

FOOD SECURITY IN AFRICA

(A.I.D. Project No. 931-1190)
(Cooperative Agreement No. DAN-1190-A-00-4092-00)

Final Evaluation

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EXECUTIVE SUMMARY

The Food Security in Africa (FSA) project became effective September 1, 1984. It is governed by a Cooperative Agreement between Michigan State University (MSU) and the Agency for International Development (A.I.D.). The seven year, three month project is scheduled to end November 30, 1991. This Final Evaluation concludes that the project has achieved significant accomplishments and recommends that a follow-on project be designed and approved by A.I.D. and implemented by MSU.

The FSA project is essentially an applied research project with a strong operational and problem-solving orientation. It places a heavy emphasis on capacity building as well as on networking and dissemination. The purpose of the project is to develop operational approaches and analytical methodologies that will help developing country governments achieve food security goals. The applied research supported under the project has focused on four substantive themes as they relate to food security: international trade; public and private sector roles; agricultural technology; and the linkages among food production, marketing, and consumption.

The "joint product/interim report" model, which is now widely associated with MSU, was used to implement the FSA project. This MSU approach encourages integration of African policymakers into the process of defining the research problems in order to "create a demand" for the research results; relies on systematic data collection and analysis to guide decision making; insists on integrating African researchers into the entire research process; ensures the timely availability of research results by issuing interim reports and working papers before the final results are in; and disseminates these interim results via workshops and conferences held in Africa to help inform the policy debate.

The FSA project is one of a very small number of centrally funded projects that is "officially" co-managed by two bureaus, in this case the S&T Bureau and the Africa Bureau. Project management both by A.I.D. and by MSU has received good marks from USAID missions in countries where the project has been implemented.

As of September 30, 1990, A.I.D. had obligated just over \$10.0 million in support of the FSA project, almost 92 percent of total project funding as estimated in the Cooperative Agreement. Almost one-third of total obligations (\$3.2 million) is core support from S&T, and the remainder (\$6.8

million) is core support from AFR and "buy-in" support. As of August 31, 1990, project expenditures totaled almost \$6.7 million, or about \$1.1 million per year, on average, over the past six years. These expenditures reflect project activities implemented in Zimbabwe and Southern Africa (SADCC), Mali, Senegal, Rwanda, Somalia, and the Sahel/West Africa region. They do not reflect the more recent activities initiated in Mozambique, Malawi, Zambia, and Tanzania.

The Final Evaluation was conducted by a five-person team. Two team members were associated with the U.S. university community (Stanford and Tufts) and three, with the U.S. Government (A.I.D. and USDA). Each team member had a background in the social sciences (economics or agricultural economics); was well grounded in food security and food policy issues; and had lived and/or worked in Africa.

The conclusions and recommendations of the evaluation were based on discussions with faculty and students at MSU in East Lansing, Michigan; similar discussions with A.I.D. officials and others knowledgeable about the project in Washington, D.C.; analysis of responses to a questionnaire administered to selected A.I.D. field missions in Africa; and a critical review of the published and unpublished research results produced under the project.

The FSA project has made major contributions in empirically unmasking incorrect "conventional wisdom" about rural households; informal local and regional markets; and the capability of farmers, traders, and government managers to respond to policy reforms, institutional changes, and technological improvements. It has shown how policy reform can become more directly attuned to food security issues by better understanding household consumption patterns (Senegal, Mali); rural trade patterns (Rwanda, Mali, Zimbabwe); informal regional trade flows (Rwanda, Mali); internal marketing institutions (Zimbabwe, Mali, Senegal); the diversity of household strategies for coping with short-term food emergencies (Mali, Senegal); and the limits imposed by technological constraints (Senegal, Mali, Zimbabwe, Rwanda).

-- MSU's work on the international dimensions of food security has shown, and convinced policymakers, that in an environment characterized by high production variability, technological constraints, and poor local food marketing infrastructure, food self-sufficiency is not a viable, or even achievable, food security strategy. At the same time, their work suggests that there are opportunities for intra-regional trade which would enhance food security both in the Sahel and SADCC regions. MSU has made a significant

contribution to understanding short-term solutions to food deficits, especially factors affecting the use of food aid in the policy reform process (Mali).

- The project has demonstrated that knowledge about marketing arrangements was inadequate, and in some cases, wrong, in part because the legacy of government control forced a sharp divergence between the "official" picture of trade and marketing and the reality of transactions occurring outside official strictures. At the same time, MSU research has shown how more effective markets can be created. In some cases, reducing state intervention in markets serves to stimulate markets. Yet, MSU found that privatization generally did not automatically produce well functioning markets. MSU research also provided strong evidence that certain public interventions, such as investments in roads and other infrastructure and in agricultural research and market information systems, have a positive impact on food security (Zimbabwe, Mali, Rwanda, Senegal).
- The project has generated sufficient empirical evidence to substantiate the importance of the linkages among technology, institutions, and policies in food security strategies (Senegal, Zimbabwe, Mali, Rwanda, Somalia). Current studies of the performance of agricultural research programs in Africa will serve to provide an empirical basis for understanding the factors that impede or facilitate agricultural research programs, and for developing effective methodologies to measure the economic costs and benefits of agricultural research.
- The project has also elucidated important linkages among household production, the marketing system, and household income and access to food. It has shown that the production of food crops and cash crops can be complementary enterprises; that many rural households do not benefit as sellers from higher prices for food crops, because a significant number of rural households, even those which produce food, are net buyers, not net sellers; and that higher prices for producers do not necessarily result in greater output in any case. These and other research findings have contributed to an understanding of how different categories of households are affected by different government and donor interventions.

The evaluation recommends that A.I.D. support a follow-on project which addresses food security issues through applied research, but that limited technical assistance be permitted as well; that the follow-on project continue to be responsive to

the needs of sub-Saharan Africa where food security problems continue to be critical, but that it permit selective expansion to other geographic regions as well; that the existing research focus is appropriate for the follow-on project, but that more explicit attention be given to the relationship between food security and certain other research themes; that MSU implement the follow-on project, but that MSU have the capability to access specific geographic and substantive expertise from other institutions; that S&T/RD manage the follow-on project; and that the follow-on project be authorized for ten years.

I. SUMMARY OF PROJECT

A. Project Background

The Food Security in Africa (FSA) project (931-1190) became effective September 1, 1984. The project is governed by a Cooperative Agreement (DAN-1190-A-00-4092-00) between Michigan State University (MSU) and the Agency for International Development (A.I.D.). The seven year, three month project is scheduled to end November 30, 1991. This Final Evaluation is designed to assess the accomplishments of the project and to determine whether or not a follow-on project is needed.

The FSA project, itself, is a follow-on project. Its predecessor, the Alternative Rural Development Strategies (ARDS) project, was also implemented under a Cooperative Agreement between MSU and A.I.D. And it also was funded for a seven year period, from August 1977 to August 1984. Because the FSA project was designed as an Amendment to the ARDS project, it was assigned the same A.I.D. project number as the ARDS project; and because A.I.D. regulations do not permit any project (as defined by a project number) to operate longer than ten years (without approval by the A.I.D. Administrator), the 1984 Amendment had to be amended again in April 1987 to enable A.I.D. Project No. 931-1190 (which began in August 1977) to operate beyond the ten year limit.

Although the FSA project and the ARDS project share the same A.I.D. project number, and although both projects have been implemented under a Cooperative Agreement with MSU, the similarities end there. Indeed, there are at least three major differences between the two projects: (a) the FSA project focuses only on Africa; the ARDS project was global, covering all geographic regions; (b) as such, the FSA project is co-managed by A.I.D.'s Bureau for Science and Technology (S&T) and Bureau for Africa (AFR); the ARDS project was managed solely by the S&T Bureau; and (c) the FSA project focuses on a limited number of substantive research themes in the area of "food security;" in contrast, the ARDS project was far more general in nature, focusing on "rural development."

It is helpful to understand these similarities and differences between the ARDS project and the FSA follow-on project in determining whether or not another follow-on project is warranted.

B. Project Overview

The logic underpinning the FSA project is straightforward. It

is spelled out in the Project Paper (PP) Amendment to the ARDS project and the subsequent Cooperative Agreement for the FSA project. Both documents called for MSU to use the tools of applied research, networking and dissemination, and training -- in one or more of four thematic subject areas (identified below) -- in order to produce various intermediate outputs. These outputs, taken together, would contribute to achieving two project purposes that, in turn, would enhance food security. These four project elements -- activities, substantive research themes, intermediate outputs, and purposes -- are summarized below.

Project Activities. The PP Amendment specified three project activities.

1. Applied research was defined to include, inter alia, comprehensive food security assessments in two African countries and problem-oriented research in up to eight additional African countries.
2. Networking and dissemination activities involved the development and distribution of working papers and newsletters and the organization of seminars and workshops.
3. Training was defined as on-the-job training (not degree training), and included the development and testing of short-term courses, data collection and analysis carried out by LDC students, and participation in the networking activities.

Research Themes. The project focused on four substantive research themes: international trade; the roles of the public sector and the private sector; agricultural technology; and the linkages among food production, marketing, and consumption. These themes were broadly defined in the PP Amendment and the Cooperative Agreement.

1. The international trade theme was defined to include the management of foreign exchange and food imports (both commercial and concessional) which -- together with related domestic food production and food marketing improvements -- would help to achieve food security goals. This theme involved: (a) the trade-off between domestic food production (food self-sufficiency) and a combination of domestic food production and production for export (food self-reliance); (b) the role of regional trade in achieving food security; and (c) solutions to reducing short run food deficits, including systems to procure food, manage food stocks, and distribute food.

2. The second research theme focused on the respective roles and responsibilities of the public sector and the private sector in: (a) solving short run food supply problems; and (b) providing the investments needed to achieve long run food security. This theme included data collection and analysis requirements needed for effective planning and for the development of market information systems.
3. Agricultural technology was the third theme. Its focus was on the interaction among technological change, institutional reform, and policy adjustments needed to achieve food security goals. It also included rate of return analysis for investments in agricultural technology development and assessment of factors affecting the return to such investments.
4. Linkages among food production, marketing, and consumption was the last research theme. This concerned the effects of domestic food marketing reforms on food producers, food consumers, and food traders. Such marketing reforms might include: (a) price incentives; (b) infrastructure development; (c) input supplies; (d) food storage (both the quantity of food stored and the location of storage facilities); and (e) physical distribution of food (including intra-household distribution) over space and time.

Project Outputs. Five intermediate outputs were expected to result from undertaking applied research, networking and dissemination, and training in these four substantive areas.

1. Identification of priority issues which must be addressed to achieve food security.
2. Workable strategies for dealing with the priority issues.
3. An improved understanding of the data needs and quantitative techniques for analyzing food security policies.
4. Improved methodologies for designing and implementing empirical research on food security issues, conducting food security assessments, and strengthening social science contributions to food security policy.
5. Improved methodologies for analyzing alternative institutional arrangements for managing food security.

Project Purposes. Two project purposes were specified.

1. To develop operational approaches and analytical methodologies that enhance the ability of developing country governments to establish objectives, identify problems, analyze policy and program alternatives, and formulate the most effective short- and mid-term strategies to accomplish food security goals.
2. To develop, test, and disseminate improved approaches to the development of institutional and professional capabilities for food system management.

In sum, the FSA project is essentially an applied research project with a strong operational and problem-solving orientation. It also has a heavy emphasis on capacity building (but not necessarily institution building). Although the project was not designed to support A.I.D. field missions or developing country governments through the provision of long-term advisors or short-term consultants, technical assistance has, to a certain extent, been an ancillary by-product of the project. This overview of the project helps to establish the broad parameters within which it should be evaluated.

C. Project Funding

The Cooperative Agreement estimates total project funding at \$10,917,233, of which \$3,600,000 would be provided as core support from S&T; the remaining \$7,317,233 would be provided as core support from AFR and as "buy-in" support, primarily from A.I.D. field missions in Africa. It is noteworthy that the Project Authorization of February 1, 1989, authorizes total project funding (including both core support and buy-in support) at \$13,495,728 -- substantially more than that estimated in the Cooperative Agreement.

As of September 30, 1990, A.I.D. had obligated \$10,026,162, almost 92 percent of total project funding as estimated in the Cooperative Agreement. Of total obligations to date, \$3,200,000 represents core support from S&T, and \$6,826,162 represents core support from AFR and "buy-in" support.

As of August 31, 1990, project expenditures (as distinct from project obligations) totaled \$6,655,903. Thus, expenditures have averaged about \$1.1 million per year over the past six years. It also appears that the current project pipeline (defined as obligations less expenditures) is substantial, over \$3.3 million. Table 1 summarizes total project expenditures by source.

TABLE 1.--Project Expenditures by Funding Source,
September 1, 1984 - August 31, 1990

<u>Funding Source</u>	<u>Amount</u>	<u>Percent</u>
Core	\$2,946,633	44.3
Zimbabwe/Southern Africa	1,846,102	27.7
Mali	1,255,023	18.9
Senegal	363,000	5.5
Rwanda	115,053	1.7
Somalia	70,000	1.1
Sahel/West Africa	36,554	0.5
S&T/Nutrition	23,538	0.3
Total	<u>\$6,655,903</u>	<u>100.0</u>

Source: Michigan State University, October 8, 1990. This tabulation does not include "buy-in" support currently being negotiated with A.I.D. missions in Mozambique, Malawi, and Tanzania.

Project expenditures cannot easily be disaggregated in terms of the project activities they support: applied research, networking and dissemination, and training. Nevertheless, Table 2 does permit some understanding of how the funds have been used.

TABLE 2.--Project Expenditures by Major Use,
September 1, 1984 - August 31, 1990

<u>Use</u>	<u>Amount</u>	<u>Percent</u>
Salaries/Benefits ^{a/}	\$2,590,565	38.9
Consultants ^{b/}	171,103	2.6
Travel	992,423	14.9
Equipment	377,461	5.7
Other Direct Costs ^{c/}	1,358,661	20.4
Overhead	1,165,690	17.5
Total	<u>\$6,655,903</u>	<u>100.0</u>

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- a/ Primarily research, dissemination, training, and administrative costs.
- b/ Primarily costs for African researchers to carry out in-country research.
- c/ Primarily in-country research and publication costs.

Source: Michigan State University, October 8, 1990.

D. Project Approach and Project Outputs

The basic approach taken by MSU in implementing the FSA project is important. It can be summarized in terms of five specific elements.

1. Integration of policymakers into the process of defining the research problems before any research is undertaken, in order to create a demand for empirical information on the part of these policymakers. This makes it more likely that the information will be used in policy formulation, currently and in the future.
2. A sound and systematic approach to the development of empirical data collection, focused on a careful definition of the questions to be answered and the minimum data needed to answer them.
3. Absolute insistence on integrating African researchers into the entire process of research development and implementation, in order to develop local capacity to continue undertaking such research.

4. Procedures for ensuring the timely availability of interim results via working papers.
5. Procedures for disseminating research results via conferences and meetings located in Africa.

Using this "joint product/interim report" model, MSU produced three kinds of outputs (or joint products) under the FSA project: (a) publications (primarily working papers and dissertations); (b) workshops (including conferences and seminars); and (c) students trained. These project outputs are summarized in Table 3. The table disaggregates these outputs in terms of the country in which the applied research was undertaken; where the workshops were held; and the nationality of the students trained.

TABLE 3.--Principal Project Outputs by Country, 1984-90

<u>Country</u>	<u>Publications</u>	<u>Workshops Convened</u>	<u>Students Trained^{a/}</u>
Mali	49	22	6
Rwanda	18	7	1
Senegal	15	2	7
Somalia	12	6	1
Tanzania	7	2	2
Malawi	3	3	3
Zimbabwe/Southern Africa	133	9	8
Sahel/West Africa	4	2	11
U.S.	15	37	31
Other	2		18
Total	<u>258</u>	<u>90</u>	<u>88</u>

a/ Refers to on-the-job training, not degree training.

Source: Michigan State University, October 8, 1990.

During the six year period 1984-90, the FSA project undertook applied research that culminated in 258 publications; in addition, 90 workshops and conferences were convened as a mechanism for disseminating the research results; and 88

students were trained. Of those trained, 44 percent were African students; 35 percent were from the U.S.; and the remainder were from other countries. Although not shown in the table, 23 percent of those trained were women.

E. Mid-term Evaluation

A Mid-term Evaluation of the FSA project was conducted in October-November 1987 and completed in March 1988. Although the evaluation was positive, it recommended eight ways in which the project might be improved during its final three years of operation. MSU has by and large implemented those recommendations as summarized below.

1. MSU has responded positively to the recommendation that empirical research findings developed under the FSA project be published in refereed professional journals so that they have a broader audience. MSU faculty, their African colleagues, and other African researchers associated with the FSA project have published articles in well-known and widely read journals such as World Development, American Journal of Agricultural Economics, Journal of Development Economics, Food Policy, and Agricultural Economics.
2. As recommended in the Mid-term Evaluation, MSU initiated discussions with Zimbabwean and USAID/Harare officials concerning the desirability of assigning a second, long-term faculty advisor to the University of Zimbabwe to support the countries of the SADCC region; a second advisor was subsequently hired.
3. The recommendation to give more emphasis on organizing national and regional workshops has been implemented by MSU. For example, MSU assisted the Sahel West Africa office of A.I.D. in conducting the Sahel regional food security policy workshops in 1988 and 1989 in Washington, D.C. MSU also prepared and presented a paper in 1989 at the annual meeting of the African Studies Association as had been recommended. The corollary recommendation to give greater emphasis to regional food security concerns in the Sahel, modeled in part on the work in the SADCC region, was also successfully implemented.
4. MSU agreed with the intent of the recommendation that more African graduate students be recruited, more food security assistantships be offered, and supplementary in-country training be provided. According to MSU, however, adequate resources have not always been available, when needed, to

implement the recommendation. For example, MSU requested A.I.D. funding to train African students from the SADCC region (using SADCC resources), but this was denied on the grounds that on-going bilateral projects could be used for this purpose. In other cases, MSU has been successful in obtaining non-A.I.D. resources (from the Rockefeller and Kellogg Foundations, for example) to fund students to work at MSU on food security issues that are carefully coordinated with the food security work under the project. MSU solidly supports this recommendation which is designed to enhance the training component and capacity building elements of the project; what is needed is a cost-effective mechanism to implement the recommendation.

