recommendation. Process of FSR/E training requires participants to first understand the fundamental concepts and methodology of FSR/E. Training in this basic understanding represents very low cost to the project.
- b. High priority. Represents past and present policy. Agree with recommendation.
- c. High priority. Agree but prefer use of the terms "development, refinement and delivery" and use of the term "units" instead of "modules". Represents past and present policy.
- d. Statement unclear. Project has never had miscellaneous training activities.

SOTA/synthesis

11. A specific plan for SOTA activities leading to a useful synthesis of experience in a small number of priority areas should be formulated in collaboration with AID, which will include an identification of resources and (at least preliminary) assignment of responsibilities among SEs.
12. This plan should include a strategy statement which defined what SOTA/synthesis activities involve within the FSR/E framework, who are the target users or clients for its products and for what purpose, and where this program is headed, both in the short and long-term time frame.
13. As methodological and conceptual issues are resolved, SOTA activities should shift to technical issues of relevance to developing countries where FSSP-associated projects are conducted.
14. Encourage joint efforts involving outside support (e.g., Population Council).

Core comment on 11 - 14:

Refer to 11 as general statement and 12, 13 & 14 as "a, b & c" and pull 24 up as "d". Project relies on voluntary cooperation: does not have mandate to assign representation. FSSP core refers to state-of-the-art as synthesis and analysis, and believes it is best to speak of the Technical Committee in the same context as FSR/E synthesis and analysis. Point "a" (or Rec 12) needs further clarification but "b, c & d" are basically sound and have been implemented. Core qualifies by saying further implementation is subject to adequate funding.

Networking

15. As in training and SOTA, and in collaboration with AID and the SEs, FSSP management should establish an overall strategy for

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networking activities in FSR/E, which includes:

concentrating on problem and technical-oriented networking activities within the developing countries;

the results of a careful review of the AID/AFR "Plan for Supporting Agricultural Research and Facilities of Agriculture in Africa", particularly in relation to a problem and commodity focus; and

continue networking activities at the current level but in support of existing viable networks.

Core comment:

High priority in 1986 and in long term. Agree except that "c" might read "with emphasis on" in place of "but in support of".

Program Development and Project Redesign

16. As mentioned in several categories above, there is an urgent need to relate the principal activities of FSSP, i.e., networking, SOTA/synthesis, training and technical assistance to technical problems critically affecting food production, particularly in Africa. FSSP management, in collaboration with S&T, AFR, the Advisory Council and the Technical Committee, after review of the conclusions and recommendations in this report, should embark as soon as possible on a strategizing process leading to a project redesign in early 1986 for the remainder of the existing agreement. This redesign and/or respecification should include:
- revision of the logical framework, including a verification or change in the project purpose and approach;
 - rationalization of the research (SOTA/synthesis and methodology) versus project -cycle support focus;
 - selection of regional (Africa) v. global scope, or some reasonable combination of both;
 - resolution of the role of core management vis-a-vis the APMT and the SEs; and
 - determining desired interface with other AID centrally and field-managed projects.

Core comment:

Recognize high priority. This entire recommendation needs further clarification, consideration and negotiation for 16, 16a-e, and including as part of 16 Recs 17, 18, 19, 22 & 26.

17. Within the context of the above actions, redefine the major project design elements, i.e., develop clearer statements of

project purpose and approach specification of desired end-results (major outputs) of FSSP activities, explicit statements of critical assumptions, and provision of performance and EOPS indicators.

Core comment:

Is redundant and should be included with 16a. Also the recommendation needs further clarification.

18. Based on the results of this collaborative strategizing and planning exercise, an output-oriented work plan should be jointly developed for the remainder of the current agreement term, limited to SOTA/synthesis, development of related training modules, and problem-oriented networking and support activities.

Core comment:

Should be included as part of 16 for re-negotiation. Should become 16 f and be rewritten as "A collaborative annual output-oriented work plan...limited to synthesis and analysis, development and delivery of training units, and problem oriented..."

19. A special review should take place within the next 12 months to assess the results of this strategizing and planning and its impact on performance, including the quality and relevance of activities, for the purpose of recommending extension or phase-out of the project.

Core comment:

Should be included as part of 16 as 16g. Generally agree but should be reviewed in total context of 16. Review should be part of an on-going evaluation process involving those members of the first evaluation team who have knowledge of FSR/E, FSSP and current Africa Bureau programs. One of the team should serve on the task force considering short and long range plans for the project.

20. The collaborative strategizing and program development process should be an annual and evolving one, needed to keep FSSP activities sensitive and relevant to the current needs of client groups, the thinking of AID, and the growing capacities of the SEs.

Core comment:

Redundant. Rec 18 is sufficient.

Management

21. Core management staff should be reduced in size with a change in

duties to involve more planning, coordinating and facilitative effort while transferring implementation/delivery responsibilities to selected SEs and task groups, providing support to them through liaison and backstopping services, and allocating FSSP seed and/or supplemental funding.

Core comment:

Generally complete or underway. However, the recommendation contains a dilemma. We assume the intent is to move more delivery to SE's. More management, however, will be required of core, at least in the short run, and delivery will be less cost effective. Seed funding insufficient for implementation. Further discussion required.

22. Greater recognition needs to be given by FSSP management and core staff to the "partnership" role of AID in this cooperative venture. As part of an effort to increase the desired and necessary collaborative relationship, there should be ex-officio AID policy level representation on Advisory Council and formal APMT representation on the Technical Committee.

Core comment:

Underway and issue has been overplayed.

23. The Advisory Council should assist the Director of FSSP in further elaboration of the FSSP/FSR/E approach and in multi-year strategizing.

Core comment:

Meaning unclear.

24. The Technical Committee should be revitalized, with help from core staff and the APMT, to serve as the mechanism for (a) supplementing and expanding the interdisciplinary base necessary to carry out basic functions, (b) to serve as the nexus between the core, AID, and SEs on technical matters, and (c) to accelerate the more effective use of SEs in problem-oriented FSR/E activities.

Core comment:

Point should be moved to Rec 11 d.

25. In pursuing the above, greater use should be made of SEs and others, through problem or technically oriented task groups, led by selected SEs with core support. AID staff participation at the working level should be encouraged and facilitated.

Core comment:

Concept is fine but points are redundant and dilemma in Rec 21 remains.

26. Senior management in S&T, and in AFR if a regional focus is decreed, should provide clearer guidelines to the AMPT, ensure that an effective intra-agency consensus process is working, allocate the necessary priority and resources (time and travel funds) necessary to operate in a collaborative and partnership mode, and closely monitor progress over the next 12 months—particularly the implementation of recommendations in this report which are acceptable to them.

Core comment:

Core agrees but it should coincide with 19. Clarify in particular the ending statement..."acceptable to them."

27. Unified agency project management responsibility should be maintained in one office, viz, S&T/AGR/ and with one, and only one, project manager through which all communications to and from FSSP must pass. This should be made abundantly clear to the Director of FSSP and core staff, including those problems or subjects in which higher level agency management participation may be appropriate.

Core comment:

Core agrees with sentence one. However, FSSP's successful experience to date shows that the project manager must have foreign service expertise grounded in extensive capability to handle fiscal transactions, negotiations and communications for USAID bureau to mission collaboration with FSSP delivery.

28. Deriving from the steps recommended for strategizing and program development, an improved and more useful reporting system for management purposes should be installed which would, inter alia:

focus on progress (through use of milestone events) in producing major results and solving problems encountered;

provide more information on the plans, activities and achievements of the Advisory Council, Technical Committee, Support Entities and task groups;

provide feedback on the impact of FSSP in involving the SEs in particular, and the US FSR/E community in general; and

discuss the results of the annual KSU_FSR/E symposium and plans for the next one.

Core comment:

Agree. Not short on official, administrative and activity reporting. Need for greater publicity through impact reporting

is under consideration.

29. Budget and fiscal data should be repackaged to provide more programmatic information, e.g.,:

the purpose, cost and results of FSSP activities carried out by SEs task groups, core staff and others; and

actual and/or projected costs to produce major products such as training modules, management manuals, evaluation methodology.

Core comment:

Disagree unless specific needs can be detailed. On-demand support nature of project has limited detail. Items listed have been budgeted. Recommendations "b" needs further consideration.

30. High level representation to the appropriate authorities of the State of Florida should be made by the University of Florida for appropriate relief from State contracting and similar regulations which impede FSSP activities involving a nationwide as well as international dimension.