5. MSU has not yet provided copies of diskettes of the various country data bases to PPC/CDIE (A.I.D.), as recommended, because African and MSU staff continue to use and refine the data. However, the data are available to anyone who wants to use them, with the caveat that users take the time to understand the nature and limitations of the data. This recommendation should be implemented to the extent possible before the end of the current Cooperative Agreement.
6. The Mid-term Evaluation also recommended that innovative research methodology materials developed under the project be more widely disseminated. MSU has informally distributed research design and data processing training materials to researchers at IFPRI, the World Bank, CIMMYT, and other universities. These materials will continue to be refined before they are published.
7. MSU has apparently not devoted resources to developing concise summaries of major research findings for distribution to host country policymakers, A.I.D. personnel, and others, as had been recommended in the Mid-term Evaluation. This recommendation continues to have considerable merit, and its implementation would enhance the networking and dissemination activity of the project.
8. The Mid-term Evaluation suggested that MSU had emphasized the supply side of food security (food availability), and that other important food security issues should also be addressed. It suggested that research on managing food aid and on technology development should be undertaken. MSU has carried out work in both areas.

Thus, MSU has, for the most part, been responsive to the recommendations of the Mid-term Evaluation.

II. EVALUATION METHODOLOGY

The Final Evaluation of the FSA project was conducted by a five-person team. Two team members were associated with the U.S. university community (Stanford and Tufts); the other three, with the U.S. Government (A.I.D. and USDA). Each of the five team members had a background in the social sciences, generally economics or agricultural economics; each was well grounded in food security and food policy issues; and each had experience living and/or working in Africa.

The evaluation methodology, like the project itself, was straightforward. It involved: (a) discussions with faculty and students at MSU in East Lansing, Michigan; (b) similar discussions in Washinton, D.C. with persons knowledgeable about the FSA project; (c) an analysis of responses to a questionnaire administered to selected A.I.D. field missions in Africa; and (d) a critical review of the published and unpublished research results produced under the project. Annex A provides a complete list of persons interviewed throughout the course of the evaluation. Annex B lists the papers that were reviewed. Annex D provides mission responses to the questionnaire and summarizes those responses.

A. MSU Site Visit

Three members of the team visited MSU for an intensive round of discussions with MSU faculty and students over a three day period, October 1-3, 1990; a fourth team member visited MSU for a one-day visit on October 12. Meetings were scheduled with: (a) core faculty of the Department of Agricultural Economics, the entity primarily responsible for implementing the FSA project; (b) the Chairman of that Department; (c) African graduate students studying at MSU under the auspices of the FSA project; (d) the Administrators of the African Studies Center and the Institute for International Agriculture; (e) the Food Security and Nutrition Working Group; and (f) key faculty members of the Economics Department who were working on research issues related to food security. The discussions were organized to have both a geographic focus (Zimbabwe/Southern Africa and Mali/the Sahel) and a substantive focus (including the Computer Support Group and the Agricultural Technology Assessment Group).

B. A.I.D./Washington Discussions

All five team members met in Washington, D.C. for three days, October 9-11, 1990, to discuss the project with A.I.D. officials as well as representatives from the International Food Policy Research Institute (IFPRI), Cornell University, and the World Bank. Within A.I.D., the team met with the two A.I.D. officers responsible for designing the FSA project in 1984 (both of whom just happened to be in the Washington area); representatives of the two A.I.D. management entities (S&T/RD and AFR/TR); agriculture officers of the three regional bureaus where the project was not being implemented (ENE/TR, APRE/TR, and LAC/DR); a representative from each of two offices in S&T supporting related research activities (S&T/AGR and S&T/N); representatives of AFR/DP; and DAA/S&T.

C. Field Mission Questionnaire

Finally, a questionnaire was administered to the 10 A.I.D. field missions in Africa where the project had been, or was being, implemented. These missions or offices included Botswana, Malawi, Mali, Mozambique, Rwanda, Senegal, Somalia, Tanzania, Zimbabwe, and Zambia. (In the case of Somalia, the questionnaire was sent to the Agriculture Development Officer in the U.S. who had backstopped the FSA project in 1986-88.) The questionnaire was also sent to REDSO/ESA and the Club du Sahel where A.I.D. officers had a particular knowledge of the project. Seven missions and REDSO/ESA responded; see Annex D.

The team was unable to travel to Africa to visit any of the countries where the project had been implemented. However, two of the team members met with representatives from Zimbabwe (the University of Zimbabwe and the Ministry of Lands, Agriculture, and Rural Resettlement of the Government of Zimbabwe), and this meeting provided a host country perspective of how the FSA project had been implemented in at least one country.

Following the Washington discussions the team dispersed for four weeks in order to evaluate the applied research, networking and dissemination, and training activities that had been undertaken during the six years the project had been in operation. Each team member assumed responsibility for evaluating these activities as they related to one of the four substantive areas on which the project focused. This permitted some degree of specialization, and obviated the need for all

team members to review all research, networking, and training activities. The team reconvened in Washington to discuss the first draft of the evaluation report on November 15, 1990. A second draft was discussed at an A.I.D./Washington briefing on December 21, 1990. The Final Evaluation was completed in January 1991.

Part III evaluates the project in terms of the four subject areas (international dimensions of food security; public and private sector roles; agricultural technology; and the linkages among food production, marketing, and consumption). Part IV evaluates project management, both in A.I.D./Washington and at MSU. Part V suggests implications for the future. Part VI summarizes the conclusions and recommendations.

III. EVALUATION OF PROJECT IMPACT

A. Introduction

The FSA project has made major contributions in EMPIRICALLY unmasking incorrect "conventional wisdom" about rural households, informal local and regional markets, and the capability of farmers, traders, and government managers to respond to policy reforms, institutional changes, and technological improvements. In doing so, the project has provided a new and compelling "story" of food security in Africa. It is the story of food insecurity in rural households -- households which are often net purchasers of staple food commodities. It is the story of rural as well as urban people who depend on markets to supply their food needs. It is the story of the operation of those markets -- local, regional, and global -- and the weaknesses and imperfections which threaten food security. It is the story of how policy reform can become more directly attuned to food security issues by better understanding household consumption patterns (Senegal, Mali), rural trade patterns (Rwanda, Mali, Zimbabwe), informal regional trade flows (Rwanda, Mali), internal marketing institutions (Zimbabwe, Mali, Senegal), the diversity of household strategies for coping with short-term food emergencies (Mali, Senegal), and the limits imposed by technological constraints (Senegal, Mali, Zimbabwe, Rwanda).

In country after country, MSU research has determined -- contrary to "conventional wisdom" -- that a significant portion of rural households are not self-sufficient in basic staples. Between a quarter and a half of the rural population are net purchasers of basic commodities. Rural households are more dependent on local markets for their food security than previously thought.

The FSA project also has demonstrated that knowledge about marketing arrangements was inadequate, and in some cases, wrong, in part because the legacy of government control forced a sharp divergence between the "official" picture of trade and marketing and the reality of transactions occurring outside official strictures. Countries which believed themselves to be self-sufficient in staples were shown to be significant importers, once unrecorded regional trade was documented (Rwanda). Policymakers who thought they were providing support to local producers found they were attracting (illegal) imports from neighboring countries (Rwanda). Assumptions about the difference between "official" and parallel market prices were shown to be seriously wrong (Mali).

At the same time, MSU research has documented the weaknesses of many local food markets. Local markets are often thin, and supplies may not be available when they are most needed (for example, during the hungry season). In addition, marketing infrastructure designed to facilitate food sales may not adequately serve the needs of rural purchasers or sellers (Zimbabwe, Mali).

Creating more effective markets, with lower transactions costs, would improve food security for many rural households. In some cases, reducing state intervention in markets is one way to stimulate such markets. Making transactions legal eliminates the need to move food in very small quantities (to avoid detection) and reduces the need to pay bribes. Transactions costs decline, and consumers benefit (Mali). Yet MSU found that privatization generally did not automatically produce well functioning markets. Traders often lacked the capability and incentive to invest in managing even intra-annual fluctuations (Senegal, Tanzania). They also faced risks associated with the operation -- and change -- of government policies (Mali, Senegal, Zimbabwe, SADCC, Sahel). Stabilizing inter-annual fluctuations was beyond the scope of virtually all private marketers, as well as some parastatals (Sahel, Mali).

When many rural households are net purchasers of basic foods, and a high proportion of food sales come from a small group of relatively well endowed farmers, higher food prices cannot be used as a policy to increase household food security or to reduce rural inequality (Rwanda, Zimbabwe). Furthermore, when non-price factors (such as the lack of improved technology, credit or adequate marketing infrastructure) constrain production, higher prices may not be successful in stimulating production increases either.

The four sections below evaluate the impact of the FSA project in terms of the four research themes on which the project focused.

B. International Dimensions of Food Security

The FSA project has made substantial progress in shifting the focus of policymakers away from commitments to national food self-sufficiency toward policies of food self-reliance. In the Sahel, MSU research and analysis was instrumental in both changing African commitments to self-sufficiency (Mali) and presenting evidence which contributed to the donor dialogue on support for national and regional food self-sufficiency schemes for the Sahel (mission responses to questionnaire; discussion

with A.I.D. officials). MSU research was also instrumental in Zimbabwe's decision to move toward food self-reliance rather than food self-sufficiency (discussion with Zimbabwe's Deputy Minister of Agriculture). MSU's work on the international dimensions of food security has concentrated in three areas:

1. Domestic food production versus production for export.
2. International and regional trade and related domestic production and marketing improvements to support food security.
3. Short-term solutions to food deficits that lead to long-term improvements in food security.

Domestic Food Production versus Production for Export. MSU is not the first to recognize that cash and food crop production may be complementary. They have, however, made a unique contribution in providing a much more accurate empirical assessment of the kinds of complementarity, and most importantly, the implications this has for the policy instruments used to increase production. The Mali and Senegal work provide the most explicit treatment of this theme.

In Mali, MSU (and other) researchers have found complementarities between the cultivation of cotton (an export crop) and food crops, in part because of the residual impact of fertilizer on subsequent food crops, and in part because of the wider benefits of infrastructure created to support cotton production and marketing.

Goetz's analysis of food/cash crop relationships in Senegal adds empirically to the knowledge of this topic. Availability of enough peanut seed makes possible the hiring of additional labor, which also expands food production. Availability of adequate food is necessary to keep married sons in the household, which permits "economies of scope" by allowing more food and cash crop production than would be possible in two separate production systems. The study suggests that increased productivity -- especially the ability to attract and productively use labor -- is critical. Traction technologies may be more important than fertilizer (partly because of the production increasing possibilities, partly because they are "durable" and can be sold off in bad years to permit food purchases). Thin and unreliable coarse grain markets limit the willingness (and ability) of farmers to expand production, even in response to alternative prices. Price guarantees also negatively impact the 20-30 percent of households which are net purchasers of food.

International and Regional Trade and Related Domestic Production and Marketing Improvements to Support Food Security. MSU has shown, and convinced policymakers, that in an environment characterized by high production variability, technological constraints and poor local food marketing infrastructure, self-sufficiency is not a viable, or even achievable, food security strategy. The net effect of attempting to achieve food self-sufficiency is generally to trade the moderate risk of variability in global markets and the food aid process for a high degree of domestic production and marketing risk. In addition, MSU has documented the following factors associated with such a strategy:

- high costs associated with supporting and storing surpluses in "good" years (Mali, Zimbabwe, Tanzania);
- lack of correlation between national surpluses and household food security (Mali, Zimbabwe); and
- constraints to using higher producer prices in stimulating food production or consumption shifts necessary to support the strategy (Senegal, Mali, Sahel).

MSU has also demonstrated that many of the same costs apply to attempts to create a protected regional cereals market in the Sahel.

At the same time, however, MSU's work suggests that there are opportunities for intra-regional trade which would enhance food security. MSU, along with other researchers, has contributed to documenting existing intra-regional trade in the Sahel and identifying the policies which impact on it. They also found that legalization of cross border trade in Mali resulted in lower transactions costs, which benefitted rural households which were purchasers of cereals.

MSU's work in Southern Africa also found opportunities for enhanced regional trade. Kingsbury et.al. identified some important constraints to intra-regional trade, based on a collection of interviews with traders. The work also identified some areas with potential for increased trade. MSU has made a contribution in putting together information on intra-regional trade in the SADCC region. Unlike the Sahelian work -- which fed directly into discussions about a protected regional cereals market -- the SADCC work seems to have been less significant in policy terms.

MSU has also investigated the impact of exchange rate policies on both trade and food security in Southern Africa, using an examination of Zambia's experience as its first case study.

While this work has produced some empirically important findings (for example, calculated margins on leakage of Zambian subsidized roller and breakfast meal), there is neither the empirical richness nor the "dramatic" impact associated with some of the other MSU work.

Short-term Solutions to Food Deficits that Lead to Long-term Improvements in Food Security. While most research on African food security discusses the supply problems associated with Africa's rainfed production cycle, few go on to spell out the profound implications of variable rainfed production for institutional roles, policy reform implementation and funding. MSU has done this -- especially in its work in Mali -- and in doing so, has made a significant contribution to understanding factors affecting the use of food aid in the policy reform process.

MSU's major contribution in this area is the analysis of the use of food aid to support food security policy reform in Mali. Dione's analysis of food aid-supported policy reform illustrates both the potential benefits and the liabilities of using food aid to support longer-term food security. Funds from the sale of food aid were used to support policy reform (for example, to help the government fund food purchases to support a guaranteed floor price). Revenue was less available during good production years (when food aid was not needed), and hence, funds to support prices ran out quickly. The work led to a more circumscribed market role for the parastatal, as well as a recognition of how severely the "countercyclical" nature of food aid can circumscribe policy reform. The study also addresses attempts to privatize the handling of food aid itself to directly support market liberalization.

C. Public and Private Sector Roles

An emphasis on the roles of the public and private sectors is an extremely important and appropriate subject to be emphasized by the FSA project. It is a sensitive area. It is also a complex subject, thereby making it difficult to achieve a positive impact. The considerable success achieved in connection with the FSA project is therefore of special interest in demonstrating clearly the advantages of the distinctive features of MSU's implementation of the FSA project in furthering this objective.

It is not only because the issues related to the roles of the public and private sectors are complex and politically sensitive that it is especially difficult to encourage policy

reforms related to food marketing and other aspects of food security. In addition to the usual patronage considerations and vested interests in interventions such as single-channel marketing of grain, there are also humanitarian concerns that reinforce a political concern to avoid urban food riots. It is extremely difficult to overcome a LDC government's reluctance to liberalize grain marketing, but market reform becomes possible if it is conceptualized as redesigning what the public sector does rather than simply expecting it to withdraw completely from the market. In Mali and several of the other countries in which it has operated, the FSA project has been able to avoid a polarized and ideological debate by promoting applied research which has focused discussion on empirical evidence that has provided a basis for informed dialogue, systematic analysis of policy options, and step-by-step progress.

The Process of Privatization and the Transition to a Market-oriented Economy. The importance of improving the policy process is underscored by the complexity of the tasks of raising farm productivity and output and of increasing the efficiency of food marketing; that is, dealing with both sides of the food security equation -- increasing food availability and access to food. A common problem related to the continuing dominance of agriculture derives from local markets for food being very thin and fragmented with large variability in prices and market volumes. Furthermore, collusion is facilitated by the small number of buyers, especially in remote areas. Private sector investment in grain marketing is discouraged by high risks, not only those that are unavoidable because of climatic factors and fluctuations in world prices, but also those that result from lack of information about government action, for example, concerning the dates and locations of free food aid distribution (Dembele, Staatz, and Egg).

An excellent paper on "Food Security Policy Reform in Mali and the Sahel" by Josue Dione presented at the 1989 World Congress of the International Economics Association emphasizes these multiple problems and the consequent need for a sustained effort that includes learning from the monitoring of on-going experience. For example, he notes that the cereal market liberalization program in Mali was based initially on assumptions that were not borne out by the field studies carried out by MSU researchers. Numerous changes have been made on the basis of accumulating knowledge and understanding. "As a result," he affirms, "some progress has been made since 1981: private grain trade has been legalised; cereals circulate more freely from suppliers to consumers; the role of the public sector has been more appropriately redefined to some extent; and market facilitating services such as financing and

information are improving."

Another of the project's important contributions has been to help host country governments avoid serious mistakes. For example, there has been a common tendency among certain activists to argue that food is so important that governments should intervene directly to promote "food first" policies. Moreover, it is often alleged that an important reason food problems arise is because farmers are encouraged to produce export crops at the expense of food crops. As noted earlier, research carried out under the project has made it clear that at the farm level the production of export crops such as cotton and food crops for subsistence consumption can be complementary.

In recent years there has also been considerable enthusiasm for "targeted food subsidies." Although targeted food subsidies are no doubt more cost-effective than general food subsidies, it is doubtful whether they merit priority in sub-Saharan Africa because of severe administrative as well as financial constraints. An important paper prepared for an A.I.D. workshop on targeted consumer food subsidy schemes makes it clear that, given those constraints, the potential for consumer subsidy schemes to make a significant contribution to food security in Mali is not at all promising (Staatz et. al., 1989).

Finally, a paper presented at the Fifth Conference on Food Security in Southern Africa states that "Proponents of market liberalisation have too often assumed that the sanctioning of private trade would be sufficient to induce a vibrant, competitive market in which traders immediately fill the void left by state decontrol of the market" and notes that this "vacuum theory of privatisation" is not supported by the available evidence (Jayne, Chisvo, Chigume, and Chopak).

Appropriate Roles for the Public Sector. Research in Zimbabwe, Mali, Rwanda, and Senegal has provided strong evidence that certain types of public interventions, such as investments in roads and other infrastructure and in agricultural research, have a considerable positive impact on food security. Research in Zimbabwe on the expansion of smallholder maize production (Rohrbach) and in Rwanda demonstrating the impact of improved roads on efficient food marketing (Loveridge) are especially noteworthy.

The progress being made in Mali in establishing a Market Information System (MIS) is a notable example of the FSA project having a significant, positive impact on marketing efficiency and the wellbeing of consumers. Dr. Abdoulaye Sall, the Director-General of the grain marketing board (OPAM), emphasized the contributions of Mali's MIS in his presentation

to the April 1990 seminar in Bamako. He stressed its impact in bringing about a very significant reduction in market prices of grain as a result of price data being broadcast on the radio, noting that studies carried out by the MIS have confirmed that consumers and traders have been taking account of that information in their decisions to buy and sell cereals. Because of the public goods nature of information, the private sector will not supply the amount of information that is socially optimal nor will it make it accessible to all participants. Thus government provision of essential information helps to make markets less risky, more transparent, more competitive, and more efficient.

It is worth emphasizing the role of Niama Nango Dembele, a Malian researcher now completing his Ph.D. at MSU, in the design and implementation of the MIS. Dembele was initially hired by the FSA project to work as a research assistant to Josue Dione, one of MSU's in-country researchers at the time. Dembele, who had completed a M.A. in economics at the University of Michigan, was brought to MSU for six months of training in agricultural economics and for orientation on the FSA project. After carrying out several valuable field studies in Mali, Dembele served as the Technical Assistant to the MIS that was established as part of OPAM. The report on that experience by Dembele, Staatz, and Egg gives a valuable account of the steps involved in establishing the MIS. The design of the project was guided by the knowledge that had been acquired by MSU and other researchers. It was decided that the system should not be a new institution but rather a coordinated effort by existing institutions that were already collecting data that only needed to be made compatible with the needs of the MIS. The plans that were developed were sensitive to the need to keep the project simple and hold down costs in order to ensure its long-term survival when foreign assistance was no longer available. A major strength of this effort is the willingness of the participants to monitor the performance of the MIS and to make periodic changes to overcome weaknesses that are observed. Moreover, the MIS plays a critical role as a public information system because it is conceived broadly as a tool for policy design and redesign for managing the food system and not simply as a market news service.

D. Agricultural Technology

The FSA project was originally not designed to investigate the role of agricultural technology in food security strategies. In fact, it appears that project designers may have intended to exclude investigation of this topic. It is curious that a

project, which was designed to identify effective food security strategies in Africa, would exclude examination of the role of technology at a time (1984) when the Africa Bureau's agricultural portfolio was beginning to focus more heavily on agricultural research.

Notwithstanding the project's design, project implementors proceeded to investigate the interaction of technological change, institutional reform, and policy adjustments in addressing food production and marketing constraints in Africa. This topic soon emerged as the primary research focus of the project. In a 1986 memorandum from the Africa Bureau's project manager to MSU's project director and the S&T Bureau's project manager, this shift in project focus was "officially" recorded as an appropriate change in project design.

This section evaluates the project's contribution to advancing the understanding of the role of agricultural technology as a "prime mover" of food security (Weber and Jayne) and the interrelationships that exist among technology, institutions, and policies. It concludes that one of the most significant accomplishments of the FSA project has been its contribution to national and regional debate on the relative importance of the interrelationships among these three elements in achieving food security goals in Africa.

Interaction of Technology, Institutions, and Policies. The project's research has generated sufficient empirical evidence to substantiate the importance of linkages that exist among technology, institutions, and policies in food security strategies.

- In Senegal, the project's research showed that the government's plan to increase the price of rice in order to achieve rice self-sufficiency would have little or no impact on production in the short run. Even a doubling of rice prices would not generate a significant supply response because the more immediate and binding constraints faced by rice producers were technical in nature.

- Goetz's research in the southeastern part of Senegal indicated that many households are net deficit producers of coarse grains. Thus, in the short run, increasing the floor price of coarse grains would elicit little or no production response, and would only hurt these households. To increase the supply of coarse grains, the project recommended that greater attention be given to developing technologies that would enhance the demand for coarse grains (for example, processing technologies), to improving labor and land productivity, and to reducing the costs of

production. Improvements in input and output marketing institutions would also be necessary.

- A similar study of the sorghum and millet markets in Zimbabwe showed that adjusting prices would have little impact on the food security of the majority of the producers, given their limited participation in commercial markets (approximately 10 percent in the early 1980s). The project noted that greater impact on food security would be achieved by developing technologies that: (a) increased average yields in normal years or raised minimum yields during years of drought; and (b) reduced storage losses and processing costs.
- Also in Zimbabwe, the project's research found that the tripling of smallholder maize production during the period 1980-85 was due to a number of factors, including the availability of, and farmers' access to, improved maize technology, improvements in both the public and private sector marketing systems, farmers' access to capital, and higher market prices.
- In Mali, Dione and Staatz found that households that have animal traction (technology) and access to credit and technical inputs (institutions) were more likely to respond to price incentives (policy).
- The project's research in Mali also showed that in the non-cotton growing zone, the head tax policy resulted in disinvestment in animal traction and draft animals by many households. The project's researchers pointed out that this disinvestment in a proven technology could have significant negative effects on household food security.
- The project's research in Rwanda showed that increasing the price of beans would not only hurt the 72 percent of rural households (producers) who were net bean buyers, but also would have little effect on increasing production. Rather than low prices, the lack of technology to address low productivity and soil fertility problems was found to be the primary constraint to increased bean production.
- In Somalia, the project's research showed that the substantial shift in urban consumption from maize to imported rice and pasta was due to the time constraint faced by women in maize processing. The project pointed out that this consumption shift could result in lower maize prices (due to reduced demand), which in turn, could have a serious impact on domestic maize production. To avert this situation, the project recommended increased attention to

the development of technologies that would reduce the time required to process maize and increase usage of existing public grain mills that were idle or underutilized.

Investing in Agricultural Research. The FSA project recently added another dimension to its investigation of the role of technology in achieving food security goals. This dimension involves an assessment of the performance of agricultural research programs and the factors that affect such performance. The recognized role of technology in food security strategies, coupled with A.I.D.'s substantial investment in agricultural research programs in Africa, make this added focus highly relevant. It also demonstrates MSU's outstanding capability to identify priority issues of immediate relevance and importance to food security strategies that were not evident during project design.

The economic justification for investing in agricultural research in Africa is often based on the double-digit returns to research investments made in the U.S., Asia, and Latin America. This is because there is little empirical knowledge about the pay-off to agricultural research in Africa, where human resources and institutions are not as advanced as in Asia and Latin America, and where climatic conditions are more harsh. There is increasing concern and uneasiness about this knowledge gap, not only because of the mounting investments in African agricultural research, but also because of growing impatience with the seeming inability of agricultural research programs in Africa to generate the impact achieved by research programs in other regions of the world.

The value of investigating the factors that affect the performance of agricultural research programs in Africa lies not only in "coming up with the numbers" (as in the case of the rate of return studies that will be undertaken in Kenya, Mali, and Malawi), but also in broadening current discussions of the factors that impede or facilitate the ability of agricultural research programs to generate impact. These studies will also be very useful in developing and testing more effective methodologies for measuring the economic costs and benefits of agricultural research. While the project has produced a number of articles (including those by Eicher, de Frahan, and Staatz) on factors that affect the performance of agricultural research in Africa, the on-going studies should substantially improve the knowledge base on this topic and contribute research-based insights on how returns to investments in agricultural technology can be maximized.

Assessment of Accomplishments. Without question, the FSA project has been successful and cost-effective. It has not

only achieved the purposes for which it was designed (that is, to develop, test and, disseminate approaches and analytical methodologies for food system management). It has also: (a) broadened the empirical knowledge base on food security strategies; and (b) facilitated the application of such knowledge to host governments' and the development community's programs and policies.

1. It has substantially advanced the knowledge base on food security issues and strategies in Africa, and in doing so, has often challenged "conventional wisdom." Three of the project's most significant findings related to agricultural technology are summarized below:

- In many African countries, "getting the prices right" (which, in almost all cases, means increasing prices) will result in little or no production response, at least in the short run, for various reasons, including: (a) many households are net deficit food producers and, therefore, do not have marketable surpluses to take advantage of increased floor prices; (b) appropriate technologies are not available or accessible to enable farmers to expand their output; (c) most African countries do not have the financial, infrastructural, and human resources to support floor prices on a sustained basis; and (d) input, output, and capital markets in Africa are often times dysfunctional.
- In the long run, the dilemma of protecting the large number of low-income consumers from high food prices, while providing price incentives to domestic food producers -- the food price dilemma -- can be resolved by developing higher-yielding technologies that reduce production costs. Such cost-reducing technological changes will allow real food prices to fall while helping to maintain the profitability of food production.
- In planning support to national agricultural research systems, it is essential that attention be given by donors to the stage of a recipient country's institutional, scientific, and political maturity. The "resource transfer" model, which often overlooks the absorptive capacity of a recipient country, usually leads to unsustainable programs and, hence, to low returns to investments in agricultural research.

2. It has facilitated the application of research findings to host governments' and the development community's programs, policies, and projects. For example:

- In Mali, the project: (a) encouraged the government to

reconsider its head tax policy; (b) encouraged the government to discontinue its price-setting function (with the exception of floor prices for paddy); (c) is being used to guide the development of the 12-year strategic plan for agricultural research; and (d) convinced USAID/Bamako to include food security as an issue in its Farming Systems Research project's agenda.

- In Zimbabwe, the project's research on maize and coarse grains is guiding current national debate on policies for private sector participation in rural marketing.
- The Development Fund for Africa's fourth strategic objective -- "improving food security" -- was, and continues to be, influenced by the project's research findings.

E. Linkages Among Food Production, Marketing, and Consumption

The previous section focused on the linkages among technology, institutions, and policies. This section also focuses on linkages: (a) linkages among production, marketing, and income; (b) linkages among production, consumption, and nutrition; and (c) intrahousehold linkages.

Linkages Among Production, Marketing, and Income. The project's research has elucidated the links among households' agricultural production, the marketing system, and household income and access to food. By its emphasis on the use of empirical information to test widely-held assumptions, it has been successful in altering policymakers' perceptions, and in some cases in affecting national and regional policies, to the benefit of household welfare.

Among the specific research results important for policy formulation that have been generated under the FSA project are the following.

- Production of food crops and cash crops can be complementary enterprises. Households which produce cash crops (for local sale or export) are often those which produce food crops both for their own subsistence and for sale (Senegal, Rwanda, Mali).
- A large number of rural households do not benefit as sellers from high prices for food crops, because many rural households, even those which produce food, are net buyers, not net sellers. Generally those households which are net

sellers of food crops are better off than those which are net buyers (Senegal, Rwanda, Mali).

- Higher prices for producers do not necessarily result in greater output in any case. Constraints to increasing production include household labor scarcity (Rwanda, Senegal), variation in rainfall (Mali), and poorly functioning markets, each of which affects production decisions in a variety of ways.
- Adequate market functioning is critical to household food security. Most rural households depend heavily on purchased food; they will not alter production decisions until they are assured of adequate food supplies from the market. Poorly functioning markets significantly lower real incomes and (in Zimbabwe) apparently jeopardize the nutritional adequacy of the diet by encouraging the consumption of less nutritious food (Mali, Zimbabwe, Rwanda, Senegal).
- Households, especially poorer ones, depend on sources other than farming for significant proportions of their income. Policies to affect household welfare need to consider all income sources, not just farm production (Malawi, Zimbabwe, Mali).

These research findings have contributed to understanding how different categories of households are affected by different government and donor interventions, and by various changes in the structure of the economy. This understanding has, in some cases, been translated into specific policy changes which will improve welfare at the household level. For example:

- In Rwanda, project research was directly related to the government's decision not to enforce increases in official food prices. Project data showed that the majority of households would be hurt (as net purchasers), and that most of the benefits of higher prices would not even flow to the relatively few Rwandan farmers who were net sellers, but rather would flow to foreign producers. Furthermore, the project's research showed that higher food prices (specifically of beans) would contribute less to the incomes of farmers than would higher prices for cash crops (coffee and tea).
- In Mali, the government is reconsidering the imposition of a head-tax on farm households at harvest time, recognizing that this would occur at a time when prices for their products are at their lowest. If the government decides to eliminate or delay the tax, household real income could

rise significantly, as some households could withhold their food from the market either for their own consumption or until prices rise.

- Also in Mali, attempts to maintain a high price for coarse grains have been abandoned, both because of government resource limitations and because of the recognition that this is not a beneficial policy for most farm households.
- In Zimbabwe, the government is beginning to eliminate restrictions on private marketing of food between surplus and deficit regions, in part because project research demonstrated that these restrictions unnecessarily increased prices, thereby reducing real incomes by as much as 38 percent in low-income households.

These are significant and impressive concrete accomplishments for a project whose primary focus is research and analysis. They also serve to demonstrate the kinds of impacts which can be expected from improved policymaking. Price and marketing policies have enormous effects on households' access to food. Maladaptive policies, such as those which restrict market functioning by raising prices and increasing price and supply instability, or which enforce unrealistically high prices or inappropriate agricultural production practices, can significantly reduce household income, food supply, and welfare. By the same token, policies informed by an understanding of how different categories of households interact with the production and marketing system can effect very significant improvements in households' income, access to food and other goods, and thus their well-being. National food security is improved to the extent that individual households are secure in their access to food.

There is necessarily a relatively long lag between the implementation of policy research and the observation of its effects at the household level. Results must be understood; they must be disseminated; and they must be incorporated into the policy process. Depending on timing, research may inform policy changes right away or more slowly. Policy formulation is affected by politics, resource constraints, and the changing environment. It is therefore often difficult to draw very direct connections between research on the one hand, and policy changes and household welfare changes on the other. Nonetheless, it should be obvious that if governments, donor agencies, and other policymakers understand the dynamics of food production and its relationship to consumption (the link being the market), then their policies will have a greater likelihood of achieving their objectives and of promoting equity and the welfare of the economically vulnerable.

Linkages Among Production, Consumption, and Nutrition. The preceding discussion focused on research linking rural households' production decisions, market participation, and income. A further question is whether this chain of reasoning can be carried to the level of individual welfare. Food security is often defined as household access to adequate food. In some sense, though, the ultimate demonstration of food security may be the nutritional status of household members.

Although the FSA project has not put major emphasis on studying determinants of the nutritional status of household members (Indeed, the project specifically excluded a focus on nutritional issues, because these were covered under other cooperative agreements.), several of the project's studies used secondary data on nutritional status as a concrete indicator of welfare to identify vulnerable households and describe their income and food sources and degree of market participation. For example:

- The Malawi project linked poor nutritional status of children to small landholdings and a dependence on subsistence production rather than market purchases.
- The Zimbabwe project used data on the prevalence of stunting and wasting among children to demonstrate that the production of marketed surpluses of food, even among smallholders, does not guarantee adequate food consumption of all individuals.

This discovery -- that the prevalence of child stunting and wasting (the usual measures of nutritional status in survey research) was not closely related to household consumption security measures -- suggests that the dynamics of determining nutritional status are different from those determining food consumption at the household level. Poor sanitation and disease were two factors, not in the domain of food availability, hypothesized to affect measures of nutritional status in the study.

- In Mali, a specific study of food consumption and nutrition was undertaken. The results of this study demonstrated that regional food production indicators do not necessarily identify nutritionally vulnerable households. Sundberg devised a household "consumption security" indicator, which was based on the number of meals per day per household and diversity in the dietary patterns. In the food deficit north of the country, the levels of consumption security were not different than in the south, where food production is much higher. Households in the north were more dependent

on sources of income other than farming, and obtained more of their food from the market, but consumption security on average was not affected by these differences in survival strategies.

The results of the Mali study have important policy implications because they demonstrate that relative food production deficits are in fact not indicators of food consumption inequities, and that welfare oriented policies need to concentrate on the poor in both regions, not on only one region.

Intrahousehold Dynamics: Household Structure, Age, Gender, and Position of Household Members. Unlike the study of nutrition and its determinants, which was specifically excluded as a focus of the FSA project, the consideration of intrahousehold dynamics is an integral part of studying access to food. The importance of understanding individual roles in production and consumption processes was demonstrated in several of the project's studies.

- In Senegal, the time costs of household labor to process grains was recognized as an important determinant of the demand for coarse grains.

- Also in Senegal, the position of members within the household (household heads, women, unmarried sons, non-relatives of the head) was found to be a major determinant of the allocation of land between household subsistence crops and crops for the market; household composition was also an important indicator of available labor for production.

These findings help inform policies designed to promote specific crops and production techniques. They also underscore the important point that food availability is only one determinant of household food consumption; time and other costs of production are also critical.

The distinct roles of women in the production and marketing of food, and in the maintenance of household and individual food consumption, have also been shown to be central to household food security.

- In Mali, which was the location of the single nutrition-focused study in the project, the sale of crops under women's control was found to correlate positively with nutritional status (stunting), while household sales in general showed no correlation.

-- Also in Mali, researchers discovered that significant quantities of stored grain were missed in measuring on-farm storage because only male heads of household, and not female producers, were queried.

Intrahousehold processes have not been a major focus of the project's research. The conceptualization of food security issues, as reflected in the research design manuals provided to project researchers, does not extend to analysis of individual roles -- determined by age, gender, position in the household, and possibly other characteristics -- in determining production, marketing, and consumption of food. These few examples demonstrate that an understanding of such roles is not separate, but is an integral part of the production-marketing-purchase-consumption chain which is the focus of the MSU research. The quality of the research which deals with households -- in their roles as producers, marketers, and consumers -- would be enhanced by a more explicit investigation of the behavior of individual actors within the household unit.

F. Other Elements of Project Impact

In addition to producing good quality research in these four areas, MSU has been extremely successful in disseminating results, providing training, developing research methodologies, and developing a market information system in Mali.

Dissemination. Research results have been successfully disseminated both within African countries and to the wider academic community. Two important innovations account for the success: (a) the "joint product" approach to research; and (b) the "interim report" approach to dissemination.

The joint product approach maximizes the policy significance of research by choosing research topics which are relevant to policy choices -- often getting direct input from policymakers on the potential value of the research. Local researchers are then involved in all phases of the research. The interim report approach to dissemination focuses on publicizing preliminary results. Such results, with appropriate caveats, have been discussed in local seminars, published in working papers, and fed into the annual Southern African food security conferences; (similar seminars have not been held in the Sahel region, however.) This dissemination strategy significantly reduces the time lag between the discovery of new information and its availability to decision makers.