Core comment:

High priority in 1986 and long term.

31. Necessary changes in budget categories and allocations should be made to cover the high transaction costs involved in a cooperative agreement of this nature and to implement these recommendations.

Core comment:

Needs clarification. Seems inconsistent with earlier recommendations concerning transfer of activity to SE's.

1986 ANNUAL WORK PLAN SUMMARY

Farming Systems Support Project (FSSP)

Introduction

The FSSP Work Plan is an annual contribution of the Cooperative Agreement (Dan-4099-A-00-2083-00) between USAID/Bureau of Science and Technology and the University of Florida, calling for support to AID Missions and related entities in the area of farming systems research and extension. The 1986 Work Plan reflects a strategy addressed by a task group consisting of the AID/Project Management Team in S&T, FSSP/University of Florida Project Management and the Africa Bureau. The Work Plan includes program activities and commitments set into motion during 1985. It also considers recommendations resulting from a 1985 external evaluation, the needs and opportunities outlined in the Africa Bureau's "Plan for Supporting Agricultural Research and Faculties of Agriculture in Africa", continuing interactions with AID Missions, and technical priorities identified by the FSSP Technical Committee.

The regional focus of FSSP's activities for 1986 and 1987 is West and Central Africa. This focus is in response to current concerns of USAID and represents an increase in emphasis on project activities in this region. Concurrently, the project must significantly reduce or eliminate activities in the other regions but will respond on a full buy-in basis to requests from Asia/Near East and Latin America.

Program objectives address three major areas: 1. Synthesis and analysis (state of the art) directed to priority training materials and support of problem-oriented networking activities. 2. Delivery and support for West Africa training and networking. 3. World-wide program development and networking support activities. The budget for 1986 is focused upon these objectives as presented in Appendix I.

Summary of Expected Major Outputs For FY86

Concentration of the FSSP network in FY 86 includes the following outputs in support of major program areas:

1. Two training unit collections, (a) diagnosis and (b) design and analysis of on-farm trials, distributed to FSSP network institutions and individuals, and made widely available to AID Mission and bilateral contract personnel.
2. A three week training course in West Africa, principally for English speaking participants from West and Central African nations, addressing common constraints to agriculture production in the region and employment of the FSRE approach to integrating commodities and technologies to alleviate those constraints.
3. A three week training course in West Africa, principally for French speaking participants from West and Central African nations, with emphasis as in 2 above.

4. A world wide symposium entitled "FSR/E: Food and Feed" at Kansas State University involving practitioners from Asia/Near East, Latin America and Africa followed by the FSSP annual meeting.
5. The top 100 publications in FSRE for 1986, selected and published in Vol III of the FSR/E bibliography.
6. Publications including: (a) the quarterly Newsletter (with a circulation of approximately 5,500 worldwide), (b) continuation of the Network Paper Series (through 1985, 10 Network Papers have been published and distributed), (c) eight FSR/E-intrahousehold Case Studies, (d) a methodological guide to accompany the cases (funding entirely from Ford Foundation), (e) the evaluation task force guidelines and format for evaluating FSR/E projects, (f) a summary of U.S. university-AID bilateral contractors technical successes and suggestions for improving project development and implementation, (g) the livestock systems reports and guidelines evolving from the Livestock Task Force, the Togo and ILCA workshops, and the ICARDA livestock conference in Syria, (h) joint report on workshops conducted with ISRA, Senegal.
7. Purged and reconstituted the newsletter mailing list.
8. Revised and published results of the FSR/E project inventory begun in 1984.
9. A report on responses from practitioners regarding their current uses of the FSR tool known as rapid rural appraisal (RRA), or the sondeo.
10. A report on the most pressing technical problems facing practitioners as identified in the newsletter readership survey conducted December 1985.
11. The second annual meeting of the West Africa Integrated Livestock Network under supervision of the W. African steering committee and in cooperation with ILCA, IITA, and FSSP.
12. A networkshop in West Africa based on the topic "FSR/E in the African University Context".
13. FSR/E-intrahousehold Case Studies reviewed and tested.
14. Enhanced networking among USAID bilateral Title XII contractors concerning issues of project implementation and the design and analysis of on-farm experiments.
15. Respond upon AID/Mission requests to assist in technical assistance, training and networking needs assessments and/or delivery, in Africa upon a case-by-case basis, and in Latin America and Asia/Near East as remaining staff time permits on the basis of complete Mission buy-ins to the project.

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Goals in 1986

The outputs listed above are supported by goals and processes of the FSSP network in FY 86 and in support of USAID. The outputs reinforce and are reinforced by procedural goals which are:

1. To work closely with the Africa Bureau (through the policy paper for Africa) AID Missions in East and Central Africa, REDSO/E and REDSO/W, and the S&T Bureau to better reflect the evolving mandate in agricultural development in general and in FSR/E in particular(all).*
2. To further solidify the training strategy for conduct and support of effective short-term training programs in FSR/E methodology in West and Central Africa (2,3).
3. To review and incorporate changes and additional materials, including those evolving from training and workgroup activities, into the collections of training units (a) diagnosis and (b) design and analysis of farm trials, with the goal of producing and distributing this supplemental material by January 1, 1987 (1, 2, 3, 4).
4. To identify, interact with, and strengthen a West or Central African entity as a base for establishing a center of excellence for short-term FSR/E training (2,3).
5. To establish stronger ties with BIFAD for mutual benefit from the FSSP support entity network system and expand upon the expertise, giving special emphasis to completion of the training unit collections and to delivery of FSR/E training for problem solving in West and Central Africa (14).
6. To continue to support the West African Farming Systems Research Network (WAFSRN) with arrangements for the first annual meeting and participation in support of this network (11,12).
 - a. To facilitate and support a networkshop in West Africa based around the topic of "FSR/E" in the African University Context".
 - b. To support and facilitate the second annual meeting of the West African Integrated Livestock Network.
7. To continue supportive interactions with CIMMYT/and CIAT outreach in Eastern and Southern Africa, and with CIP, ICRISAT, IITA AND ILCA in West and Central Africa in areas of mutual concern (all).
8. To strengthen the effort between the FSSP and U.S. university bilateral contractors implementing projects that involve FSR/E in Africa, by (a) assisting in the collection, summary, compilation and dissemination of information on those technical areas which are going well in projects

* Note the number or word in paranthesis refers to the summary of expected outputs for 1986.

and (b) investigating areas which could be improved in project design, implementation and evaluation and (c) linking FSR/E activities between bilateral contractors through at least one meeting in West Africa in 1986 based upon two meetings held in 1985 by US based contract backstop people (4, 8, 9, 10, 14).

9. To support the Technical Committee of the FSSP in its effort to obtain information on practitioners' special (or non-traditional) techniques of farm trial designs and make this information available to practitioners (4, 9, 10).
10. To continue to urge the program associates in the FSSP network, and practitioners receiving the Newsletter, to provide input in state of the art in FSR/E through (a) submissions to the Newsletter, (b) submissions to the Network Paper Series and (c) ideas for, and acting, when possible, as moderators/discussants/leaders in, sessions of the FSSP annual meetings dedicated to state of the art topics (10).
11. To continue with regular publication activities, including (a) the quarterly Newsletter, (b) the Network Paper Series, (c) project reports (quarterly/annual) and (d) various training units, case studies and workshop reports (6).
12. To compile additional information on those receiving the Newsletter so that discipline and FSR/E interests can be referenced, pressing technical problems identified, and direction given to the type of information most wanted/needed by practitioners (7).
13. To continue to maintain and make available the services of the FSR/E biodata collection (15).
14. To complete, and field test the evaluation guidelines and framework being completed by the evaluation task force (15).
15. To continue to host numerous visitors to the University of Florida, IFAS and International Programs with interest in FSR/E (all).
16. To involve more of the support entity program associates in development and delivery of FSSP-supported activities, giving greatest emphasis to training and networking (all).

FSSP in Africa

Program Development

Program development is embodied in the FSSP approach to training and networking for West Africa. Many of the training materials and networking activities draw upon the more generic FSR/E experiences throughout the world which contribute to the greater pool of experience and to synthesis of the state of the art in Farming Systems. Interactions that occur between farming systems practitioners on a worldwide basis are desired by African practitioners and contribute to accelerated development and learning in application of farming systems research concepts. Emphasis is

given both to development of materials in Africa, and adaptation of existing materials to national program needs in Africa. All activity of the FSSP is designed to synthesize experience through case studies, development of training units, various publication efforts and training activities. State-of-the-art activity is an integral part of the project.