Training. MSU has in general conducted an exemplary on-the-job training program. The result has been a cadre of researchers, natives of the countries in which they work, who understand both the dynamics of how policies can affect the welfare of different groups and the importance of empirical information in the design of new policies. This focus on developing the capacity of individual researchers and policymakers both to understand and to undertake policy-related research is likely to improve the quality of policymaking in these countries in the future.

The project has been conscientious about including African researchers in the implementation of the studies, and including policymakers in the formulation of questions to be studied. As a result, the project has successfully engendered an African demand for the kind of analysis which will improve policymaking in the long run, even though the specific questions and the economic context in which they are posed may change. A project which produced only policy-relevant research would have a short run impact on those policies; in contrast, a project which produces researchers who can continue to do policy-relevant research on new topics as they emerge can have a continued impact over the longer-term.

The emphasis on a "partnership" in which MSU faculty provide backstopping for in-country researchers has been of great value. Periodic visits by MSU-based faculty have contributed to in-country training, and they have also provided an occasion to schedule seminars with policymakers to discuss working papers that provided timely evidence pertinent to issues under discussion.

MSU has been particularly successful in integrating this project (which does not provide long-term degree training) with the resources of the agricultural economics department. The institutional commitment of the department to international work, the cadre of faculty with international experience, and the flexibility in arranging course and degree work to fit the needs of Africans with official positions have all supported MSU's effective training program; see Annex C.

Research Methodologies. MSU has gone beyond "on-the-job training" in developing its joint product approach to research. It has developed practical methods for training researchers in data analysis, research project design and implementation, as well as specific economic methodologies. Its approach to data collection methods strikes an appropriate balance between requirements for statistical validity and the constraints which face researchers in many sub-Saharan African countries.

In particular, it has developed improved methodologies for designing and implementing empirical research on food security issues. A recent report developed by MSU, "Research Methods in the MSU Food Security in Africa Project: Conceptualizing and Implementing Policy Relevant Studies," provides an excellent synthesis of the most effective principles, techniques, and methodologies utilized by the project in its research programs in Africa. MSU has also developed a training manual which provides state-of-the-art information on designing, conducting, and analyzing sample surveys in a cost-effective manner.

The project's research planning tools, which MSU has used with notable success in Africa, can have broad application elsewhere. These tools include the research planning matrix (which helps to conceptualize, identify, and focus research on the most important variables that directly relate to the activity's objectives) and the task calendar (which helps to identify and schedule the various steps in the research process). More recently, the SPSS/PC+ software package was improved based on lessons learned from implementing the project's research activities in Africa.

Market Information System. An important contribution of the project has been the development of the Market Information System (MIS) in Mali, which has been instrumental in improving the functioning of the private sector market in several ways. Public announcement of prices on the radio and in the press has contributed to market competition and greatly reduced the level and variability of prices in a number of cities. Producer-consumer margins are now at about the level of the cost of transport and storage, an indicator of the benefit of competition. This information makes it possible for consumers to purchase food where prices are lower and to bargain more effectively, thus increasing the quantity of food they can obtain for a given expenditure. Interest in implementing similar systems in other countries has been generated by the project, which has also provided technical assistance on the implementation and uses of these systems.

Overall, the project has been highly successful in combining applied research; networking of researchers, donors and policymakers; and training of in-country researchers and users of research to achieve the goal of improving food security by improving government and donor policies.

IV. EVALUATION OF PROJECT MANAGEMENT

A. A.I.D./Washington Management

When the ARDS project was amended in 1984 to focus on food security issues solely in Africa, the decision was made for the project to be co-managed by S&T/RD and AFR/TR/ANR rather than by S&T/RD alone. Thus, the FSA project became one of a very small number of S&T projects that is "officially" co-managed with another bureau.

Co-management of the project by the two bureaus has proven to be satisfactory to all parties involved for a number of reasons: (a) it has enabled the Africa Bureau to be an equal partner in determining the scope of the project's research agenda without being involved in the day-to-day administrative and operational aspects of project management; (b) S&T's involvement has enabled the project to maintain a research focus, which would have been difficult for a geographic bureau to "enforce" given its mandate (implicit, if not explicit) to be responsive to its field missions' immediate needs, including needs for technical assistance; (c) the Africa Bureau's involvement as a "manager" has provided an assured and significant source of supplemental funding for the project; and (d) with the Africa Bureau's intervention, "doors were opened" to the project during the early years of implementation when such an advantage was essential.

For any co-management arrangement to function effectively, communication among the various parties is absolutely essential. Successful co-management also requires a clear understanding of responsibilities and expectations of all the parties involved. For the most part, communications between S&T and the Africa Bureau, and between the A.I.D. managers and MSU, have been good. In spite of the rapid turnover of A.I.D. project managers (four in the Africa Bureau and five in S&T), project management has not been impaired. It is also amazing that while a "formal" definition of responsibilities has not been made, the three parties involved in project management (S&T, AFR, and MSU) maintain a clear understanding of what each ones' responsibilities are.

This is not to say, however, that such a definition of responsibilities and expectations is not desirable. With more than one office in the Africa Bureau now supporting the project, it has become necessary to ensure clear communication lines and to define responsibilities and expectations. An effective way of accomplishing this is through annual workplan

reviews, which the FSA project has not consistently undertaken. Periodic meetings by A.I.D. parties with an interest in food security issues and the project may also be useful for both substantive and operational reasons.

B. MSU Management

At MSU, the project is managed by a Director who oversees approximately 50 professional, administrative, and technical support staff in East Lansing, Michigan, and in the project's various research sites throughout Africa. Over the years, MSU's management of the project has consistently received good marks from participating USAID missions for: (a) identifying excellent senior and junior (graduate students) research personnel in a timely manner (except in Zimbabwe when MSU had difficulties fielding a senior research advisor for about a year); (b) requiring minimal logistical and administrative support; and (c) providing intensive and outstanding technical backstop support to field researchers. On a less positive note, MSU was criticized by one mission for maintaining overly tight control over field activities.

MSU's administrative support staff is experienced and quite knowledgeable of A.I.D.'s procurement rules and reporting requirements. The project's monthly financial tracking and reporting system is one of the best in S&T/RD. The skills and experience of MSU's administrative staff have minimized management burdens on the MSU Director and the S&T project manager.

V. IMPLICATIONS FOR THE FUTURE

The FSA project will formally be completed on November 30, 1991. The question arises whether or not further research in the area of food security is needed; if so, where it is needed, and what type is needed; and finally, whether or not A.I.D. should design and fund a follow-on project to carry out that additional research.

This part of the Final Evaluation departs from evaluating the past, and instead recommends actions for the future. It assesses the need for a follow-on food security project from four perspectives: (a) geographic balance -- whether a follow-on project should focus on Africa, or on other regions as well; (b) operational focus -- whether it should emphasize applied research, or technical assistance as well; (c) substantive focus -- whether the four research themes under the current project are appropriate, and/or whether others should be included; and (d) country emphasis -- the criteria for determining which specific countries should be highlighted.

A. Geographic Balance

There appear to be important advantages in focussing a follow-on project on sub-Saharan Africa. The problems of that region are clearly challenging. Moreover, there appear to be very promising possibilities for enlarging the impact of the FSA project on applied research, policy analysis, and policy formation in additional African countries. Both the need and the opportunities appear to be especially great in Mozambique and in the Sahel. It seems probable that Sahelian countries additional to Mali and Senegal will benefit considerably as a result of regional conferences and other activities, especially given the possibility of drawing upon experience in the SADCC region and with Josue Dione now playing a key role with the Institut du Sahel in Bamako.

In addition, food security is likely to remain an important topic for A.I.D. in sub-Saharan Africa. Addressing the continent's persistent food security problems is one of the four strategic objectives of the Development Fund for Africa (DFA). In addition, virtually all countries in sub-Saharan Africa will qualify for the new grant food aid authority established in the Food, Agriculture, Conservation and Trade Act of 1990 (the "farm bill"). Under this new legislation, A.I.D., which will have sole responsibility for grant food aid, will have the opportunity to use the new food aid authority to

respond to food security and development problems.

Given the relatively high profile of food security issues in sub-Saharan Africa, it is imperative that resources available for responding to them are not diluted or over-extended through a proliferation of demands upon them. At the same time, it is important that A.I.D. have access to the best research possible in responding to its new food aid mandate, as well as to its past commitments to food security.

The rationale for having a follow-on project continue to work in sub-Saharan Africa is strengthened if MSU does the work. MSU has built a faculty with significant current research interest and experience in sub-Saharan Africa; it has established excellent contact with African institutions; and it has a network of students, graduates, faculty, and associates in the region. Its core personnel are known and respected, and the quality of its work is recognized by those who have come in contact with the project. These are accomplishments which come about slowly, and the benefits are felt gradually and cumulatively. (Annex C establishes MSU's predominant capability to carry out work on food security in this area.)

On the other hand, the questions of food security, as they have been formulated in the FSA project, are relevant to other regions as well. As such, there is scope for expanding the research to Latin America and Asia as well as Eastern Europe -- anywhere where markets have been prevented from functioning freely and where little is known about the varieties of household strategies for gaining a livelihood and about their participation in food production, sale, and purchase. A geographically expanded project might also encourage more comparative analysis that would be of value to sub-Saharan Africa as well as to other regions.

However, if a follow-on project were expanded beyond Africa, and if MSU were the primary implementer of that project, it would be a mistake to assume that the same core of people and the same level of resources could be spread over more, different regions without a cost. The MSU approach implies a concentrated, labor intensive method dependent on high quality, committed professionals with limited time. Expansion of the geographic focus would require the addition of more high quality researchers and administrative capacity, and the establishment of new networks of contacts. If the Africa focus is not maintained, then additional resources, both financial and especially human, will be needed if the same level of quality and effectiveness is to be achieved.

Of course, if the demand for food security research in the

Asia, Near East, and Europe region and the Latin American and Caribbean region were only modest, there is the possibility that, even with a de jure expansion of geographical coverage, a follow-on project would de facto focus heavily on sub-Saharan Africa.

B. Operational Balance

A follow-on project should also be primarily a research activity. Given the inevitable bias of government officials and A.I.D. missions to emphasize short-term problems, there is an ever-present danger that the really important comparative advantage of the FSA project would have been compromised had it been required (or even permitted) to respond readily to requests for short-term technical assistance. S&T, by virtue of its project management role, has helped to protect the project's integrity and has enabled it to concentrate on applied research.

Virtually all the missions responding to the evaluation questionnaire indicated that research should be its primary focus. The process by which research has been conducted -- the joint product approach with a heavy emphasis on publicizing findings during the research process itself -- appears to have worked well in providing timely information which is of recognized value to missions.

Some kinds of technical assistance, of course, flow naturally from the applied research focus of the project. Two come to mind: (a) ex ante technical assistance to identify research priorities; and (b) ex post technical assistance to disseminate policy-relevant research findings. This recognizes that the information needs of host governments must be taken into account in the design of individual research studies, and that the only way to assure that research results will be used is to design research to inform current, topical policy questions. The FSA project has been conscientious in doing this, and a follow-on project should do likewise.

C. Substantive Focus

The Four Research Themes of the FSA Project. The present concentration on four subject areas has important advantages. They constitute an important and coherent set of topics. All of them have a significant bearing on the attainment of food security. They are sufficiently broad to facilitate the task

of reaching agreement within a country on the selection of more limited and more immediately relevant topics to be given priority in on-going research programs. The pursuit of common or related themes has also facilitated cross-country analyses and cumulative understanding of complex issues, and encouraged the transfer of relevant findings to other countries.

Therefore, the four research themes of the FSA project -- the international dimensions of food security (including intraregional trade), the roles of the public and private sectors (including institutional and legal conditions for their improved functioning), the role of agricultural technology in a food security strategy, and linkages among food production, marketing, and consumption -- appear to be appropriate areas for continued research. In the future, however, several changes in emphasis are recommended.

Work under the FSA project on the trade-off between food and cash crops was important and well done. As a result, there is less need to focus generally on this potential "trade-off," although there may be specific cases where government policies predicated on incorrect assumptions about trade-offs will require additional research on this topic (for example, Senegal). Work on the international dimensions of food security should avoid becoming too closely tied to examining the impacts of macroeconomic adjustment programs per se. Empirical work on the food security implications of exchange rate changes and other policy changes on regional trade may be justified, but it should be undertaken judiciously. The project should focus on creating a sound empirical and conceptual framework for analyzing trade performance, using its considerable expertise in analyzing national and regional markets. It should avoid branching out into areas such as niche marketing for speciality crops, where ties to food security become more remote and research on international commodity markets would be required.

Food aid is an important international dimension of food security in many food deficit countries. During the final year of the FSA project, as A.I.D. prepares food aid programs under the new legislation, MSU staff should brief mission directors on key research findings of the FSA project, and be available to answer questions concerning their relevance to new opportunities for programming food aid. In addition, the new flexibility associated with multi-year food aid agreements and grant food aid provide A.I.D. with a new range of options which might usefully be explored by drawing on existing MSU research and in some instances commissioning other research. Possible areas for additional research include: (a) timing (and tying) food aid deliveries to closer monitoring of prices in local

food markets; (b) integration of food aid into overall economic assistance packages so that it is not "countercyclical" and, therefore, is more effective in supporting policy reform; and (c) development of more nutritionally oriented assessments of food aid needs.

In the area of agricultural technology, a follow-on project should continue to focus on the interactions among technological changes, policy adjustments, and institutional reforms in a food security strategy. It should do so by addressing, inter alia, three issues: (a) the complementarities among different types of public and private investments, especially in relation to investments in technology development and transfer; (b) the impact of investments in specific types of institutions, policies, and infrastructure on the performance of agricultural research; and (c) strategies to make production and processing technology generation and transfer systems more sustainable and effective in achieving food security goals (including clarifying the relative emphasis that should be given to alternative commodity and geographic foci of agricultural research).

A Fifth Research Theme: Food Security and Measures to Protect the Environment. To date, the short- and medium-term impact on food security of long-term measures to protect the environment has received little or no attention from development specialists. Investigation of this issue is of vital importance because measures to achieve environmental sustainability in the long-term can run counter to efforts to achieve food security in the short-term. For example, stricter enforcement of measures to control agricultural and human encroachment into forests and other protected areas could, in the short run, reduce households' access to land for agriculture purposes, and to fuelwood for food processing. These measures could also reduce access to an income source for many households, which would limit their ability to purchase food for consumption. In Asia, restrictions on logging can have very significant implications for the affected countries' ability to generate foreign exchange to import food and capital goods in the short- and medium-term. Limited access to land for food production and to fuelwood sources can have an immediate negative impact on women, who, in most societies, are responsible for food production and processing.

Research needs to be undertaken to assess the short run effects on food security of measures to protect the environment, and to recommend technological, policy, and institutional solutions to reduce the negative impact on food security of such measures. The research also needs to assess the impact of these measures on women and propose recommendations to minimize or alleviate

the negative impacts.

Cross-cutting Themes. A follow-on project should pay special attention to two cross-cutting themes: (a) non-farm income generation; and (b) intrahousehold dynamics.

Non-farm Income Generation. It should be possible to identify and take advantage of complementarities between the FSA project and the work being carried out by Carl Liedholm, Don Mead, and other researchers at MSU concerning rural non-farm activities. Realizing the potential for intersectoral growth linkages between agriculture and industry, especially the rural non-farm sector, is of particular importance in increasing output and expanding employment opportunities in African countries because they are still at such an early stage in the structural transformation process. The evidence that has accumulated from project research concerning the importance of food purchases by farm households also underscores the fact that the expansion of non-farm employment and incomes by members of rural households is often the key to attaining food security.

Intrahousehold Dynamics. A follow-on project should be more attentive to the dynamics of labor and task allocation and time use among household members as a determinant of agricultural production, market participation (both in and outside of agriculture), and food consumption. Some of the studies undertaken under the current project accepted rather than questioned assumptions about the internal organization of households and the behavior of individuals (for example, Malawi). Intrahousehold dynamics are central to understanding the interface of households with the external economy. Time availability, task allocation, access to and control over products based on gender and age, and other individual characteristics, all affect decisions about what foods and other goods to produce, what technologies to use, and what foods to purchase and consume. Understanding these processes is central to predicting the effectiveness of particular policies in affecting food availability at the market and in the household, and to predicting their effects on individual consumption.

One reason for strongly recommending that food security research address intrahousehold dynamics is that the intrahousehold dimension provides the critical link between studies of food security on the one hand, and studies of nutritional status on the other. By expanding the focus on intrahousehold dynamics, a follow-on project could make use of the analytic and research capabilities most relevant to the other areas of research identified in the project, while still providing the necessary basis for linking market and household

processes with the processes by which nutritional status is "produced" in the household.

Networking. The FSA project over the past six years has taken a broad view of food security. This is entirely appropriate, since food security concerns are integral to the entire strategy of development. Achieving food security on a sustainable basis is not possible without the transformation of low-income, predominantly agrarian economies into more diversified, more productive, and predominantly industrial economies. And structural transformation and the eradication of poverty cannot be achieved without completing the half-completed demographic transition by bringing fertility levels into manageable balance with the sharply reduced mortality levels that now prevail. Nonetheless, the FSA project has been successful in achieving its goals partly because it has not attempted to undertake research outside the domain of food security.

To the extent a follow-on project involves the relationship between food security and broader issues such as population, health, and nutrition, it should be through increased networking with researchers and development professionals in these fields. The networking component, not the applied research component, of a follow-on project should focus on rural health, nutrition, and population which, though they fall beyond the scope of the project, nonetheless have an impact on food security. Networking also should benefit food security research by making researchers aware of relevant information which might fall outside the food security rubric.

Two examples illustrate how (a) health and nutrition activities and (b) population activities can inform food security research and policy analysis.

Health/Nutrition. Sundberg's field work in Mali examined the relationship between the nutritional status of members of a household and socio-economic factors such as food production and stocks, sales and purchases of grain, ownership of draft animals and plows or other equipment, and on-farm and off-farm sources of income. An important finding of her research was that the correlation between the availability of food at the household level and the nutritional status of infants and small children is surprisingly low. This supports the growing body of evidence that suggests that household food security, while essential, is not sufficient to guarantee that adequate nutrition is achieved.