The present work plan desires to build upon the successful synthesis concept established by the intra-household case studies. While moving these projects to completion, testing and inclusion in the training program, small project grants are planned for West Africa to support practitioners in their efforts in write-up and analysis of results from their farming systems research activities. Sixteen small grants are proposed to stimulate these study reports. The Technical Committee, including the West African representative to the Committee, will serve as the steering and review committee for these technical reports, thus providing for overall synthesis of technical and methodological experience.

State-of-the-art synthesis provides ground work for a longer term FSR/E program activity. A strategy developed by the FSSP Technical Committee draws upon the resource base provided by the overall support entity structure and is included as Appendix II to the 1986 Work Plan. The Technical Committee is prepared to develop a long term action plan for state-of-the-art synthesis.

The FSSP continues to strengthen U.S. institutions for participation in USAID technical assistance in Africa. The FSSP is emphasizing the concept of networking technical and methodological experiences among support entities, particularly as they relate to their African bilateral contract work involving an FSR/E approach. This emphasis complements the overall network programming of the Africa Bureau.

The FSSP continues to further strengthen US institutional capability through participant add-on opportunities at no cost to the contract. This concept provides an opportunity for an FSSP Program Associate to join a technical assistance, training or networking team and become an understudy of those leading the effort. The participant add-on also contributes his or her expertise to the activity. While the focus for participant add-ons is West and Central Africa, similar opportunities occasionally arise through the buy-in process in other regions.

Training Strategy

A major objective of the FSSP is to provide training and support for training activities in FSR/E methodology. The general training strategy for West and Central Africa is outlined below.

Goal: To conduct and support effective training programs in FSR/E.

Objectives:

1. Have effective logistical support and facilities.
2. Provide useful training materials:
 - a) Training Units
 - b) Project Handbook for Research and Extension
 - c) Slide-tape Modules

- d) Case Studies
 - e) Documentation
 - f) Reports on previous workshops
 - g) Materials from other sources of FSR/E training
3. Have appropriate and competent trainers:
 - a) Provide a pool of individuals knowledgeable in FSR/E
 - b) Select appropriate trainers
 - c) Inform trainers about training units and other
 4. Ensure the attendance of appropriate participants.

These four objectives are discussed in detail in Appendix III. Particular emphasis on Networking and Training in West Africa includes refining and utilizing the training units and case studies. A schedule for this process and for delivery is given in Table 1.

Training Delivery

The FSSP training strategy for West and Central Africa is designed to initiate and implement institutionalization of regional practitioner-level English and French short-term training in FSR/E. Criteria for selecting a location in the region for a training center include:

- 1) Compatibility with the Africa Bureau's Africa Strategy.
- 2) Ability to provide hands-on activities within on-going FSR/E projects, thereby enabling a practical experience of applying methods learned in the training activity.
- 3) Delivery capability in English and French.
- 4) An institutional location where extension and research personnel are trained.
- 5) High potential for good logistical support, transportation, airline access, and training facilities.
- 6) Interest and commitment towards institutionalization within the selected African educational institution, explicitly detailed prior to short course initiation and evaluated following course delivery.
- 7) Willingness of selected African institution to accept partial enrollment in the training course of regional participants.

Using these criteria, Cameroon has been identified as a potential site for holding regional short courses and for the establishment of a regionally based support program. Other countries may request delivery of selected courses through AID Missions. Courses for practitioners from only one country can be designed for delivery in that country.

The University Center Dschang (UCD) is the site specified as most appropriate within Cameroon as appropriate for long term institutionalization of the required short courses. For logistical reasons initial courses would be presented in Yaounde. Operation of the short course program in Cameroon will build linkages with on-going FSR/E activities, particularly those within the National Cereals Research and Extension (NCRE) program, assisted by IITA and USAID.

TABLE 1

FSSP WEST AFRICA NETWORKSHOP AND TRAINING DELIVERY SCHEDULE

<u>Date</u>	<u>Activity</u>
January	Complete first edition of the Diagnosis in FSR/E (Vol I) and On-Farm Experimentation (Vol II) training units
February	Production of training units
February-March	Distribution of training units
February 26-Mar 1	Gender issues in FSR/E, UF/WIA Africa
February	Review and test four intra-household case studies
March 10-14	First WAFSRN meeting in Dakar
March 15-17	Bilateral contractor meeting on Farming Systems in Africa
March	Complete first draft of intra-household case studies
April	Gambia regional training course (English)
May	Animal systems networkshop, West African Integrated Livestock Network
June - July	Cameroon regional training course (French)
July	Complete intra household case studies
Open	Workshop on FSR/E in the African University Context.
October	KSU Farming Systems Symposium & FSSP annual meetings
November	Integrate feed back from training unit use

The FSSP envisions that short courses offered at the Center will be of two to three week's duration. Courses will be divided into three parts. Part one will focus on diagnostic methods. Part two will be a practicum in diagnosis within an actual FSR/E project. Part three will focus on the design of on-farm experiments and analytical methods, including field-level implementation and management issues. The area of socio-economic analysis needs further emphasis. FSSP training materials will provide the backbone of the courses. Currently, these are available only in English. However, selection of existing French materials and translation of other material is underway.

Operationally, the FSSP plans to deliver the first course in English in The Gambia, tentatively in April, 1986, because the University of Cameroon will not be prepared to host the effort due to ongoing faculty and student relocation. The second course in French will be offered in Cameroon later in 1986. Should enough participants express interest in the Francophone course, it may be divided along ecological lines to have one focus on humid uplands and lowlands, and the other on the problems of the arid Sahelian zone. Evaluation following these deliveries will determine further programming needs relative to site and language.

An exchange of training experience and materials between university faculty in Africa provides a means to accelerate the development of indigenous training capacity. A networkshop focused on FSR/E curriculum in the African university will give early focus to strengthening the FSR/E training base.

Network strategy

Communication among nationals, technical assistance personnel and others is facilitated through newsletters, publications, practitioner visits, workshops and training activities. Specific FSSP support to network activity will include problem commodity and component concerns where FSR/E can contribute to resolving these constraints in a whole farm systems context. Three thrusts are anticipated:

- 1) Participation with and support to existent crop/commodity networks,
- 2) Support of the emerging network (West African Integrated Livestock Network) on animal systems in a mixed crop-livestock context, and
- 3) Methodological exchanges focused on design and analysis of on-farm experimentation.

Participation and support of crop/commodity based networks will require further planning in 1986 with USAID, CIMMYT, IITA, ICRISAT, and SAFGRAD to insure compatibility of interests and organized mutual support. Introducing and strengthening the farming systems dimension in support of adaptive and on farm research is a mutual objective towards the overall goal of establishing stronger linkages between farmers and basic research. The technology development process calls for various adaptive research and extension activities where FSR/E concepts and applications service crop/commodity needs.

The commodity area of emphasis in FSSP support to commodity based networks will parallel those in the Africa Bureau Strategy which includes maize, sorghum, millet, upland rice, roots and tubers, and edible beans. Program associates in the FSSP network all have strong disciplinary bases with emphasis in commodity areas. FSR/E calls for complementarity with the commodity focus through consideration of household and livestock influences on the adaptability and acceptability of commodity based research improvements.

The West African Integrated Livestock Network is planning a second annual workshop dealing with various animal forage, traction and farmer/household concerns. A steering committee of West African practitioners is planning network activities in consultation with ILCA, IITA, FSSP, FAO and various national entities. The goal is to provide for practitioner exchange of on-farm research experience pertaining to livestock in the farming system.

The third thrust follows up on the bilateral contractor interactions of the project during 1985. A meeting with selected FSR/E projects in Africa in 1986 will attempt to accomplish two things:

1. Arrive at a synthesis of particularly successful on-farm techniques and methods in trial objectives, design, analysis and redesign, and
2. Arrive at a consensus for improving FSR/E implementation, both through bilateral contracts and host country approaches.

The focus of this thrust will be on the experience of current practitioners of FSR/E. The output of the thrust will be a synthesis of their experience, both positive and negative. The audience of this synthesis is host country decision-makers involved in funding and staffing FSR/E effort, bilateral contractors (especially the U. S. Title XII institutions), and USAID (Washington and African missions).

Conclusion

Development of the support base for FSSP programming, while not complete, is sufficient for 1986 and 1987 program delivery. New efforts are anticipated relative to development of materials for support of technical assistance, networking or training programs as they evolve from delivery experience. Delivery through workshops and training activities generates experience and is the basis for continued evolution of the material support base.

The concept of farming systems is advancing to include numerous research and extension linkages at the farm level and anticipates regional and sectoral concerns. The FSSP continues to develop methodologically and technically in its implementation and support of Farming Systems Research and Extension (FSR/E). It encourages systems considerations for the agricultural sector and a responsibility for improved policy making relative to technology development and use. The FSR/E process is dynamic and will continue well beyond the present FSSP Cooperative Agreement. The FSSP remains prepared to address these concerns and to support the farming systems initiatives and strategies of USAID, bilateral contracts, and national interests in agricultural development.

The notion that FSR/E should be a project for bilateral contracting is no more valid today than it was five years ago. FSR/E as an approach should not be the sole basis for developing a project but a methodological approach to improve agricultural research, education and extension projects. As an approach FSR/E is stronger and in greater worldwide use today than five years ago when there were many more projects defined as "Farming Systems".

The University of Florida is committed to completion of the training and synthesis tasks of the FSSP with emphasis upon high quality results. These results can be transferred to a West Africa training and support center. Should funding prove adequate in a second phase of the project, the state of the art synthesis, training development, and network support activities can be based on a solid set of experiences, materials and methods forthcoming from the present program strategy.

The FSSP was established to provide a support base for AID Missions and bilateral contractors and to provide for leadership in synthesis of methodological experience particularly in on farm research. The mechanism of delivery for this worthy objective has been through training activities and workshops. Reduction in support resources by more than fifty percent for the 1986 and 1987 years has removed all capability for involvement in Asia and Latin America. This is a significant loss not only in training where both regions were requesting assistance but also a loss to the overall synthesis activity and development of training programs for West Africa.

lab008:2ldsk5

APPENDIX 5

March 14, 1986

Dr. Chris Andrew, Director
Farming Systems Support Project
University of Florida
3028 McCarty Hall
Gainesville, Florida 32611

Dear Dr. Andrew:

The review of the work plan for Cooperative Agreement No. DAN-4099-A-00-2083-00 has been completed.

This version is much improved over the earlier submission. However, the current workplan has major deficiencies, especially for one not well acquainted with FSSP. The workplan does not follow the commonly accepted procedure of specifying objectives in behavioral and measurable form, and then relating activities required to accomplish objectives. While the workplan provides insight into various activities, readers are on their own in terms of understanding linkages among activities, program objectives and delivery costs. Major leaps of faith and gigantic assumptions are required to make the connections. It would be helpful, from a management perspective, to have the various activities keyed to costs and identified in the budget.

The staffs of S&T/AGR and the Africa bureau have studied the plan in detail. The following represents a consensus of views from both staffs. In general the plan fails to meet minimum standards required. However, in order to maintain continuity in some areas, AID approves work on some activities with certain stipulations and rejects others for the reasons shown. Funds provided by Cooperative Agreement No. DAN 4099-A-00-2083-00 must not be expanded, except as specified conditions are met and accepted by the Project Managers in S&T/AGR.

The following activities are endorsed, however, the project manager must approve a detailed budget for each activity.

(a) Conduct of a three-week training course for English-speaking participants from West and Central African countries.

(b) Conduct of a three-week training course for French-speaking participants from West and Central African countries.

(c) Development of training units to support the training-related activities which are approved herein.

(d) Participation in the second annual meeting of the West Africa Integrated Livestock Network, including the provision of support to WASFRN to facilitate the arrangements to conduct this meeting. Project managers must approve a detailed budget.

(e) Participation in the conduct of the "FSK/E: Food and Feed" symposium which will be held in Kansas State University.

(f) Selection and publication of the top 100 FSK/E publications for the FSK/E bibliography.

The following activities are generally endorsed. However, before any AID funds are expended on these activities the project manager must approve a revised workplan which includes a strong rationale and course of action, with estimated costs, for each activity.

(a) Establishment of a regional training site at the University Center at Dschang. This proposal is rejected at this time because of lack of information on FSSP's strategy to operationalize it.

(b) Development of a short-term training strategy for west and Central African countries. Within 60 days, FSSP should present an operational plan to develop a regional FSK/E training program for West and Central African countries. The training plan should also include a discussion of institutional options, such as the strengthening of entities like IITA or WASFRN, as an alternative to the current proposal of developing a regional training capacity at the University Center at Dschang.

(c) Drafts of the following should be submitted to AID for review and approval prior to publication and dissemination: (1) guidelines for evaluating FSK/E projects; (2) livestock systems reports and guidelines; (3) report on workshops conducted with ISRA in Senegal; and (4) report on technical problems facing FSK/E practitioners.

(d) Development of a report summarizing AID bilateral contractors' technical successes in FSK/E project implementation and suggestions for improving FSK/E project development and implementation. The development of this report is acceptable, only if it is developed by an agricultural research chief of party or an agricultural economist with two or more years of African field experience. FSSP's proposal to develop linkages with AID bilateral contractors for the purpose of gathering information needed to develop this report is, likewise, acceptable under the same condition.

(e) Provision of sixteen study grants. FSSP should justify how the studies will contribute to strengthening FSSP's capability to implement approved activities. If the studies cannot be justified on these grounds, the study grants should not be funded.

(f) Justify the need for FSSP's editor to undertake local and international travels.

The following activities should not be undertaken with funds provided by AID under the subject cooperative agreement.

(a) Reconstitution and purging of the newsletter mailing list. This should not be a discrete activity. It should be done as a routine matter in managing the newsletter.

(b) Revision and publication of the results of the FSR/E project inventory. Not approved--such a publication would be of little or no value to AID.

(c) Development of a report on current uses of the rapid rural appraisal approach (RRA) or the sondeo. Not approved--this publication is seen as having no value to AID.

(d) Conduct of a workshop in West Africa on "FSR/E in the African University Context", including provision of support by FSSP to WAFSRN to organize this workshop. Not approved--Africa Bureau sees no value in such a workshop.

(e) Compilation of information on FSR/E practitioners' interests, technical problems, and information needs from people in the FSSP newsletter mailing list. This activity is not viewed as needed.

(f) Development and maintenance of FSR/E practitioners' bio-data. Not approved--it is not needed by AID.

(g) Development of a long-term action plan for state-of-the-art synthesis. Not approved--in general, FSSP should not engage in activities planned under this Cooperative Agreement. It should not anticipate AID funding beyond the current termination date. Any further AID support for "Farming Systems" beyond the current termination of the Cooperative Agreement will be done only after an End of Project Evaluation and renewed competition.

Activities not addressed in FSSP's workplan or in this letter may be proposed by FSSP or AID in the spirit of the Cooperative Agreement. Such activities as are proposed by either party must be presented in a workplan format with budget estimates and approved by the AID project manager.

If there are any questions, please contact me on (703) 235-8952 or the AID FSSP Project Officer, Don Osburn on (703) 235-8946.

Sincerely yours,

/s/

Anson R. Bertrand
Director
Office of Agriculture
Directorate for Food and
Agriculture
Bureau for Science and
Technology

cc: SER/CH/AMM, J. Frame
AFR/TR/ARD, K. Prussner
ST/AGR/EPP, P. Church
SI/AGR/EP, D. Osburn

ST/AGR:RCurtis:edd:3/4/86:Wang #3332A
Rev. by ARBertrand:ns:3/14/86

DEC 15 1986

ACTION MEMORANDUM FOR THE AGENCY DIRECTOR FOR FOOD AND AGRICULTURE,
BUREAU FOR SCIENCE AND TECHNOLOGYFROM: ST/AGR, T. Gill *T. Gill*

SUBJECT: S&T/AGR Farming Systems Support Project (FSSP 936-4099)

Problem: On March 14, 1986, a decision was made to discontinue the FSSP when the current agreement expired in September 1987 (see attachments). This decision was based on the mid-term evaluation findings and competing priorities of more effective and productive activities. A review and analysis of FSSP accomplishments since then suggest another look at the decision to determine whether it should be reversed.

Discussion: The FSSP, conceived as a ten-year project, started on September 30, 1982, as a five-year cooperative agreement (CA) with the University of Florida at a total estimated cost of \$9,952,199. (The S&T contribution was set at \$ 7,887,600, the balance of mission buy-ins.). Obligations through September 30, 1986 total \$ 6,158,000, leaving a balance of \$2,269,700 for the final funding year of the first 5-year phase. The FY 87 CP proposed only \$540,000 in FY 87 funding, which has been further reduced to \$300,000 in the FY87 OYB. Obligations compared to planning figures in the CA are shown in the following table.