Household food security is commonly defined as "access by all people at all times to enough food to sustain a healthy and

active life." Activity levels, disease status, genetic factors, and a variety of other factors not related to food availability and access, also directly affect individual nutritional status. This means that even in the context of household food security, interventions such as mother-and-child health programs, nutrition education, and preventive health activities such as immunizations and oral rehydration will continue to be necessary. A follow-on project should work with the designers of health and nutrition interventions both to identify information needs which might fall within the domain of food security research, and to incorporate their insights into the dynamics of household and individual food consumption decisions.

Population. The potential benefits of improving infant and child survival prospects appear to be especially great because of their influence on reaching the "fertility threshold" when family size begins to be determined in large measure by the conscious decisions of parents. It would be inappropriate for a follow-on project to initiate research on family planning or other aspects of population policy. However, the persistence of rapid population growth in sub-Saharan Africa has such important implications for the attainment of food security that it would seem highly appropriate for the project to include this subject in regional conferences. The paper on "Food Policy Options: Zimbabwe" prepared for the Fifth Conference on Food Security Research in Southern Africa lists "rapid population growth" as one of the key problems facing Zimbabwe in the 1990s. Recent demographic research suggests that Zimbabwe, Botswana, and possibly Kenya have emerged as the first countries in sub-Saharan Africa to enter the second phase of the demographic transition characterized by declining fertility. A competent presentation of the available evidence on that experience would appear to be an excellent topic for a conference paper. Another paper examining the implications of rapid growth of a country's population and labor force with respect to its rate of structural transformation and changes in average farm size would also seem to be an important topic to be brought into the food security policy dialogue.

The networking and dissemination component of a follow-on project might also emphasize comparative analysis, for example, in the area of field research. S&T might organize a small workshop on "Conceptualizing and Implementing Policy Relevant Field Studies" that would be of value beyond the African region. The workshop could draw on several sources of experience including: (a) the core group at MSU and in-country researchers associated with the FSA project in the area of research implementation tools for sequencing data collection, processing, analysis, and write-up; (b) the work of other

universities which have also been acquiring experience in the design of field studies and the use of computers for data management and policy analysis in LDCs, including the summer short courses organized at Stanford's Food Research Institute and the work pioneered by the Harvard Institute for International Development; and (c) the work of six doctoral candidates in agricultural economics at Cornell culminating in a book on Data Collection Methodologies and Survey Design in Developing Countries. Another subject which might be illuminated by comparative studies concerns techniques for minimizing the adverse effects of periodic food crises.

In summary, the substantive focus of a follow-on project should: (a) continue to emphasize the four research themes of the FSA project; (b) add a fifth research theme on food security and measures to protect the environment; and (c) pay special attention to certain cross-cutting issues including the role of non-farm income generation and the role of intrahousehold dynamics in achieving food security objectives. A follow-on project should also embrace a broader interpretation of networking and encourage more comparative analysis.

D. Country Selection Criteria

The FSA project has had differential impacts in the countries in which it has worked. A follow-on project should take into account these differential impacts, as well as the research needs of countries not included under the current project.

Consolidate Achievements. In Mali the project appears to have had its widest range of impacts, contributing to policy change, strengthening institutional capabilities, creating a "demand" for policy analysis, and developing the capacities for collecting, analyzing, and disseminating market information on an on-going basis. In Rwanda, the project has had an impact on policy, has significantly strengthened the institutional capability for policy analysis, and may have generated an increased demand for policy analysis among Rwandan policymakers. In both instances, there was general agreement on MSU's positive interaction with local researchers and institutions. In such countries, the focus in the future should be on consolidating achievements and developing linkages which will support the movement to more self-sustaining programs.

Refine Programs. In several countries, there appear to have been positive contributions, with indications that the "classic"

model of joint products and heavy involvement by local researchers has not worked as smoothly as in Mali and Rwanda. Despite some real contributions to Zimbabwe's movement toward a "food self-reliance" strategy and a recognition of the need to look at household food security, there were rather mixed reviews of the project's "capacity building" role. A number of those interviewed thought that MSU and its graduates -- rather than local researchers and policymakers -- obtained the primary benefits of the project. There were also indications that MSU contributions to strengthening the institutions with which it was involved (University of Zimbabwe, SADCC Food Security Office) were inadequate. Neither institution currently serves as a base for moving policy analysis into the policy reform process. On the other hand, the food security seminars organized by MSU and the University of Zimbabwe appear to have been an important vehicle for transmitting information to policymakers.

Respond to New Needs. MSU has been quite responsive to the suggestion in the Mid-term Evaluation that it include a regional program in the Sahel. This should be continued. It seems less clear that attempts to widen country coverage in the SADCC region (Malawi, Tanzania, Mozambique) are as promising. On the other hand, it is too soon to evaluate the work in Mozambique, and perhaps in the other countries as well.

Given the expectation that more, not less, work on food security will be required in the next few years, it will be important to carefully delineate what can be accomplished by a research project, and what should more appropriately be done through other mechanisms. It seems that the strength of the FSA project has been its joint product/interim report model. This only develops in situations where a relatively long-term commitment can be made, where there is some reasonable interest in food security at the national level, and where policy relevant institutional linkages can be made. Studies in countries where the political and economic climate is not conducive to achieving food security goals (for example, Somalia) should be avoided.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Several important conclusions emerge from this Final Evaluation of the FSA project.

1. The FSA project has demonstrated that it is possible to conduct research so that its findings feed rather directly and rather rapidly into local policy processes. The "joint product/interim report" model of the FSA project is a real step forward in organizing and disseminating applied research. Research can be useful and timely if it is focused, goal-oriented, of high quality, and policy relevant.
2. FSA project-supported research findings have contributed to the policy debate of key food security issues including: (a) complementarities between food crop and cash crop production; (b) the government's role in a liberalized market environment; (c) the relative importance of policy adjustment, technological change, and institutional strengthening in a food security strategy; and (d) alternative interpretations of the "food price dilemma."
3. When the research process is perceived to be "owned" by local researchers, who in turn have an institutional base which provides them some measure of access to policymakers, the process of conducting and disseminating research can "create a demand" for more policy relevant information.
4. Research methodologies which are cost-effective and capable of producing timely results have been developed under the FSA project. These methodologies have helped African policymakers and planners recognize that it is feasible to obtain research-based information and to approach decision making in a systematic way. (USAID/Harare indicated, for example, that the most significant impact of the project in the SADC region has been in improving the "climate" for rational, data-based decision making.)
5. The FSA project has generally helped to develop local capacity for policy research and analysis in those countries where it has had long-term involvement.
6. Although actual empirical research results are always country specific, they can still provide general insights which influence perceptions and understandings in other

countries. Three clear examples of this were produced under the FSA project: (a) the results showing that many rural households are not food self-sufficient; (b) the results indicating that actual marketing patterns are often quite different than "official" expectations; and (c) the results showing the importance of non-price factors in influencing farmer and consumer responses to price policy.

7. Empirical research can sensitize both researchers and policymakers to the need to examine certain issues simply because they are important in a particular country, and not necessarily because the results are generalizable. The FSA project has identified at least two such issues: (a) the need to look for variations in household food security strategies (which may differ dramatically even within regions of a single country); and (b) the need to gauge empirically the capabilities and perceptions of local private traders.
8. The FSA project has successfully established networks of communication among researchers and policymakers within individual countries and within regions. The food security conferences in the SADCC region have been widely recognized as focusing debate on food security issues, and the recently initiated conferences in the Sahel region appear highly promising.
9. It is less clear that the project has had the same degree of success in publicizing its results to the larger A.I.D. community. While individual missions were generally able to identify important findings, there did not appear to be a general understanding among A.I.D. officials of either the project's findings or the potential significance they had for A.I.D.'s activities.
10. A.I.D. has invested substantial resources in developing expertise and experience in food security research at MSU. Partly as a result of this investment, the MSU staff has achieved international recognition, which has enhanced its effectiveness in conducting food security research and disseminating the research results.
11. MSU itself has made a sustained long-term commitment to international development in general, and to food security in particular. This commitment is reflected by: (a) the number of tenured and tenure-tracked faculty whose research and recent experience have been on food security in African countries; and (b) the number of masters and doctoral level students who have been accepted into the program and for whom special program approaches have been developed.

B. Recommendations

A.I.D. and/or MSU should consider implementing nine recommendations.

1. A.I.D. should support a follow-on project which addresses food security issues through applied research and limited technical assistance. The technical assistance should be undertaken very selectively, primarily as a means of diagnosing issues for investigation under longer-term research activities and/or as a means of demonstrating the policy application of the project's major research findings.
2. The follow-on project should continue to be responsive to needs in sub-Saharan Africa where food security problems continue to be critical, not only in countries where work has already been done but in other countries as well. The follow-on project should also permit selective expansion to other geographic regions because: (a) food security issues are relevant to all regions; and (b) an expansion allows for cross-regional comparative analysis of substantive findings and methodological approaches. However, to ensure that the quality of work achieved under the FSA project is maintained, the follow-on project should be allocated additional resources to accommodate the additional regions.
3. The follow-on project should be authorized for 10 years, in recognition of the long-term nature of research and the possibility of geographic expansion. A mid-term evaluation should be undertaken at the end of the fourth year of the project to determine whether or not changes in project design are necessary and to allow such changes, if necessary, to be implemented.
4. The follow-on project should be implemented by MSU. A.I.D. has made a productive investment to develop a capability at MSU to undertake food security research; and MSU's "joint product/interim report" model has proven effective. However, in view of the possibility that the follow-on project may be geographically expanded beyond Africa and substantively expanded beyond the current research themes (see Recommendation 7.), a mechanism should be developed to permit MSU to access specific geographic and substantive expertise from other institutions.
5. A.I.D. project management of the follow-on project should rest with S&T/RD. (The current system of co-management would probably work well only as long as the number of parties and regions involved in food security were small.)

S&T should be responsible for forming and chairing an inter-bureau technical committee comprised of representatives of bureaus involved with the follow-on project to help guide the direction of the project's research.

6. MSU should: (a) write brief, cogent summaries of research results supported under the follow-on project; and (b) develop a mailing list and widely disseminate these summaries throughout A.I.D. This is particularly important in an organization which rotates people frequently, but tends to operate in a tightly compartmentalized way.
7. The current research focus of the FSA project is appropriate for the follow-on project. However, the utility of the follow-on project would be enhanced by giving more explicit attention to the relationship between food security and: (a) food aid (which will be governed by new legislation in 1991); (b) long-term measures to protect the environment; (c) non-farm income generation; and (d) the dynamics of production and consumption decisions within households.
8. The follow-on project should embrace a broader interpretation of "networking" by developing linkages between itself and groups conducting related research on health, nutrition, and population as well as on agronomic research. This recognizes that the comparative advantage of the project does not lie in the investigation of determinants of nutritional status (health, sanitation, feeding practices and beliefs) other than access to food. It also permits the project's socio-economic findings to be considered by technical agricultural research scientists and by research groups in the areas of health, nutrition, and population.
9. The follow-on project should continue to develop local capacity for policy research and analysis, but with a greater emphasis on awarding research assistantships to women from participating countries.

ANNEX A

Persons Interviewed

Agency for International Development

A. Science and Technology Bureau

William Douglass, Chief, S&T/RD/RRD
Michael Yates, S&T/RD/RRD
Norge Jerome, Director, S&T/N
Chris Brown, S&T/AGR
Frank Alejandro, S&T/PO
Gene Chiavaroli, Deputy Assistant Administrator, S&T

B. Africa Bureau

Judy Gilmore, Deputy Director, AFR/TR
Tom Hobgood, AFR/TR/ANR
Patricia O'Brien-Place, AFR/TR/ANR
Tim O'Hare, AFR/TR/ANR
Jay Smith, AFR/DP/PAR
Emmy Simmons, AFR/DP/PPE
Kim Finan, AFR/SA
Fred Zobrist, AFR/SA
Ron Daniel, AFR/SWA/REGL
James Walsh, AFR/SWA/REGL
Rosemary Depp, former Program Officer, USAID/Rwanda
Michael Fuchs-Carsch, former ADO, USAID/Rwanda

C. Other

Tom Marchione, FVA/PPM
John Flynn, ENE/TR/ARD
Alan Hurdus, APRE/TR/ARD
Ray Waldron, LAC/DR/RD

Don Anderson, former Project Manager of FSA project
Curt Reintsma, former Project Manager of FSA project

Michigan State University

A. Department of Agricultural Economics

Lester Manderscheid, Chairman
Michael Weber, Project Director
Richard Bernstein

Eric Crawford
Carl Eicher
James Oehmke
James Shaffer
John Staatz

B. Department of Economics

Carl Leidholm
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C. Other Professional Staff

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D. African Graduate Students

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Maria Nita Dengo (Mozambique)
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Joseph Rusike (Zimbabwe)
Kapola Sipula (Zambia)
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E. U.S. Graduate Students

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Lisa Schwartz
Jim Stearns
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David Tschirley
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Non-A.I.D. and Non-MSU

A. International Food Policy Research Institute (IFPRI)

Harold Alderman
Chris Delgado
Neville Edirisinghe
Eileen Kennedy
Joachim von Braun

B. World Bank

Bob Christenson
Andrew Spurling

C. Other

David Sahn, Cornell University
Mandivamba Rukuni, Dean of Agriculture, University of
Zimbabwe
Tobias Takavarasha, Deputy Secretary; Ministry of Lands,
Agriculture, and Rural Resettlement; Government of
Zimbabwe

ANNEX B

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ANNEX C

Michigan State University:
A Case of Predominant Capability

The March 1988 Mid-term Evaluation reported that "(t)he principal and unanimous conclusion of the evaluation team is that the Project is successfully addressing its objectives, and doing so in an efficient and cost-effective manner." After an additional 30 months, the evidence of success is even more impressive.

Although much has already been accomplished, it is more important to emphasize that the objectives of the project are being achieved: developing human resources and strengthening capacity are long-term, time-consuming processes. A.I.D.'s past investments in this project have created a valuable resource that is continuing to yield high returns. This Final Evaluation helps to clarify the main reasons why this project is having such a high payoff.

The distinctive features of the project that have made it so cost-effective can be summed up in terms of "four C's": commitment, continuity, critical mass, and collaborative research and analysis.

A. Commitment

MSU's commitment to research and training related to problems of agricultural and rural development in Third World countries dates from the beginning of U.S. foreign assistance programs in the 1950s. The special commitment of the Department of Agricultural Economics dates from the early 1960s when Professor Glenn Johnson, followed by Professor Carl Eicher, served as directors of a newly established Economic Development Institute in Nigeria. Quite remarkably, that commitment has continued to the present, as reflected in part by the fact that some 12 different graduate and undergraduate courses, benefiting both U.S. and foreign students, are taught by MSU faculty involved with the FSA project. That commitment was affirmed most recently in "A Strategic Plan for Excellence in MSU's Department of Agricultural Economics" (June 1, 1990). One of the four departmental goals for the 1990s is "to continue to serve as the lead department in the University in international research, training and institution-building in the Third World." The Department is currently recruiting for

tenure track positions in International Agricultural Development and Agricultural Trade and Policy to add new talent to the already strong core team of tenured faculty -- Weber, Eicher, Shaffer, Crawford, Bernsten, Oehmke, and Staatz.

B. Continuity

The continuity is evident by the way in which MSU has not only sustained but strengthened its position as the leading institution in the U.S. (and in the world) that has focused on training and research related to the food and agricultural problems of sub-Saharan Africa. This continuity and the high quality of the MSU program has made it possible to recruit faculty and graduate students with the professional and personal qualifications essential for the success of projects such as the FSA project. It is noteworthy that the degree training at MSU that has been such an important ingredient in the success of the project has been financed mainly from other sources of funding -- including A.I.D.'s bilateral programs for graduate training and other donors such as the Rockefeller and Kellogg foundations. Field work and other research by MSU graduate students has, of course, been funded by the project, but it was largely because MSU is recognized as a leading center for training and research on African development problems that high calibre graduate students were available for those assignments.

Much of the success of the project is due to the high quality research carried out by graduate students serving as in-country researchers. This has been an extremely cost-effective approach to supporting research and training in host countries, but its success has depended critically on the availability of first-rate graduate students.

C. Critical Mass

The critical mass represented by the tenured core group of Bernsten, Crawford, Eicher, Oehmke, Shaffer, Staatz, and Weber (now augmented by Thomas Jayne, David Tschirley, and J.B. Wyckoff) has also been essential to the success of the project. The group has been sufficiently strong and large that it has attracted outstanding graduate students and has provided extremely valuable backstopping for their in-country researchers in addition to fulfilling their teaching and other faculty responsibilities at MSU. There have also been significant economies of scale and specialization associated

with having a critical mass. A strong administrative unit and a talented Project Director (Weber) has enabled other members of the core team to concentrate more fully on their research and teaching. The Department of Agricultural Economics has also drawn on the services of three departmental computer specialists who have made a notable contribution to the effective use of computer hardware and software in the project's research and training activities. This is another important dimension of MSU's "critical mass."

D. Collaborative Research and Analysis

Finally, and most important though most intangible, has been the emphasis on collaborative research and analysis. A striking feature of the research carried out under the project is the extent to which it has been a collaborative effort between faculty and graduate students, including an impressive number of nationals of the host countries.

Project staff have invested considerable time in coordinating FSA research and in-service training with A.I.D. bilateral training activities. A.I.D.'s investment in graduate training is enhanced substantially when students are associated with the FSA project and its in-country research activities. Their graduate training tends to be more meaningful and relevant to conditions in their home country, and on their return they are more likely to be integrated into work that will make good use of the knowledge and skills that they have acquired.

ANNEX D

Frequency Distribution of USAID Responses
to Evaluation Questionnaire

A questionnaire was sent to the 10 A.I.D. field missions in Africa where the project had been, or was being, implemented, as well as to REDSO/ESA and the Club du Sahel. Eight of the possible 12 entities (67 percent) responded: Malawi, Mali, Mozambique, Rwanda, Somalia, Tanzania, Zimbabwe, and REDSO/ESA. (In the case of Somalia, the response was from the Agriculture Development Officer in the U.S. who had backstopped the FSA project in 1986-88.) This annex summarizes responses to the questionnaire. Actual responses are attached.