FY	Planned in CA (\$000)	Obligated (\$000)	Differences (\$000)
83	1,002.9	2,725.0	1,722.1
84	1,222.3	1,050.0	(172.3)
85	1,611.1	1,623.0	(488.1)
86	1,946.6	720.0	(1,226.6)
87	2,104.0	540.0*	(1,564.0)
TOTAL	7,887.7	6,158.0	(1,729.7)

*In FY 87 CP; this is budgeted at 300,000 in the FY87 OYB.

The FSSP mid-term evaluation, carried out in June 1985 by a team of highly recognized specialists, had the following conclusions and recommendations: (see attachment A)

- 1)- FSSP achieved considerable accomplishments, but there were also problems in project performance. While the project responded quickly and provided reasonable quality of technical assistance to missions' requests, the demands for TA were at a level lower than expected, which was reflected in the level of mission buy-ins;
- 2)- Initial training activities were spotty in quality yet useful as a networking technique involving AID employees and foreign nationals in FSSP activities. Although those activities have improved over time, it was suggested that they be redirected to become more responsive to clients' and meet sponsors' needs;
- 3)- The FSSP publications (newsletter, bibliographies, guidelines, etc.) were good to excellent quality, but these needed to be reduced because they were competing for the time of the reduced project staff;

4)- As the networking efforts overseas have been exploratory in nature, especially concerning Africa, judgments on the effectiveness of the work should be considered rather tentative since successful networks require time to mature;

5)- An outstanding achievement of the FSSP was in fostering the development of a network among U.S. universities and several private firms. The FSR/E Annual Symposium has become "the fulcrum of international farming systems activities in the U.S. and the single most significant gathering in the world."

S&T reaction to the evaluation report was summarized in two main recommendations: First, that FSSP should concentrate its resources in the West Africa Region and, second, that the level of effort specified for activities be reduced. A further decision on the future of FSSP came as a result of discussions on the 1986 Work Plan. On March 14, 1986, S&T/FA sent a letter to the FSS Project Director indicating that "FSSP should not anticipate AID funding beyond the current termination date" (see attachment B). The document adds that "any further AID support for farming systems beyond the current termination of the Cooperative Agreement will be done after an End of Project Evaluation....".

Accomplishments during the fourth year of implementation suggest that the project has achieved substantial gains and requires additional time for consolidation. The following tasks are essential to assure pay-off from AID investments to date.

1) Methodological advances require testing- FSSP has completed the preparation of two methodological documents (Diagnosis in FSR/E and Techniques for Design and Analysis, On-farm Experimentation) that have proved useful to FSR practitioners for increasing food-crop production among small farmers. The main focus of these documents is to identify constraints impeding the adoption of proven technologies, and how they can be adequately addressed. These documents need to be field-tested not only by FS researchers but also by a broad group of policy analysts and policymakers. The University of Florida is currently applying the diagnosis system to both small farmers in the northern part of Florida and commercial farmers in the southern area of that state with its own resources .

2) Economic analysis tools require completion- Farming systems research cannot ensure adoption by farmers unless it shows that a given technology would lead to increases in physical production as well as to an overall positive impact on farmers' income when the whole set of on and off farm activities are taken into account. The FSSP has initiated the process to show how FSR works and increases the net returns to all resources controlled by the farmer and his/her family. The Economic Analysis Training Manual requires additional time for its completion and testing under different sets of field conditions.

3) Networking linkages require institutionalization- FSSP is now in a position to institutionalize the linkages that it has helped foster among U.S. universities, international donors and LDC's. The annual FSR/E Symposium held by Kansas State University for the last six years was supported by the project. Other institutions have indicated interest in hosting and/or funding part of the costs of future Symposia. An Animal Traction Network initiated two years ago in Western Africa is attracting the attention of many donors. It also has attracted other donors' support. The CIMMYT and IITA experience in Africa utilizing FSSP outputs for disseminating technologies offer an example for a close collaboration between FSSP and other IARC's (ICRISAT, CIP in the near term) for strengthening existing networks.

4) Additional matching grants would enlarge FSSP scope.- Many donor agencies such as IDRC, FAO, and GTZ have recognized the contribution that FSSP has made to numerous farming systems activities, particularly to the areas of training and networking. They have made initial overtures to cooperate in joint ventures and to share costs with FSSP in implementing these activities.

With these gains in momentum toward reaching FSSP goals and objectives, it would not be advantageous to AID to terminate its support at this stage in project implementation.

Recommendation: That you reverse the decision to terminate FSSP when current FY 86 funding is exhausted in early 1987 and permit continuation of the FSSP until December 31, 1987, for ST/AGR to fully consider extension or termination of the project. Taking into consideration that current funding is until June 1987, it will be required as a minimum an additional \$300,000 to fund the requested extension.

Approved: _____

Disapproved: _____

Date: _____

APPENDIX 7

NETWORKING PAPERS LIST

- No. 1 Comparing Anglophone and Francophone Approaches to Farming Systems Research and Extension
by Louise Fresco
- No. 2 SYNOPSIS - The Marif Maize On-Farm Research Programme 1984. Development of An On-Farm Research Programme with A Farming System Perspective
by C.E. Van Santen
- No. 3 Some Problems in the Implementation of Agricultural Research Project with A Farming System Perspective
by David W. Norman
- No. 4 Farm Trials with Madura Cattle: Supplements for Village Diets
by Petheram, R.J.; Susento Prawirodigdo and Hardi Prasetyo
- No. 5 Rapid Rural Appraisal, The Critical First Step in a Farming System Approach to Research
by Dr. James Beebe
- No. 6 A Decade of On-Farm Research in Lowland Rice-Based Farming Systems: Some lessons
by Richard A. Morris
- No. 7 Adaptive Research & Pre-Extension Testing: The Case of Upland Rice in West Africa
by Fotzo Tagne P., P.S.C. Spencer and A. S. Sandhu
- No. 8 Impact of Cropping Systems Program at Sukcharna
by B.K. Singh and K. D. Sayre
- No. 9 Recognizing Structural Constraints on Implementation of a Farming System Approach within a National Agricultural Program: Some Views from Thailand
by Craig L. Infanger
- No. 10 A Methodology for Conducting Reconnaissance Surveys in Africa
by Timothy R. Frankenberger and John Litche

- No. 11 Introduction a L'Approche Recherche/Developpment des Systemes de Production et a la Methode de Recherche en Milieu Paysan
by Fotzo Tagne Pascal
- No. 12 The Process of On-Farm Trial Design: The Honduran Experience of 1978
by Daniel Galt
- No. 13 Conducting On-Farm Research in FSR Making a Good Idea Work
by Clive Lightfoot and Randolph Barker
- No. 14 Draught Animal Power in Africa, Priorities for development, research and liaison
by Paul Starkey
- No. 15 Farmer Participation in Farming Systems Research
by D. L. Galt and S. B. Mathema

APPENDIX B

LISTING OF RESPONSES OF SUPPORT ENTITY REPRESENTATIVES TO QUESTIONNAIRE ON EVALUATION OF FSSP PERFORMANCE

The following is a listing of responses from representatives of the Support Entity Network regarding questions about the strengths and weaknesses of FSSP. A total of 20 questionnaires were sent out, with 12 being returned. The responses are listed in order of number of appearances. The exact number of times each response appeared is shown in parentheses.

- I Key strengths of FSSP, especially during previous two years.
- o Networking of FSR practitioners worldwide through activities such as newsletter, training and symposia (6)
 - o Newsletter (5)
 - o Support of Annual FS Symposium (5)
 - o FSR/E Training materials development (5)
 - o Networking of Support Entities (3)
 - o Annotated Bibliography and documentation services (3)
 - o Provision of FSR/E training courses (2)
 - o Networking in West Africa (2)
 - o Central location and advocacy of FSR (2)
 - o Creation of broad consensus on farming systems methodology (2)
 - o Strong, highly-motivated core staff (1)
 - o Networking Papers (1)
 - o Relatively independent of UFlorida (1)
 - o Domestic FSR orientation program (1)
 - o Support of bi-lateral projects (1)

II Major weaknesses of FSSP, especially during previous two years.