A. Project Impact and Relevance

1. Who benefited from the project's research?

a.	USAID	4 (50%)
b.	Host country	5 (63%)
c.	Other donors	5 (63%)
d.	Other researchers	3 (38%)
e.	Private sector entities	1 (13%)
f.	Regional institutions	5 (63%)
g.	No opinion	1 (13%)

2. How useful was the project to USAID/host country?

a.	Very useful	3 (38%)
b.	Moderately useful	2 (25%)
c.	Not useful	0 (0%)
d.	Not sure because:	0 (0%)
	i. research still in process	
	ii. impact not evident	
	iii. persons knowledgeable of the project not around	
e.	No opinion	3 (38%)

3. What have been the most important accomplishments of the project to date? Please be as specific as possible.

USAID responses include the following: training of host country policy analysts; increased awareness and understanding of food security issues; initiation of a system in which serious analysis is part of the policy-making process; creation of an improved data base; and development of a model for national public information system; (see also attached individual questionnaire responses).

4. What has been the most significant impact of the project? Please be as specific as possible.

USAID responses include the following: increase in the number of quality policy analysts; facilitation of debate on the role of the private sector in marketing; documentation of farmer, trader and household responses to policy, institutional, and technological interventions; and development of a climate for data-based decision making; (see also attached individual questionnaire responses).

5. What factors contributed to the accomplishments and impact listed above? (Assign "3" to factors which have made a MAJOR contribution; "2" to factors which have made a MODERATE contribution; and "1" to factors which have made LITTLE or NO contribution.)

- a. **Quality of research and analysis**
3=3 (50%) 2=3 (50%) 1=0 (0%)
- b. **Involvement of host country analysts**
3=5 (83%) 2=1 (17%) 1=0 (0%)
- c. **Project's capacity-building (training) program**
3=2 (50%) 2=1 (25%) 1=1 (25%)
- d. **Dissemination/articulation of research findings**
3=2 (40%) 2=2 (40%) 1=1 (20%)
- e. **Ability to provide information in a timely manner**
3=2 (33%) 2=3 (50%) 1=1 (17%)
- f. **Ability to identify issues most important to decision-makers**
3=2 (40%) 2=3 (60%) 1=0 (0%)
- g. **Ability to provide institutional support, such as computers, software, vehicles, etc.**
3=3 (50%) 2=3 (50%) 1=0 (0%)

- h. Other **Building of a critical mass of trained researchers/analysts**
- i. No opinion **2 (25%)**

6. Did the project's research generate "new" knowledge (defined as information not previously known to or used by USAID or the host country)?

- a. Yes **5 (63%)**
- b. No **0 (0%)**
- c. No opinion **3 (37%)**

7. If the answer to question No. 6 is "yes", in what areas was "new" knowledge generated?

USAID responses include the following: marketing; price information system; interaction between technology, cash crops, and food security; and role of price incentives in a food security strategy; (see also attached individual questionnaire responses).

8. Of the areas listed in question No. 7, which ones made the greatest difference to USAID/host country programs and projects?

All the areas listed above.

9. How effectively did the project's research respond to USAID's information/analytical needs?

- a. Very effective **2 (24%)**
- b. Moderately effective **3 (38%)**
- c. Unresponsive **0 (0%)**
- d. No opinion **3 (38%)**

10. How effectively did the project's research respond to the host country's information/analytical needs?

- a. Very effective **3 (38%)**
- b. Moderately effective **2 (24%)**
- c. Unresponsive **0 (0%)**
- d. No opinion **3 (38%)**

11. How were the project's research results used by USAID?
- | | | |
|----|--|---------|
| a. | To inform development of USAID program strategy | 2 (25%) |
| b. | To identify/design project or non-project assistance | 2 (25%) |
| c. | To improve project/program implementation | 3 (38%) |
| d. | To identify/track project/program impact | 2 (25%) |
| e. | To inform policy dialogue with host government | 5 (63%) |
| f. | To inform dialogue/interactions with other donors | 2 (25%) |
| g. | Other: To inform AID/W | 1 (13%) |
| h. | Research results were not used | 0 (0%) |
| i. | No opinion | 3 (38%) |
12. How were the project's research results used by host country?
- | | | |
|----|--|---------|
| a. | To formulate new food security policy | 2 (25%) |
| b. | To amend existing policy | 3 (38%) |
| c. | To improve policy implementation | 2 (25%) |
| d. | To strengthen public sector performance | 1 (13%) |
| e. | To strengthen private sector performance | 2 (25%) |
| f. | Other: Not sure | 1 (13%) |
| g. | Research results were not used | 0 (0%) |
| h. | No opinion | 3 (38%) |
13. How can the project's research be made more useful/relevant to host country and USAID? (Assign "3" to factors which will contribute **MOST** to improving usefulness; "2" to factors which will make a **MODERATE** contribution; and "1" to factors which will make **LITTLE OR NO** contribution.)
- | | | | | |
|----|--|-----------|-----------|-----------|
| a. | By increasing level of host country involvement in research design, implementation, and analysis | 3=3 (50%) | 2=3 (50%) | 1=0 (0%) |
| b. | By improving timeliness of generating research results | 3=2 (40%) | 2=3 (60%) | 1=0 (0%) |
| c. | By improving quality of research outputs/analysis | 3=2 (50%) | 2=0 (0%) | 1=2 (50%) |
| d. | By improving research design | 3=3 (43%) | 2=1 (14%) | 1=3 (43%) |

- e. By improving dissemination of research findings
3=2 (33%) 2=4 (67%) 1=0 (0%)
- f. By improving articulation/presentation of research findings/recommendations
3=0 (0%) 2=4 (80%) 1=1 (20%)
- g. By improving selection/identification of research issues/topics
3=1 (20%) 2=3 (60%) 1=1 (20%)
- h. Other
3=0 (0%) 2=0 (0%) 1=0 (0%)
- i. No opinion: 2 (25%)
14. Has the project helped to strengthen host country/regional capability to design and undertake food security research/analysis?
- a. Yes 5 (63%)
b. No 0 (0%)
c. Don't know 3 (37%)
d. Too soon to tell 0 (0%)

If answer is "b", "c", or "d" please move to question No. 16.

15. What factors contributed to the development/strengthening of local capacity to undertake food security research and analysis? (Assign "3" to factors that made a **MAJOR** contribution; "2" to factors that made a **MODERATE** contribution; and "1" to factors that made **LITTLE** or **NO** contribution.)
- a. By involving host country research institutions and/or host government entities
3=4 (80%) 2=0 (0%) 1=1 (20%)
- b. By providing research assistantships to host country graduate students
3=3 (75%) 2=1 (25%) 1=0 (0%)
- c. Through on-the-job training programs
3=1 (25%) 2=2 (50%) 1=1 (25%)
- d. Through seminars, workshops, and conferences
3=3 (60%) 2=2 (40%) 1=0 (0%)

- e. Through publications
3=2 (50%) 2=1 (25%) 1=1 (25%)
- f. Other (specify)
3=0 (0%) 2=0 (0%) 1=0 (0%)
- g. No opinion: 2 (25%)

16. Has the project contributed to the achievement of sustainable institutional changes?

- a. Yes 2 (25%)
- b. No 1 (12%)
- c. Too soon to tell 3 (38%)
- d. Not sure 0 (0%)
- e. No opinion 2 (25%)

17. This project includes a sub-regional approach to undertaking food security research (in addition to country-level research). In your opinion, did the sub-regional approach enhance or hinder the utility of research at the country level?

- a. Enhanced 5 (63%)
- b. Hindered 0 (0%)
- c. Did not significantly affect it 1 (12%)
- d. Don't know 2 (25%)

18. Has the project effectively disseminated research results?

- a. Yes 3 (38%)
- b. No 0 (0%)
- c. Not sure 3 (38%)
- d. No opinion 2 (25%)

B. Research Quality

1. How do you assess the quality of research/analysis produced by the project?

- a. High 4 (50%)
- b. Medium 1 (12%)
- c. Low 0 (0%)
- d. Variable 1 (12%)
- e. No opinion 2 (25%)

2. What factors affected the quality of research produced by the project? (Assign "3" to factors which had a **MAJOR** effect; "2" to factors which had a **MODERATE** effect; and "1" to factors which had **LITTLE** or **NO** effect.)

- | | | | | |
|----|---|-----------|-----------|--|
| a. | Quality of MSU staff assigned to project | | | |
| | 3=4 (67%) | 2=1 (17%) | 1=1 (17%) | |
| b. | Quality of local staff involved in project | | | |
| | 3=6 (86%) | 2=1 (14%) | 1=0 (0%) | |
| c. | Degree of collaboration between MSU and local researchers | | | |
| | 3=3 (60%) | 2=1 (20%) | 1=1 (20%) | |
| d. | Appropriateness/relevance of research topics | | | |
| | 3=4 (67%) | 2=1 (17%) | 1=1 (17%) | |
| e. | Other | | | |
| | 3=0 (0%) | 2=0 (0%) | 1=0 (0%) | |
| f. | No opinion | 2 (25%) | | |

3. To what extent did the quality of research affect acceptance and utilization of the project's outputs?

- | | | |
|----|-----------------------|---------|
| a. | It was a major factor | 3 (38%) |
| b. | Made no difference | 0 (0%) |
| c. | Not sure | 3 (38%) |
| d. | No opinion | 2 (24%) |

C. Project Management and Implementation

1. Do you have comments on MSU's management of the project?

- | | | |
|----|-----|---------|
| a. | No | 2 (26%) |
| b. | Yes | 6 (74%) |

Comments on MSU's management include: high quality; close follow up; professional and efficient; effective in keeping all involved A.I.D parties informed; excellent technical and logistical backstopping; and tended to over-control; (see also attached individual questionnaire responses).

2. Do you have comments on A.I.D./W's management of the project?

- | | |
|--------|---------|
| a. No | 3 (38%) |
| b. Yes | 5 (62%) |

Comments on A.I.D./W's management include: conscientious and efficient; generally competent, timely, and responsive; excellent backstopping both technically and logistically; S&T's support has been beneficial to the project; and generally "hands off"; (see also attached individual questionnaires).

3. Did the project impose a heavy management burden on USAID?

- | | |
|---------------|---------|
| a. No | 4 (50%) |
| b. Yes | 1 (12%) |
| c. No opinion | 3 (38%) |

4. If answer to question No. 3 is "b", can A.I.D./W help to reduce the management burden on USAID?

- | | |
|-------|---------|
| a. No | 1 (12%) |
|-------|---------|

Mission comment: Although the project imposes a heavy management burden on the mission (USAID/Mali), there is nothing AID/W can do because USAID has chosen to accept the burden given the importance of the project to the mission.)

- | | |
|--------|--------|
| b. Yes | 0 (0%) |
|--------|--------|

5. What have been the most significant problems (management, implementation, and/or technical) encountered in carrying out the project? Please specify.

- | | |
|------------------------|---------|
| Missions with comments | 4 (50%) |
| No opinion | 4 (50%) |

Comments include: lack of local collaboration; difficulty in sustaining the capacity developed by the project; small size of MSU staff vis-a-vis demand; long delay in fielding a long-term advisor (in Zimbabwe); and distance, difficulties in communications, and lack of stability in (the Somali) government; (see also attached individual questionnaire responses).

D. Implications for the Future

1. Should a centrally-managed follow-on food security project be supported, and why?

a. Yes 5 (63%)

Reasons given include: importance of food security as a development issue; effectiveness of the project in providing policy-relevant information and in bringing (SADCC) researchers together; and level of activity in this area will drop without some central seed money; (see also attached individual questionnaire responses).

b. No 1 (13%)

Reason given include: (Food security) does not fit within Mission's (USAID/Tanzania) priority programs".

c. No opinion 2 (24%)

2. If a follow-on food security project were supported, should that follow-on activity continue to be research oriented?

a. Yes 2 (25%)

b. No, it should: 4 (50%)

- i. include technical assistance on a 50%-50% basis
- ii. include some amount of technical assistance (less than 50%) 2 (50%)
- iii. be primarily technical assistance (more than 50%)
- iv. be 100% technical assistance
- v. No indication given of how much technical assistance is preferred 2 (50%)

c. No opinion 2 (25%)

3. If a centrally-managed follow-on food security project with a research component were supported, do you have suggestions for substantive areas that should receive priority attention?

a. No 5 (64%)

b. Yes (specify) 3 (38%)

Suggestions include: effects of regional trade on food security; approaches to take when technologies to increase production are unable to keep up with population-induced land degradation; and impact of marketing/market structures and other policy constraints on household food security (see also attached individual questionnaire responses).

4. If a decision were made to discontinue the S&T Bureau's support for a follow-on food security project, what would the effect be on USAID/host country?

Responses include: Missions may abandon "food security" as a priority issue; it would be difficult to access combined expertise in data collection, institution building, and a joint production and consumption approach to food security problems, which will remain critical in the years to come; there would be much less quality policy analysis; not sure (Tanzania); and none (Somalia).

M A L A W I

**UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
MISSION TO MALAWI**

P.O. Box 30455
Lilongwe 3
Malawi



NICO House, City Center
Tel: 731 455/731 632/731 093
Telex: 4627

TO (COMPANY/ORGANIZATION) : SAT/RD/PRD

ATTENTION : Gloria D. Steele
Food Security in Africa Project Officer

FAX NO : 703-875-4394

DATE : October 15, 1990

REFERENCE No : -

TOTAL NUMBER OF PAGES : Two (2) (INCLUDING THIS ONE)

NAME OF SENDER : Joanne T. Hale, ADO *JTH*

OFFICE : Agriculture and Food Security

CLEARANCE : Carol A. Peasley
Mission Director

SUBJECT: Food Security in Africa Project: Request for
Response to Evaluation Questionnaire

Since ADO has only recently arrived at Mission, the following comments in response to subject evaluation questionnaire are from Dr. B.F. Kandoole, Chancellor College, Zomba. Dr. Kandoole is the main contact in Malawi for the Food Security Project in Africa and has been closely associated with this regional project since it began in Malawi in November 1989.

The relevant (for Malawi) question numbers have been addressed by key as follows:

- A. 1. a, b (Chancellor College and others), c (UNICEF), e (SADCC)
2. a
3. Baseline data have been collected and analyzed. Reports are being prepared for two meetings in November. A national workshop in Malawi and a regional workshop in Harare are also project outcomes.
4. Knowledge gained is being used as part of on-going policy discussions on food security.

M A L I

9/11/223

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FOOD SECURITY IN AFRICA PROJECT (931-1190):
EVALUATION QUESTIONNAIRE

A. Project Impact and Relevance

1. Who benefited from the project's research?

- a. USAID
- b. Host country (specify) OPAM (grain marketing board), Ministry of Finance, Ag Research Institute
- c. Other donors (specify) PRMC (MULTIDONOR GROUP)
- d. Other researchers (specify) from other donors and GRM, but GRM researcher benefit quite limited
- e. Private sector entities (specify) Private Traders, Farmers
- f. Regional institutions (specify) CLING ON SAMEL, CUIS

CONSULTANTS WERE BY APPOINTMENT TO DO EVALUATIONS & STUDIES

2. How useful was the project to USAID/host country?

- a. Very useful
- b. Moderately useful
- c. Not useful
- d. Not sure because:
 - i. research still in process
 - ii. impact not evident
 - iii. personnel knowledgeable of the project no longer around

3. What have been the most important accomplishments of the project to date? Please be as specific as possible.

- Providing model for, and setting up, national public price information system.
- Affecting opinions and operating assumptions of key Malian policy-makers.
- Documenting critical policy information highlighted in item 7 below.

- USING MALIAN RESEARCHERS AND STAFF IN ALL ASPECTS OF PROJECT IMPLEMENTATION

4. What has been the most significant impact of the project? Please be as specific as possible.

Documenting for GRM and donor decision-makers -- in a timely and convincing way -- the fact that:

- a) Continued price increases would have important negative consequences;
- b) Much of the grain market functions fairly and efficiently.
- c) Price is useful information that can be used

1) EVIDENCE PRESENTED ON BEHAVIOR, STOCKING AND CONSUMPTION VARIATION EVEN AT VILLAGE LEVEL

2) THE ACCURATE TRANSMISSION OF TRADER ACTIVITIES

5. What factors contributed to the accomplishments and impact listed above? (Assign "3" to factors which have made a MAJOR contribution; "2" to factors which have made a MODERATE contribution; and "1" to factors which have made LITTLE or NO contribution.)

- 3 a. Quality of research and analysis
- 3 b. Involvement of host country analysts
- 3 c. Project's capacity-building (training) program
- 3 d. Dissemination/articulation of research findings
- 3 e. Ability to provide information in a timely manner
- 3 f. Ability to identify issues most important to decision-makers
- 2 g. Ability to provide institutional support, such as computers, software, vehicles, etc.

h. Other (specify) _____

6. Did the project's research generate "new" knowledge (defined as information not previously known to or used by USAID or the host country)?

- a. Yes
- b. No

7. If the answer to question no. 6 is "yes", in what areas was "new" knowledge generated?

- 1. Documented efficiency and integration of important markets.
- 2. Provided model of how to sustain good price data collection.
- 3. Documented positive correlation between technicality, cash crop, and food security.
- 4. Documented high proportion of net grain buyers and limited role of price identifiers alone on production.

8. Of the areas listed in question no. 7, which ones made the greatest difference to USAID/host country programs and projects?

All made major and significant contributions to GBM policy and actions and to USAID + other donor programs.

9. How effectively did the project's research respond to USAID's information/analytical needs?

- a. Very effective
- b. Moderately effective
- c. Unresponsive

10. How effectively did the project's research respond to the host country's information/analytical needs?

- a. Very effective
- b. Moderately effective
- c. Unresponsive

11. How were the project's research results used by USAID?

- a. To inform development of USAID program strategy
- b. To identify/design project or non-project assistance
- c. To improve project/program implementation
- d. To identify/track project/program impact
- e. To inform policy dialogue with host government
- f. To inform dialogue/interactions with other donors
- g. Other (specify) _____

h. Research results were not used.