- o Not enough involvement of SEs - too much implementation by core staff (5)
- o Difficult for SEs to feel that they were real stakeholders/participants in FSSP (4)
- o Budget cuts negatively impacted Project outreach and effectiveness (3)
- o General lack of organization of Annual Meetings (2)
- o Too much attention on training manuals relative to other activities (1)
- o Core staff inexperienced in FSR work (1)
- o Slide-tape modules not as good as training manuals (1)
- o Not in forefront on current FSR issues - eg policy linkages, institutionalization (1)
- o Lack of AID Mission demand for service due FSSP's lack of understanding of its own role (1)
- o USAID was only source of funding (1)
- o In the beginning, FSSP tried to do too much too quickly, so performance did not equal promise (1)
- o Over concentration on social issues (1)
- o Excessive overhead costs charged by University of Florida (1)
- o Failure to involve biological scientists fully due to social science orientation of core staff (1)
- o Failure to support state-of-the-arts research due to AID's failure to recognize complementarity between research and training (1)
- o Unrealistic initial expectations as to nature and scope of Project activities (1)
- o Lack of clarity as to Project goals and regional focus (1)
- o Did not promote FSR/E aggressively enough (1)

APPENDIX 9

A Sketch of the Evolution of FSSP¹ by Chris Andrew²

Little did I know in June 1982, when I agreed to direct the Farming Systems Support Project if the University of Florida was chosen as lead entity, how often I would experience both pleasure and pain over the ensuing five years. Pleasure and pain come with growth and change in an area where the course is not well-charted, as in the case of FSSP with its opportunities captured and foregone.

In July of 1982, the University of Florida was selected to organize a support network to assist the United States Agency for International Development (USAID) with farming systems research and extension (FSR/E). The mandate and mission for the Farming Systems Support Project (FSSP) was not specified other than to assist the Agency with its various FSR/E projects. Consensus about farming systems seemed to be a long way in the future.

Formulation of a support network was left to the lead entity and its ability to collaborate with other institutions. The first joy came in working with the FSSP support entities that became 25 in number: 4 private firms and 21 universities. Competition for leadership of the project was soon followed by collaboration in the network. This support entity network emerged with a memorandum of agreement, an advisory council, a technical committee and numerous support functions. Many people wanted to be involved in the network. The support entities expected to be strengthened programatically because of involvements with the project. Each participating institution identified a program leader, an administrative coordinator and program associates to facilitate institutional affiliation with FSSP and to coalesce their own respective programs. Resources through departments, centers and programs at these institutions were committed to strengthening the U.S. domestic capacity to provide support to AID farming systems activities through the FSSP. Financial gain was not an anticipated benefit of participation in FSSP. This attitude provided the basis for establishing a unique network among U.S. universities and institutions for international work, profoundly different than any previously developed.

While the purpose of the project has been to deliver technical assistance, training and network development to the third world, particularly in Africa, one of the important results of its organization and collaborative activity is the established network support capability - the FSSP Network within the United States as a support system for USAID. Sometimes concern and criticism relative to the synthesis and delivery process has clouded our collective vision of this powerful network. FSSP has collectively developed its own identity, mission and methodology. Its mission and methodology evolved to support FSR/E; but more resulted.

¹Paper presented at the Farming Systems Research Symposium, October 18-21, 1987 University of Arkansas, Fayetteville, Arkansas, U.S.A.

²Director, Farming Systems Support Project, University of Florida, Gainesville, Florida. U.S.A

Processes involved in the methodology of the network became something to imitate by the various participating institutions, non-participating institutions and other networks. A long list of specific processes being used would include at least:

- 1) Approaches to establishing learning environments in short course settings tailored to specific clientele needs.
- 2) Methods for the development of training materials.
- 3) Approaches to the development of case studies.
- 4) Approaches to regional collaboration among bilateral contract institutions, particularly within the USAID umbrella but also including organization and participation in cooperative support with international agricultural research centers, various international donors and national agricultural ministries and government organizations.
- 5) Technical committee linkages where the committee serves as the FSR/E conscience while consulting with the FSSP.
- 6) A functional biodata system in an environment that is sensitive to misuse of such information.
- 7) Information management relative to activity reports such that ready access to human and other resource information is possible.
- 8) Effective tri-lingual newsletters capable of providing information to recipients as well as information from recipients to be transmitted throughout the network of multidisciplinary and multi-country field-level practitioners.
- 9) Multidisciplinary collaboration in fielding training and technical assistance teams including both biophysical and socioeconomic inputs.
- 10) Establishment of a documentation systems for ephemeral or fugitive literature made available through bibliographies and microfiche to long distance and remote locations where Farming Systems Research and Extension work is underway in third world countries.

Early work in the FSSP was facilitated by well-qualified management on the part of the Science and Technology Bureau, USAID. The attitude was facilitative and flexible, allowing rapid emergence of mission-level programming and diagnostic work to determine project direction. Since the FSSP began without the mandated direction of the CRSP programs, bilateral contracts and other technical support activities, FSSP's collaborative management approach was essential. The intent of its cooperative agreement was being served. Given both the diagnostic and design orientation of early demands on the project, as well as the need to immediately move into the field, collaborative management from the lead entity drew its advisory support through the support entities and the Agency. The three-member advisory council was sufficiently small to take quick action and was able to do so readily with the cooperative direction provided by the USAID/S&T project manager and the FSSP director and core staff at the University of Florida. The functional agreement was that each of the three major actors (project manager, director's office, advisory council) had a specific role to play and that overlap or turf issues would be minimized based upon defined responsibilities:

1. The project manager agreed to manage USAID relations, provide leadership and training to the core staff in establishing mission level linkages, and to oversee contract office interactions to meet USAID mission demands. The project manager also took responsibility for developing and maintaining linkages with AID's regional bureaus relative to project planning and general collaboration.
2. The project director and core staff were responsible primarily for bringing the program and support demension to bear on USAID needs at the mission level. Particular emphasis was on the substantive- and content-oriented issues of FSR/E and the linkage issues associated with involving varied university and complementary resources with problem solving and overall support.
3. The advisory council was a sounding board and source of information for structuring the support entity network to provide sustained collaboration with a mission orientation to serve USAID needs. The council interacted with the establishment of the technical committee, working groups and various programming aspects that emerged from those two activities to provide leadership for the process of synthesis, consensus and growth in the area of methodology of FSR/E.

This major accomplishment was achieved between January and October 1983 and the structure was fully functioning by October of 1984. An impact of FSSP on FSR/E consensus and thought was felt by programs in various parts of the world due to linkage of the technical committee to networks in other continents. It was further strengthened in 1985 and 1986 by the addition of representatives from the regions of Asia, Africa and Latin America to the FSSP technical committee. From this base, participation by numerous program associates (or faculty) within the support entity structure, especially in the development and review of training materials, further intensified a synthesis-to-consensus process. The consensus was free and open (as opposed to a closed activity), bringing new demensions into focus and eliminating disruptive "noise" in the system. The process recognized and accepted varied forms of on-farm research and extension methodology necessary for unique biophysical and socioeconomic environments.

AID programming for farming systems shifted away from worldwide support efforts to emphasis on West Africa, a role the Agency was ill-prepared to assume. Both the FSSP management and the various support entities had something to learn about potential networking and training development in West Africa. Nevertheless, the situation was no more impossible than it might have been in other areas of the world as they began similar activities in previous decades. Language and varied degrees of research capability, among other constraints, were networking challenges. Adaptive work by excellent people (led by Susan Poats) in collaboration with national entities represented by and through AID missions, stimulated program emergence much more rapidly than most people anticipated. It was not as rapid, however, as others desired in terms of establishing commodity networks in the region.

An important West African regional network did emerge. Participants in several regional activities identified the need for emphasis on mixed crop

and livestock systems. To that end FSSP resources, in collaboration with those from international donors and the International Livestock Center for Africa (ILCA), established a network of interested research and extension scientists that can perform effectively in the future if support is sustained until the overall program reaches maturity. Deliberate action and patience has paid off with careful identification of African leaders to participate in the network. Patience is required because these individuals are busy in their respective national programs and cannot give undivided attention to regional networks. It is recognized that regional participation will provide valuable input to the collaborating scientists. Likewise, direction for such an organization must come from national participants or a long-term sustained effort cannot be achieved. To that end steering committees and leaders have been drawn from nationals, which slows the process but makes it more secure. Only now at the close of Phase I of FSSP have these results begun to take-off. While productive workshops and considerable interest have emerged, it is now that the process can begin to bear fruit in terms of long-term research contributions and cooperation. This process however, probably would need at least five more years of support to become fully self-sustained. Financial support from other governments such as the German's and Canadian's, is greatly appreciated by the network and may lead to a viable long-term organization.

Numerous other interactions could be mentioned where collaborative efforts, direct involvement and backstop by FSSP support entities has been exemplary. Collaboration relative to programming for Asia was outstanding, yet no funding emerged to support an Asian program. That collaboration and cooperation remains as a particularly capable source for support to USAID should the Agency decide to use it.

A caution is in order as we consider the final days of FSSP Phase I and a future for the US Network. That is the trust that has been established within the support entity system. It is unique and sometimes delicate. Misuse of biodata, for example, can injure the trust. Selection of one support entity over others to perform a task of pervasive importance without collaboration and communication relative to that selection process can injure the collaborative relationship. With considerable care a relationship that focuses on multidisciplinary involvements in FSR/E has been established which will definitely outlive FSSP regardless of the funding horizon. This unique resource, if nurtured, can provide a support base to USAID and others over a long period of time. To maintain interest within this support base only minor financial investments are necessary. To ignore the base, however, will send a signal to those who have given unselfishly of their institutional and personal resources to the program.

It is impossible to say what the absolute dollar match by USAID missions, other donors, support entities, IARCs and national programs has been to FSSP activity. The project has stimulated the mobilization of many human and information resources at minimal cost to the project but often at substantial cost to collaborating entities. Yet FSSP has been criticized at times because mission buy-ins have not been of a level competitive with other projects in USAID. The project has been managed so that administrative and bureaucratic maneuvers were minimized, including exchange of funds. In many cases this has removed the need for handling funds through extra contract offices and agents as well as with

international money exchanges and transfers. The goal has been to manage the funds as close to the client activity as possible.

Careful study of the overall record indicates that not only mission funds have been extended at the point of delivery of mission-demanded activity, but that funding matches have come from bilateral contractors both in the field and at the home institution. It is impossible to identify the extent to which these matches have augmented the resource base of the FSSP. Nevertheless, the multiplier effects have been considerable and numerous hours have been "freely" contributed to activities such as work groups, task forces, training unit development teams, symposia, councils and technical committees - where no federal monies have been expended. The States, their universities, their offices of International Agricultural Programs, their departments and their faculties have viewed FSSP as a worthwhile investment. This may come as a surprise to some, but the attitude in delivering such support is very positive and conducive to an active and productive multidisciplinary and multi-institutional core of program associates. Most of these people did not know each other in 1982, but now function intensively as colleagues across many disciplinary and institutional boundaries.

While interaction and collaboration provide for information and experience exchanges in a network, descriptive data of activities and actors is another measure of networking success. For FSSP, the important facilitative activities have included newsletters, network papers, bibliographies, document holdings, symposia, workshops/shortcourses, consultancies, biodata searches, cables/telexes information requests and training materials. The inventory does not account for the many activities held in response to FSR/E needs by the support entities. A summary of the FSSP baseline data covering 1982-1987 follows.

Newsletters - 20 issues in English, 20 issues in French, 20 issues in Spanish (Each language carried distinct material for the regional orientation); readership was about 20,000 per mailing of 5,000 including all three languages; thus over 5 years more than 20,000 people read 20 different letters for a total of more than 400,000 interactions. In these letters, articles on varied FSR/E topics evolved from more than 75 authors. Practitioner participation in the newsletter provided content on the cutting edge of FSR/E methodology, as well as ongoing discussion of issues related to diagnosis, design and analysis of on-farm experimentation.

Support Entity News - FSSP helped support the worldwide Farming Systems Symposium at Kansas State University and the University of Arkansas, as well as a Gender Issues Conference at the University of Florida. More than 1,500 people attended these meetings, which not only facilitated an information exchange but also resulted in proceedings, published for broad distribution. In five years more than 40 countries were represented at these meetings.

Network Papers - Various network publications have been prepared from practitioner research, network meetings and workshops with distribution to a practitioner audience targeted from the FSSP mailing list, shortcourse and workshop participants and others who have requested them. Before the series was discontinued, 15 Networking Papers were issued. Four

Networkshop Reports, proceedings from major workshop activities, were also published and distributed, primarily in Africa.

Farming Systems Bibliographies - Two major efforts went forward in documentation. The first was a bibliographical listing published by Kansas State University including 1950 items, accompanied by an Africa-specific bibliography of 485 items selected from the main volume. Efforts on the bibliography continue today with the addition of another major collection of works. The second effort was coordinated through the Technical Committee of the FSSP, encompassing review and selection of items for inclusion in FSSP's Bibliography of Readings in Farming Systems. Three volumes were issued in Spanish and French and four volumes were issued in English to the entire FSSP mailing list of more than 5000. More than 850 documents were reviewed in this process including hundreds contributed by farming systems practitioners worldwide and the balance selected from the Kansas State Bibliography. In the four resulting English volumes 419 documents were selected for annotation. The AID Document Information and Handling Facility (DIHF) will continue to handle requests for the FSSP Bibliographies and their contents beyond FSSP Phase I and into the future. (Similarly, Kansas State University will continue to distribute and harbor proceedings of the Annual Symposium through an agreement with the University of Arkansas.)

Document Holdings - All of the above bibliographic listing are available in the Kansas State University FSR/E documentation center. From that holding 1550 articles are in microfiche for "at cost" purchase by individuals or libraries desiring to establish an FSR/E reference facility of both published and ephemeral materials.

Workshops/Shortcourses - Courses and workshops have varied greatly in length, topic, location and numbers of participants. FSSP has led or made major contributions to workshops and short courses in 22 countries with a total of 676 participants.

Training Materials - Fifteen slide-tape modules (in English, Spanish and French) were produced as supplemental training materials, the basis for further discussion of specific topics. Methodological steps of the FSR/E approach were the basis for contents of these modules. More than 600 sets were produced for distribution, involving more than 40,000 slides.

The primary training materials developed by FSSP were sets of training units including 3 volumes with a supplemental trainers guide. Development and testing of these units was an intensive effort on the part of FSSP program associates, core staff, technical committee members, and scores of practitioner throughout the world. The synthesis and analysis that has gone into the training units truly represents FSR/E state-of-the-art. The units have undergone extensive testing and revision which has resulted in the integration of livestock and economic analysis concerns into the units. A fourth volume remains to be completed before year's end.

Technical Assistance - Project design and evaluation teams, as well as training needs assessments and program development consultancies, have involved 66 teams and 124 team members in assignments in 14 countries where FSSP was the leader or major contributor to the activity.

Visitors - Short term visits to FSSP headquarters were managed as short term training activities lasting from one hour to several days. These were non-formal (not shortcourse) but tailored training encounters that involved more than 1500 visitor days over the first four years of the project. Visitors came to the FSSP from 40 countries.

Biodata Searches - Biodata on FSR/E practitioners processed and available through FSSP included 798 individuals, and 143 searches provided information to various users, USAID being the heaviest.

Telex/Cable Communication - Without telex and cable service the FSSP would not have responded in a timely manner to various requests and delivery activities. The files show that more than 700 communications resulted in five years.

Information Requests - General information requests by telephone and letter have averaged over seven per day or more than 10,000 since fall of 1982.

It would be incorrect to say that the FSSP has institutionalized FSR/E within the 25 cooperating support entities. Yet the essence of the FSSP goes well beyond the input data given above. The FSSP has provided a mechanism for faculty members with interests in farming systems to collaborate as well as communicate with practitioners from around the world. It is not an institutional network per se, but it is a network of faculty belonging to an important insitutional resource base. FSR/E, it must be remembered, is methodology, not an institutional construct. The institutional dimensions enjoyed by FSSP result from the strength of the participating institutions and the various parent entities affiliated with those institutions, (such as the Land Grant Association and AUSUDIAP, the professional societies such as those of agronomy, agricultural economics, and others), along with a host of other inter-institutional mechanisms. Somehow the right ingredients formed within the FSSP to provide for a unique congruity of thoughts and practices in the support network to achieve support for FSR/E based USAID programs and FSR/E programs of other donors. The United States Agency for International Development can take considerable credit for initiating a project that has stimulated this unprecedented collaboration. While FSR/E as a methodology is here to stay, the network support and broad based institutional needs to support agricultural research and extension remain tenuous at best.

Future support efforts in AID and through the donor community will surely benefit from study of the FSSP experience.