12. How were the project's research results used by host country?

- a. To formulate new food security policy
- b. To amend existing policy
- c. To improve policy implementation
- d. To strengthen public sector performance
- e. To strengthen private sector performance
- f. Other (specify) _____

g. Research results were not used.

13. How can the project's research be made more useful/relevant to host country and USAID? (Assign "3" to factors which will contribute MOST to improving usefulness; "2" to factors which will make a MODERATE contribution; and "1" to factors which will make LITTLE OR NO contribution.)

- 3 a. By increasing level of host country involvement in research design, implementation, and analysis.
- 2 b. By improving timeliness of generating research results.
- 1 c. By improving quality of research outputs/analysis.
- 1 d. By improving research design.
- 2 e. By improving dissemination of research findings.
- 2 f. By improving articulation/presentation of research findings/recommendations.
- 2 g. By improving selection/identification of research issues/topics
- _____ h. Other (specify) _____

14. Has the project helped to strengthen host country/regional capability to design and undertake food security research/analysis?

- a. Yes
- b. No
- c. Don't know
- d. Too soon to tell

If answer is "b", "c", or "d" please move on to question no. 16.

15. What factors contributed to the development/strengthening of local capacity to undertake food security research and analysis? (Assign "3" to factors that made a MAJOR

contribution; "2" to factors that made a MODERATE contribution; and "1" to factors that made LITTLE or NO contribution.)

- 1 a. By involving host country research institutions and/or host government entities. *BIGGEST WEAKNESS!*
- 2 b. By providing research assistantships to host country graduate students.
- c. Through on-the-job training programs.
- 2 d. Through seminars, workshops, and conferences.
- 2 e. Through publications.
- f. Other (specify) _____

16. Has the project contributed to the achievement of sustainable institutional changes?

- a. Yes (specify how) *By providing empirical base for demonstrating more limited and therefore sustainable, role for public sector in the grain market.*
- b. No
- c. Too soon to tell
- d. Not sure

17. This project includes a sub-regional approach to undertaking food security research (in addition to country-level research). In your opinion, did the sub-regional approach enhance or hinder the utility of research at the country level?

- a. Enhanced
- b. Hindered
- c. Did not significantly affect it.
- d. Don't know

18. Has the project effectively disseminated research results?

- a. Yes
- b. No
- c. Not sure

B. Research Quality

1. How do you assess the quality of research/analysis produced by the project?

- a. High
- b. Medium
- c. Low

2. What factors affected the quality of research produced by the project? (Assign "3" to factors which had a MAJOR effect; "2" to factors which had a MODERATE effect; and "1" to factors which had LITTLE or NO effect.)

- 3 a. Quality of MSU staff assigned to project
- 3 b. Quality of local staff involved in project
- 1 c. Degree of collaboration between MSU and local researchers *No local researchers involved. The 2 Malian researchers, whose participation was critically important, were MSU employees who have no role in GRM or Malian private sector*

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- 3 d. Appropriateness/relevance of research topics
- e. Other (specify) _____

3. To what extent did the quality of research affect acceptance and utilization of the project's outputs?

- a. It was a major factor
- b. Made no difference
- c. Not sure

C. Project Management and Implementation

1. Do you have comments on MSU's management of the project?

- a. No
- b. Yes (specify) Generally competent, timely, & responsive. Excellent backstopping, both technically and logistically.

2. Do you have comments on AID/W's management of the project?

- a. No
- b. Yes (specify) Generally competent, timely and responsive. Excellent backstopping, both technically and logistically.

3. Did the project impose a heavy management burden on USAID?

- a. No
- b. Yes

4. If answer to question no. 3 is "b", can A.I.D./W help to reduce the management burden on USAID?

- a. No; we chose to accept the burden because this was an important part of the policy reform process
- b. Yes (specify how) _____

5. What have been the most significant problems (management, implementation, and/or technical) encountered in carrying out the project? Please specify.

Institutionalizing and sustaining the MSU-initiated market information system.

→ applied research to help donors and governments design and sustain effective interventions and policies.

D. Implications for the Future

1. Should a centrally-managed follow-on food security project

a. Yes, because the past few years -- largely as a result of MSU FSA work, together with that of IFPRI, the World Bank, the UAI University Helsinki, and a few others, has seen major advances in understanding the complex ~~links~~ links between micro-level food security, micro-level production constraints, and aggregate food availability. Now is the time to build on these advances and undertake action-oriented

2. If a follow-on food security project were supported, should that follow-on activity continue to be research oriented?

a. Yes, but with more resources going to institutionalize some of the research functions
b. No, it should:
i. include technical assistance on a 50%-50% basis.
ii. include some amount of technical assistance (less than 50%).
iii. be primarily technical assistance (more than 50%).
iv. be 100% technical assistance. which implies TA, therefore b. ii

3. If a centrally-managed follow-on food security project with a research component were supported, do you have suggestions for substantive areas that should receive priority attention?

a. No These are
b. Yes (specify) Only a few Examples -
1. Better understanding of causes and consequences of specific cases of food insecurity, and specific solutions possible.
2. Approaches to take when technologies to increase production cannot keep up with population-induced land degradation, i.e., what should governments and donors do in cases where production technology is inadequate to ensure food security.
3. Effects of regional trade on food security.

4. If a decision were made to discontinue the S&T Bureau's support for a follow-on food security project, what would the effect be on USAID/host country? It would make it more difficult to access combined expertise in data collection, institution-building, and a joint production and consumption approach to food security problems which will remain critical in the years to come.

NAME OF RESPONDENT(S) DAVID ATWOOD (with Reid Whitlock + Tracy Atwood)
USAID/BANAKO
10-251-90

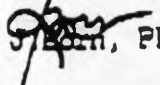
MOZAMBIQUE

M E M O R A N D U M

10/15/80

TO : Gloria Steele, S&T/RD/RRD, Food Security in Africa
Project Officer

THRU : Carlos Pascual, Program Officer, USAID/Maputo

FROM : , FRM

SUBJECT : Food Security in Africa Project: Evaluation
Questionnaire

As you noted in your cover memo requesting USAID/Maputo to complete the questionnaire, our research program under this project is just now getting underway. The MSU resident researcher arrived on October first; the first MSU team effort will begin October 23rd, getting the research underway with a rapid appraisal in up-country areas where the research program will focus field activities and also working on organizational and coordination activities in Maputo; the MSU team will then take a number of Mozambican participants to the annual Harare conference in November.

Our conviction, based on Mozambique's interest and MSU's responsiveness to date, is that this project will provide important assistance to Mozambique. However, we are unable to fill out the questionnaire based on experience. We can only comment on: (1) the thorough professionalism, efficiency, and interest demonstrated by MSU staff in the course of planning research activities under the project; and (2) the conscientiousness and efficiency which you and Joan Atherton displayed in helping to get the research and analysis program in Mozambique underway.

R W A N D A

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SPEARMAN

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STHR-01 STAG-02 PRIE-02 SEOP-01 SEOS-02 SERP-01 SEPW-01
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AIDAC

FOR ST/RD/RRD, GLORIA STEELE

E.O. 12356: N/A
SUBJECT: RWANDA - RESPONSE TO FOOD SECURITY
QUESTIONNAIRE

REF: STEELE FAX TO CRAWFORD DATED SEPTEMBER 28, 1990

1. USAID REGRETS THAT IT CANNOT RESPOND TO ST/RD/RRD'S
EVALUATION QUESTIONNAIRE FOR THE FOOD SECURITY IN
AFRICA PROJECT.

2. THE RWANDA ACTIVITIES UNDER THE FOOD SECURITY IN
AFRICA COOPERATIVE AGREEMENT WERE CLOSELY LINKED WITH
THE USAID-FUNDED AGRICULTURE SURVEYS AND POLICY
ANALYSIS PROJECT (ASPAP) AND WE DO NOT NOW HAVE A
SEPARATE FILE ON THESE ACTIVITIES. SINCE THESE
ACTIVITIES WERE COMPLETED PRIOR TO THE ARRIVAL OF THE
CURRENT ADO, THE MISSION CANNOT EFFECTIVELY ANSWER THE
QUESTIONS POSED WITHOUT A PROHIBITIVE AMOUNT OF
RESEARCH IN THE FILES.

3. AS YOU MAY BE AWARE, PER STATE 342399, THE
SITUATION IN RWANDA IS EXTREMELY UNSETTLED. SINCE
THERE WAS FIGHTING WITHIN KIGALI, MANY CONTRACT
PERSONNEL HAVE BEEN EVACUATED. THESE DEPARTURES
INCLUDED GREG LASSITER, THE CURRENT TECHNICAL ADVISOR
FOR ASPAP, AND DAN CLAY, A SHORT-TERM CONSULTANT FOR
THAT PROJECT FROM MICHIGAN STATE UNIVERSITY. DR. CLAY
PARTICIPATED IN THE FOOD SECURITY RESEARCH IN RWANDA.

4. UNFORTUNATELY, USAID CANNOT TURN TO THE RWANDAN
GOVERNMENT FOR ASSISTANCE IN RESPONDING TO THIS
QUESTIONNAIRE. THE RWANDAN WHO WAS RESPONSIBLE FOR THE
FOOD SECURITY RESEARCH CARRIED OUT UNDER THE COOPERATIVE
AGREEMENT, SERGE RWAMASIRAGO (THE DIRECTOR OF THE
DIVISION DES STATISTIQUES AGRICOLES), IS NOT AVAILABLE
FOR CONSULTATION.

5. WHILE USAID IS NOT ABLE TO RESPOND TO SPECIFICS OF
THE FOOD SECURITY EFFORT HERE, WE DO WISH TO POINT OUT
THAT A RECENT WORLD BANK AGRICULTURE SECTOR ASSESSMENT
RELIED QUITE HEAVILY ON WORK UNDERTAKEN UNDER THE FOOD
SECURITY COOPERATIVE AGREEMENT IN MAKING ITS CASE FOR
VARIOUS AGRICULTURE SECTOR POLICY REFORMS. OF
PARTICULAR SIGNIFICANCE IN THIS REGARD WAS THE RESEARCH
BY SCOTT LOVERIDGE ON THE MARKETING OF BASIC STAPLES
(E.G. BEANS AND FORTNUM). MR. LOVERIDGE'S RESEARCH
DEMONSTRATED THAT RWANDA WAS NOT SELF-SUFFICIENT IN
THESE CROPS, HAD BEEN PRESUMED, AND THUS LAID THE
BASIS FOR THE WORLD BANK'S ARGUMENT THAT RWANDA SHOULD
MOVE TOWARDS A MORE OUTWARD LOOKING AGRICULTURE SECTOR.

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S O M A L I A

FOOD SECURITY IN AFRICA PROJECT (931-1190):
EVALUATION QUESTIONNAIRE

A. Project Impact and Relevance

1. Who benefited from the project's research?

X a. USAID

b. Host country (specify) SOMALIA: MOA - better price information
where project functioning

c. Other donors (specify) _____

d. Other researchers (specify) Bay Region Agricultural Development
Project researchers

e. Private sector entities (specify) _____

f. Regional institutions (specify) _____

2. How useful was the project to USAID/host country?

a. Very useful

X b Moderately useful

c. Not useful

d. Not sure because:

i. research still in process

ii. impact not evident

iii. personnel knowledgeable of the project no longer
around

3. What have been the most important accomplishments of the project to date? Please be as specific as possible.

Left Somalia October 1987: Provided Somalia agriculture officials better understanding of market mechanics and a data base with respect to price fluctuation vs. government policy.

4. What has been the most significant impact of the project? Please be as specific as possible.

Supports free market policy as a means to encourage production.

(4)

5. What factors contributed to the accomplishments and impact listed above? (Assign "3" to factors which have made a MAJOR contribution; "2" to factors which have made a MODERATE contribution; and "1" to factors which have made LITTLE or NO contribution.)

- 3 a. Quality of research and analysis
- 3 b. Involvement of host country analysts
- ? c. Project's capacity-building (training) program
- ? d. Dissemination/articulation of research findings
- ? 2 e. Ability to provide information in a timely manner
- ? f. Ability to identify issues most important to decision-makers
- 3 g. Ability to provide institutional support, such as computers, software, vehicles, etc.

 h. Other (specify) _____

6. Did the project's research generate "new" knowledge (defined as information not previously known to or used by USAID or the host country)?

- a. Yes
- b. No

7. If the answer to question no. 6 is "yes", in what areas was "new" knowledge generated? Market area price information for strategic crops, especially sorghum

8. Of the areas listed in question no. 7, which ones made the greatest difference to USAID/host country programs and projects? Commodity availability relevant, especially in terms of being important with respect to PL480.

9. How effectively did the project's research respond to USAID's information/analytical needs?

- a. Very effective
- b Moderately effective
- c. Unresponsive

10. How effectively did the project's research respond to the host country's information/analytical needs?

- a Very effective
- b. Moderately effective
- c. Unresponsive

(5)

11. How were the project's research results used by USAID?

- a. To inform development of USAID program strategy
- b. To identify/design project or non-project assistance
- c. To improve project/program implementation
- d. To identify/track project/program impact
- e. To inform policy dialogue with host government
- f. To inform dialogue/interactions with other donors
- g. Other (specify) e. probably with respect to PL480.

h. Research results were not used.

12. How were the project's research results used by host country?

- a. To formulate new food security policy
- b. To amend existing policy
- c. To improve policy implementation
- d. To strengthen public sector performance
- e. To strengthen private sector performance
- f. Other (specify) _____

g. Research results were not used.

13. How can the project's research be made more useful/relevant to host country and USAID? (Assign "3" to factors which will contribute MOST to improving usefulness; "2" to factors which will make a MODERATE contribution; and "1" to factors which will make LITTLE OR NO contribution.)

- 2 a. By increasing level of host country involvement in research design, implementation, and analysis.
- 2 b. By improving timeliness of generating research results.
- 3 c. By improving quality of research outputs/analysis.
- 1 d. By improving research design.
- 2 e. By improving dissemination of research findings.
- 2 f. By improving articulation/presentation of research findings/recommendations.
- 2 g. By improving selection/identification of research issues/topics
- h. Other (specify) _____

14. Has the project helped to strengthen host country/regional capability to design and undertake food security research/analysis?

- a. Yes
- b. No
- c. Don't know
- d. Too soon to tell

If answer is "b", "c", or "d" please move on to question no. 16.

15. What factors contributed to the development/strengthening of local capacity to undertake food security research and analysis? (Assign "3" to factors that made a MAJOR

(6)

contribution; "2" to factors that made a MODERATE contribution; and "1" to factors that made LITTLE or NO contribution.)

- ___ a. By involving host country research institutions and/or host government entities.
- ___ b. By providing research assistantships to host country graduate students.
- ___ c. Through on-the-job training programs.
- ___ d. Through seminars, workshops, and conferences.
- ___ e. Through publications.
- ___ f. Other (specify) _____

16. Has the project contributed to the achievement of sustainable institutional changes?

- a. Yes (specify how) _____
- b. No Government currently in survival mode; could fall
- c. Too soon to tell
- d. Not sure

17. This project includes a sub-regional approach to undertaking food security research (in addition to country-level research). In your opinion, did the sub-regional approach enhance or hinder the utility of research at the country level?

- a. Enhanced b. Hindered c. Did not significantly affect it. d. Don't know

18. Has the project effectively disseminated research results?

- a. Yes b. No c. Not sure

B. Research Quality

1. How do you assess the quality of research/analysis produced by the project?

- a. High b. Medium c. Low

2. What factors affected the quality of research produced by the project? (Assign "3" to factors which had a MAJOR effect; "2" to factors which had a MODERATE effect; and "1" to factors which had LITTLE or NO effect.)

- 3 a. Quality of MSU staff assigned to project
- 3 b. Quality of local staff involved in project
- 3 c. Degree of collaboration between MSU and local researchers

(7)

- 3 d. Appropriateness/relevance of research topics
- 3 e. Other (specify) Resident researchers in Somalia

3. To what extent did the quality of research affect acceptance and utilization of the project's outputs?

- a. It was a major factor
- b. Made no difference
- c. Not sure

C. Project Management and Implementation

1. Do you have comments on MSU's management of the project?

- a. No
- b. Yes (specify) Appropriate -- fairly close follow-up, but fact that student researchers were very good and well thought of in government circles contributed to the general positive cooperation received from host government.

2. Do you have comments on AID/W's management of the project?

- a. No
- b. Yes (specify) Pretty much hands off.

3. Did the project impose a heavy management burden on USAID?

- a. No
- b. Yes

4. If answer to question no. 3 is "b", can A.I.D./W help to reduce the management burden on USAID?

- a. No
- b. Yes (specify how) _____

5. What have been the most significant problems (management, implementation, and/or technical) encountered in carrying out the project? Please specify. Distance, communication, and lack of stability in the Somali government

D. Implications for the Future

1. Should a centrally-managed follow-on food security project be supported, and why?

a. Yes, because provides an information bank for policy generation that is needed.

b. No, because _____

2. If a follow-on food security project were supported, should that follow-on activity continue to be research oriented?

a. Yes

b. No, it should:

i. include technical assistance on a 50%-50% basis.

ii. include some amount of technical assistance (less than 50%).

iii. be primarily technical assistance (more than 50%).

iv. be 100% technical assistance.

3. If a centrally-managed follow-on food security project with a research component were supported, do you have suggestions for substantive areas that should receive priority attention?

a. No

b. Yes (specify) _____

4. If a decision were made to discontinue the S&T Bureau's support for a follow-on food security project, what would the effect be on USAID/host country? In Somalia, I would assume none, given current situation with respect to civil strife.