APPENDIX 10

FINAL REPORT

A Proposal for the Development and Implementation of an Agricultural Research and Design, Management, and Analysis Training Program Utilizing MSTAT and Microcomputers.

Funded by Farming Systems Research Project University of Florida.

Implemented by Michigan State University

- Crop and Soil Science Dept.
- Agricultural Economics Dept.
- Institute of International Agriculture

March 18, 1986

Russell Freed
MSTAT Director

The purpose of this grant (\$213,712.45) was to develop training materials and programs for MSTAT, a microcomputer program for agricultural research. Four experimental workshops to train farming systems researchers were also planned.

The specific activities of this project are outlined below:

1. Materials will be developed for workshops to train scientists to use MSTAT. In March 1984 a workshop will be held at MSU to train MSTAT users located at the FSSP and collaborating institutions.
2. Two scientists from three FSR projects will be identified and attend MSTAT workshop (March 84).
3. The MSTAT program will be changed to reduce the level of "computerese" required to operate MSTAT.
4. French, Spanish and English translations of MSTAT will be made for both the program and manual.
5. Three additional MSTAT workshops will be held in cooperation with national FSR/E programs. Participants will receive copies of MSTAT.

Accomplishments of FSSP grant to MSU

1. In March 18-30, 1984 eleven researchers attended a MSTAT workshop at MSU. The participants were from six countries and are listed in Appendix A. The goals and daily workshop schedule are outlined in Appendix B. The participants used both IBM and Apple computers in the workshop. English was the language of instruction. However, two of the students were taught in Spanish. The participants used English, Spanish and/or French MSTAT programs.
 2. The first in country workshop was held at the Chitedze Agricultural Research Station in Malawi from May 28 to June 8, 1984. Drs. Russell Freed and Tom Stilwell from MSU and Dr. Larry Janicki from the University of Florida conducted the workshop with help from Mr. Lupiya and Mr. Kaunda. A summarization of the participant evaluations of the workshop is given in Appendix C. This workshop was given to support a FSR/E project in Malawi.
 3. The second in country workshop was held at the Institute du Sahel in Bamako, Mali in December 15-22, 1984 by Joe Tohme (MSU). Thirteen participants (Appendix A) from Mali, Gambia, Bukina Faso and Niger attended the MSTAT workshop. The AID mission in Mali was instrumental in organizing this workshop. The mission was impressed with the workshop (Appendix D). This workshop was conducted primarily in French with additional instruction in English.
 4. The third in country workshop was held in Senegal at the Institut Senegalais Agricole in January 15-27, 1985. Fifteen researchers (Appendix A) attended the course taught by Joe Tohme (MSU) with help from Valorie Kelly, Mamadou Sidibe, and Ndiaga Cisse. This workshop was in support of a USAID farming systems project in Senegal.
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5. The fifth MSTAT workshop was conducted in September 1984 at the International Rice Research Institute with partial funding from this grant. Thirty participants included researchers from Peoples Republic of China, IRRI, Kenya, Nigeria and several South East Asian countries.
6. This project helped support the programming of MSTAT in English, French and Spanish. It also provided funds to develop training manuals in three languages. Copies of the first MSTAT program and manual, version 2.0, are enclosed. The programs are for MS-DOS (IBM compatible) machines.
7. The project also partially supported the development of the 3.0 version of MSTAT. This major revision reduced the level of "computerese" required to operate MSTAT. Many of the revisions were also a result of comments from FSR/E MSTAT users. Agricultural researchers with minimal computer experience can use the new version of MSTAT.

A summary of the major changes are listed below:

- a. Numeric variables are stored as single precision numbers (decimals).
- b. Output produced by subprograms can be directed to (1) the screen, (2) the printer and (3) the disk.
- c. Configuration file (printer/computer) menu driven.
- d. CALC subprogram no longer needs to exit MSTAT to edit program lines or to enter transformation statements. Statements can also be saved on disk.
- e. The FACTOR subprogram no longer requires user to enter "K values" for this subprogram. A menu with 28 experimental designs are listed.
- f. The multiple regression subprogram was rewritten with a better algorithm.
- g. Several new subprograms were written including:
 - STABIL - produces regression line for two factor experiments over environmental mean (Hildebrand, 1985).
 - RANGE - mean separation program - LSD, Duncan, Multiple Range, Tukeys, and Student - Newman - Keuls at 10,5 or 1 percent levels.
 - SEASON - economics program which calculates seasonal and cyclical indices on commodity prices, and deflated and inflated prices. The results are displayed based on both market and calendar year basis.
 - ACSERIES - plant breeding program to manage pedigrees and print books, labels etc.
8. The new 3.0 version program was translated into Spanish and French. The manuals for this version were not completed with these funds since the grant terminated December 31, 1985. However, other funds are being used to complete the Spanish manuals. The translation is completed and will be printed shortly.

9. The training materials and MSTAT programs which were developed with partial funding from this grant were also used in the following workshops:
- MSU - August, 1984 22 Bean/Cowpea CRSP participants
 - Zimbabwe - September, 1984 24 participants
 - Pakistan - CIMMYT
 - Swaziland - Penn State/CIMMYT
 - Bangladesh - IADS
 - Turkey - CIMMYT
10. MSTAT is being used by several thousand agricultural researchers around the world. Many farming systems projects around the world are using MSTAT. Several of the FSR projects which have used MSTAT include: Senegal, Malawi, Ecuador, Pakistan, Mali, Swaziland, Botswana, Rwanda, Zimbabwe, Mexico, Philippines, Thailand, Burkina Faso, Tanzania, Gambia, Niger, Dominican Republic, Guatemala, Bolivia, Peru, Columbia, Honduras, Puerto Rico, Cameroon, Zambia, Sri Lanka, Indonesia, just to name a few.
11. Many of the International Centers are using MSTAT in their programs. These include IRRI, CIMMYT, CIP, CIAT, IITA, ICIPIE, IFDC, AVRDC, ICRISAT and ICARDI. Several of the CRSP's researchers are also using MSTAT. Appendix D gives some quotations and letters concerning MSTAT.

APPENDIX 11

SUMMARY OF USAID MISSION EVALUATION OF FSSP SERVICES 86 - 87

The following is a brief summary of field mission responses to a cable inquiring as to services received and performance of the Farming Systems Support Project during 1986 and 1987. N/C implies no comment or no contact with FSSP during the period.

AFR MISSIONS

- THE GAMBIA - NETWORKSHOP - WELL DONE
- TECHNICAL WORKSHOP - WELL DONE
- FSSP EXCELLENT EXAMPLE OF HOW CENTRALLY-FUNDED PROJECT CAN SUPPORT BI-LATERAL EFFORTS.
- KENYA - FSSP TOO RESEARCH ORIENTED, NO EMPHASIS ON TECHNOLOGY TRANSFER
- LESOTHO - N/C
- MALI - IN-COUNTRY TRAINING SATISFACTORY
- NEWSLETTER USEFUL, W/SOME WEAK POINTS
- TECHNICAL INFO USEFUL
- SYMPOSIUM GENERALLY USEFUL, SOME WEAK POINTS
- OVERALL - STRONG SUPPORT
- RWANDA - TRAINING WORKSHOP - OUTSTANDING FSSP CONTRIB.
- LIBERIA - RECONNAISSANCE SURVEY - EXCELLENT
- ZAMBIA - N/C
- SENEGAL - N/C
- SUDAN - N/C
- REDSO/ESA - NEWSLETTER USEFUL MEANS OF COMM. FSSP COLAB W/CIMMYT ON TWO FRENCH FSR SEMINARS

ANE MISSIONS

- INDIA - N/C
- BURMA - N/C
- EGYPT - N/C
- FIJI - LIKE NEWSLETTER, TECH INFO
- PAKISTAN - NO DIRECT USE, BUT APPRECIATES NEWSLETTERS AND SYMPOSIA
- PHILIPPINES - N/C
- SRI LANKA - N/C
- THAILAND - ATTENDANCE AT INT'L CONF - GOOD
- NEPAL - N/C

LAC MISSIONS

- BELIZE - N/C
- BOLIVIA - N/C
- DOMINICAN REPUBLIC - N/C
- ECUADOR - N/C
- EL SALVADOR - N/C
- HAITI - PROJ. EVALUATION - WELL DONE W/SOME WEAK POINTS
- HONDURAS - TRAINING COURSE - EXCELLENT
- JAMAICA - N/C
- PARAGUAY - TRAINING OF EXTENSION AGENTS - VERY SUCCESSFUL