NAME OF RESPONDENT(S) J. Raymond Carpenter

(9)

TANZANIA

FOOD SECURITY IN AFRICA PROJECT (931-1190):
EVALUATION QUESTIONNAIRE

A. Project Impact and Relevance

1. Who benefited from the project's research?

- a. USAID
- b. Host country (specify) UNIVERSITY OF DAR ES SALAAM, DEPARTMENT OF ECONOMICS
- c. Other donors (specify) _____
- d. Other researchers (specify) _____
- e. Private sector entities (specify) _____
- f. Regional institutions (specify) SADCC

2. How useful was the project to USAID/host country?

- a. Very useful
- b. Moderately useful
- c. Not useful
- d. Not sure because:
 - i. research still in process
 - ii. impact not evident
 - iii. personnel knowledgeable of the project no longer around

3. What have been the most important accomplishments of the project to date? Please be as specific as possible.

PRODUCTION OF TWO PAPERS PUBLISHED IN UZ/MSU
FOOD SECURITY RESEARCH IN SOUTHERN AFRICA
PROJECT, 1988 & 1989.

4. What has been the most significant impact of the project? Please be as specific as possible.

FACILITATE DEBATE ON PRIVATE TRADERS
INVOLVEMENT IN FOOD CROPS MARKETING.

5. What factors contributed to the accomplishments and impact listed above? (Assign "3" to factors which have made a MAJOR contribution; "2" to factors which have made a MODERATE contribution; and "1" to factors which have made LITTLE or NO contribution.)

- 2 a. Quality of research and analysis
- 2 b. Involvement of host country analysts
- 1 c. Project's capacity-building (training) program
- 2 d. Dissemination/articulation of research findings
- 2 e. Ability to provide information in a timely manner
- 3 f. Ability to identify issues most important to decision-makers
- 3 g. Ability to provide institutional support, such as computers, software, vehicles, etc.

 h. Other (specify) _____

6. Did the project's research generate "new" knowledge (defined as information not previously known to or used by USAID or the host country)?

- a. Yes
- b. No

7. If the answer to question no. 6 is "yes", in what areas was "new" knowledge generated? LIBERALIZATION OF FOOD CROPS MARKETING

8. Of the areas listed in question no. 7, which ones made the greatest difference to USAID/host country programs and projects? AS IN 7 ABOVE

9. How effectively did the project's research respond to USAID's information/analytical needs?

- a. Very effective
- b. Moderately effective
- c. Unresponsive

10. How effectively did the project's research respond to the host country's information/analytical needs?

- a. Very effective
- b. Moderately effective
- c. Unresponsive

11. How were the project's research results used by USAID?

- a. To inform development of USAID program strategy
- b. To identify/design project or non-project assistance
- c. To improve project/program implementation
- d. To identify/track project/program impact
- e. To inform policy dialogue with host government
- f. To inform dialogue/interactions with other donors
- g. Other (specify) _____

h. Research results were not used.

12. How were the project's research results used by host country?

- a. To formulate new food security policy
- b. To amend existing policy
- c. To improve policy implementation
- d. To strengthen public sector performance
- e. To strengthen private sector performance
- f. Other (specify) _____

g. Research results were not used.

13. How can the project's research be made more useful/relevant to host country and USAID? (Assign "3" to factors which will contribute MOST to improving usefulness; "2" to factors which will make a MODERATE contribution; and "1" to factors which will make LITTLE OR NO contribution.)

- 2 a. By increasing level of host country involvement in research design, implementation, and analysis.
- 3 b. By improving timeliness of generating research results.
- 1 c. By improving quality of research outputs/analysis.
- 1 d. By improving research design.
- 2 e. By improving dissemination of research findings.
- 2 f. By improving articulation/presentation of research findings/recommendations.
- g. By improving selection/identification of research issues/topics
- h. Other (specify) _____

14. Has the project helped to strengthen host country/regional capability to design and undertake food security research/analysis?

- a. Yes
- b. No
- c. Don't know
- d. Too soon to tell

If answer is "b", "c", or "d" please move on to question no. 15.

15. What factors contributed to the development/strengthening of local capacity to undertake food security research and analysis? (Assign "3" to factors that made a MAJOR

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contribution; "2" to factors that made a MODERATE contribution; and "1" to factors that made LITTLE or NO contribution.)

- 3 a. By involving host country research institutions and/or host government entities.
- 3 b. By providing research assistantships to host country graduate students.
- 1 c. Through on-the-job training programs.
- 2 d. Through seminars, workshops, and conferences.
- 3 e. Through publications.
- f. Other (specify) _____

16. Has the project contributed to the achievement of sustainable institutional changes?

- a. Yes (specify how) _____
- b. No
- c. Too soon to tell
- d. Not sure

17. This project includes a sub-regional approach to undertaking food security research (in addition to country-level research). In your opinion, did the sub-regional approach enhance or hinder the utility of research at the country level?

- a. Enhanced
- b. Hindered
- c. Did not significantly affect it.
- d. Don't know

18. Has the project effectively disseminated research results?

- a. Yes
- b. No
- c. Not sure

B. Research Quality

1. How do you assess the quality of research/analysis produced by the project?

- a. High
- b. Medium
- c. Low

2. What factors affected the quality of research produced by the project? (Assign "3" to factors which had a MAJOR effect; "2" to factors which had a MODERATE effect; and "1" to factors which had LITTLE or NO effect.)

- 1 a. Quality of MSU staff assigned to project
- 3 b. Quality of local staff involved in project
- 3 c. Degree of collaboration between MSU and local researchers

(21)

- 1 d. Appropriateness/relevance of research topics
 - e. Other (specify) _____
-

3. To what extent did the quality of research affect acceptance and utilization of the project's outputs?

- a. It was a major factor
- b. Made no difference
- c. Not sure

C. Project Management and Implementation

1. Do you have comments on MSU's management of the project?

- a. No
 - b. Yes (specify) _____
-
-
-

2. Do you have comments on AID/W's management of the project?

- a. No
 - b. Yes (specify) _____
-
-
-

3. Did the project impose a heavy management burden on USAID?

- a. No
- b. Yes

4. If answer to question no. 3 is "b", can A.I.D./W help to reduce the management burden on USAID?

- a. No
 - b. Yes (specify how) _____
-
-

5. What have been the most significant problems (management, implementation, and/or technical) encountered in carrying out the project? Please specify. _____

D. Implications for the Future

1. Should a centrally-managed follow-on food security project be supported, and why?

a. Yes, because _____

b. No, because IT WON'T FIT WITHIN MISSION PRIORITY PROGRAMS

2. If a follow-on food security project were supported, should that follow-on activity continue to be research oriented?

a. Yes

b. No, it should:

- i. include technical assistance on a 50%-50% basis.
- ii. include some amount of technical assistance (less than 50%).
- iii. be primarily technical assistance (more than 50%).
- iv. be 100% technical assistance.

3. If a centrally-managed follow-on food security project with a research component were supported, do you have suggestions for substantive areas that should receive priority attention?

a. No

b. Yes (specify) _____

4. If a decision were made to discontinue the S&T Bureau's support for a follow-on food security project, what would the effect be on USAID/host country? NOT SURE

NAME OF RESPONDENT(S) WILLIAM BAYNIT

Z I M B A B W E

RE: P. 545 PERTAIN
BY:
SOUTHERN AFRICA
REGIONAL PROGRAM
(SARP 690-0207)
D.R. PICKETT,
PROJECT OFFICER
OCT. 5, 1990

**FOOD SECURITY IN AFRICA PROJECT (931-1190):
EVALUATION QUESTIONNAIRE**

A. Project Impact and Relevance

1. Who benefited from the project's research?

- a. USAID
- b. Host country (specify) ZIMBABWE, MALAWI, ZAMBIA, MOZAMBIQUE,
BOTSWANA, TANZANIA, SWAZILAND, LESOTHO AND INDIRECTLY, NAMIBIA
- c. Other donors (specify) FAO, UNDP, CISA
- d. Other researchers (specify) UNIVERSITY PERSONNEL IN ABOVE
NAMED COUNTRIES
- e. Private sector entities (specify) _____
- f. Regional institutions (specify) SOUTHERN AFRICA DEVELOPMENT
COORDINATION CONFERENCE (SADCC); SADCC FOOD SECURITY COORDINATING
UNIT, MIN. OF LANDS, AGRICULTURE & RURAL RESETTLEMENT, ZIMBABWE

2. How useful was the project to USAID/host country?

For "WASH"
READ THIS;
PROJECT
EXTENDS TO
9/30/97

- a. Very useful
- b. Moderately useful
- c. Not useful
- d. Not sure because:
 - i. research still in process
 - ii. impact not evident
 - iii. personnel knowledgeable of the project no longer around

3. What have been the most important accomplishments of the project to date? Please be as specific as possible.

- a. THERE IS NOW A CADRE OF GOVT. & UNIVERSITY RESEARCHERS TRAINED AND INVOLVED IN FOOD SECURITY RESEARCHERS IN SEVERAL SADCC COUNTRIES.
 - b. SADCC COUNTRIES HAVE MOVED CONCEPTUALLY FROM THINKING ABOUT FOOD SELF-SUFFICIENCY TO NATIONAL FOOD SECURITY AND, RECENTLY, TO FOOD SECURITY AT THE COMMUNITY AND HOUSEHOLD LEVELS.
 - c. UNIVERSITY AND GOVERNMENT RESEARCHERS ARE INCREASINGLY GAINING ENTRY TO POLICY ANALYSTS AND FORMULATORS, AND THEIR FINDINGS ARE INCREASINGLY BEING INPUTTED INTO DECISIONS ON A WIDE RANGE OF POLICY OPTIONS.
 - d. IN ZIMBABWE, FOR THE FIRST TIME EVER, A NATIONAL FOOD SECURITY POLICY WORKSHOP HAS BROUGHT TOGETHER ACADEMICS, MIN. AG. AND MIN. HEALTH POLICY ANALYSTS TO CONSIDER F.S. AND NUTRITIONAL EFFECTS OF POLICY OPTIONS.
4. What has been the most significant impact of the project? Please be as specific as possible.

ALL OF THE ABOVE ARE SIGNIFICANT. SUMMING THEIR IMPACT, ONE MIGHT SAY THE "CLIMATE" FOR RATIONAL, DATA-BASED DECISIONS IS IMPROVING RAPIDLY WITH HELP FROM THE PROJECT.

(11)

- 2 -

5. What factors contributed to the accomplishments and impact listed above? (Assign "3" to factors which have made a MAJOR contribution; "2" to factors which have made a MODERATE contribution; and "1" to factors which have made LITTLE or NO contribution.)

- 2 a. Quality of research and analysis
3 b. Involvement of host country analysts
3 c. Project's capacity-building (training) program
3 d. Dissemination/articulation of research findings
2 e. Ability to provide information in a timely manner
2 f. Ability to identify issues most important to decision-makers
2 g. Ability to provide institutional support, such as computers, software, vehicles, etc.

 h. Other (specify) BUILDING OF A "CRITICAL MASS" OF CONCERNED, KNOWLEDGEABLE, SKILLED PERSONNEL INVOLVED IN THE CONSIDERATION OF FOOD SECURITY ISSUES AND THEIR IMPACT ON POLICY FORMULATION AND REFORM.

6. Did the project's research generate "new" knowledge (defined as information not previously known to or used by USAID or the host country)?

- a. Yes b. No

7. If the answer to question no. 6 is "yes", in what areas was "new" knowledge generated? EXPANDED AWARENESS OF THE COMPONENTS OF HOUSEHOLD FOOD SECURITY (DETERMINANTS) AND OF THE EFFECTS OF GOVT. POLICIES ON PRICES, RELIEF, TRANSPORT, QUALITY CONTROL, ETC., ALSO, EXPANDED AWARENESS OF THE INCIDENCE AND CAUSES OF MALNUTRITION IN PARTS OF THE COUNTRIES INVOLVED WITH THE PROJECT.

8. Of the areas listed in question no. 7, which ones made the greatest difference to USAID/host country programs and projects? LESSONS LEARNED (AND DATA COLLECTED) SHOULD IMPACT ON THE SARP STRATEGY AND ON ITS SELECTION OF PROJECT ACTIVITY IN THE LONG TERM.

9. How effectively did the project's research respond to USAID's information/analytical needs?

- a. Very effective b. Moderately effective c. Unresponsive

10. How effectively did the project's research respond to the host country's information/analytical needs?

- a. Very effective b. Moderately effective c. Unresponsive

(12)

11. How were the project's research results used by USAID?

- a. To inform development of USAID program strategy
- b. To identify/design project or non-project assistance
- c. To improve project/program implementation
- d. To identify/track project/program impact
- e. To inform policy dialogue with host government
- f. To inform dialogue/interactions with other donors
- g. Other (specify) TO INFORM AID/W!

h. Research results were not used.

12. How were the project's research results used by host country?

- a. To formulate new food security policy
- b. To amend existing policy
- c. To improve policy implementation
- d. To strengthen public sector performance
- e. To strengthen private sector performance
- f. Other (specify) _____

THESE ARE PARTS OF A DYNAMIC PROCESS WHICH IS ON-GOING

g. Research results were not used.

13. How can the project's research be made more useful/relevant to host country and USAID? (Assign "3" to factors which will contribute MOST to improving usefulness; "2" to factors which will make a MODERATE contribution; and "1" to factors which will make LITTLE OR NO contribution.)

- 3 a. By increasing level of host country involvement in research design, implementation, and analysis.
- 2 b. By improving timeliness of generating research results.
- 3 c. By improving quality of research outputs/analysis.
- 3 d. By improving research design.
- 2 e. By improving dissemination of research findings.
- 2 f. By improving articulation/presentation of research findings/recommendations.
- 2 g. By improving selection/identification of research issues/topics
- h. Other (specify) _____

14. Has the project helped to strengthen host country/regional capability to design and undertake food security research/analysis?

- a. Yes
- b. No
- c. Don't know
- d. Too soon to tell

If answer is "b", "c", or "d" please move on to question no. 16.

15. What factors contributed to the development/strengthening of local capacity to undertake food security research and analysis? (Assign "3" to factors that made a MAJOR

contribution; "2" to factors that made a MODERATE contribution; and "1" to factors that made LITTLE or NO contribution.)

- 3 a. By involving host country research institutions and/or host government entities.
- 3 b. By providing research assistantships to host country graduate students.
- 2 c. Through on-the-job training programs.
- 3 d. Through seminars, workshops, and conferences.
- 3 e. Through publications.
- f. Other (specify) _____

16. Has the project contributed to the achievement of sustainable institutional changes?

- a. Yes (specify how) I BELIEVE SO, THOUGH IT IS STILL EARLY IN THE PROCESS. THE SAIACC FOOD SECURITY SECTOR COORDINATING UNIT HAS BEEN STRENGTHENED AND UNIVBILITY CAPABILITY TO DEAL WITH ISSUES HAS BEEN INCREASED.
- b. No
- c. Too soon to tell
- d. Not sure

17. This project includes a sub-regional approach to undertaking food security research (in addition to country-level research). In your opinion, did the sub-regional approach enhance or hinder the utility of research at the country level?

- a. Enhanced
- b. Hindered
- c. Did not significantly affect it.
- d. Don't know

18. Has the project effectively disseminated research results?

- a. Yes
- b. No
- c. Not sure

B. Research Quality

1. How do you assess the quality of research/analysis produced by the project?

- a. High- 0 -or Medium
 - b. Low
 - c. SOME VERY GOOD. SOME NOT S. GOOD.
- UNIFORM BY COUNTRY, INSTITUTION AND RESEARCH*

2. What factors affected the quality of research produced by the project? (Assign "3" to factors which had a MAJOR effect; "2" to factors which had a MODERATE effect; and "1" to factors which had LITTLE or NO effect.)

- 3 a. Quality of MSU staff assigned to project GENERALLY EXCELLENT.
- 2 b. Quality of local staff involved in project THIS WAS MIXED.
- 3 c. Degree of collaboration between MSU and local researchers VERY GOOD.

- 2 d. Appropriateness/relevance of research topics
- e. Other (specify) _____

3. To what extent did the quality of research affect acceptance and utilization of the project's outputs?

- a. It was a major factor
- b. Made no difference
- c. Not sure

C. Project Management and Implementation

1. Do you have comments on MSU's management of the project?

- a. No
- b. Yes (specify) MSU HAS BEEN CHALLENGED TO KEEP BOTH AID/W AND USAID/ZIMBABWE WELL-INFORMED AND IN SYNC. AID'S BUREAUCRATIC OBSTACLES TO EFFECTIVE PROJECT MANAGEMENT ARE NOT EASY TO OVERCOME, BUT MSU HAS BEEN CONSCIENTIOUS AND EFFECTIVE IN KEEPING ALL PARTIES WELL-INFORMED. USAID/Z - EXT BUREAU CONTACTS HAVE BEEN GOOD. USAID/2 - AFR BUREAU CONTACTS HAVE BEEN LESS GOOD.

2. Do you have comments on AID/W's management of the project?

- a. No
- b. Yes (specify) SEE C.1.b above.

3. Did the project impose a heavy management burden on USAID?

- a. No
- b. Yes

4. If answer to question no. 3 is "b", can A.I.D./W help to reduce the management burden on USAID?

- a. No
- b. Yes (specify how) _____

5. What have been the most significant problems (management, implementation, and/or technical) encountered in carrying out the project? Please specify. DELAYS IN FIELDING A TEAM LEADER EARLIER THIS YEAR (1989-90) SLOWED PROGRESS SOMEWHAT.

D. Implications for the Future

1. Should a centrally-managed follow-on food security project be supported, and why?

a. Yes, because THERE IS NEED TO RETAIN MOMENTUM

b. No, because _____

2. If a follow-on food security project were supported, should that follow-on activity continue to be research oriented?

a. Yes, BUT SHOULD FOCUS HEAVILY ALSO ON ENCOURAGING POLICY CHANGE WHERE WARRANTED.

b. No, it should:

- i. include technical assistance on a 50%-50% basis.
- ii. include some amount of technical assistance (less than 50%).
- iii. be primarily technical assistance (more than 50%).
- iv. be 100% technical assistance.

3. If a centrally-managed follow-on food security project with a research component were supported, do you have suggestions for substantive areas that should receive priority attention?

a. No

b. Yes (specify) _____

4. If a decision were made to discontinue the S&T Bureau's support for a follow-on food security project, what would the effect be on USAID/host country? GIVEN STAFFING CONSTRAINTS, IT

COULD WELL RESULT IN THIS MISSIONS ABANDONING FOOD SECURITY AS A PRIORITY PROGRAMMING AREA AFTER THE PROJECT ENDS (SEPT. 1991)

NAME OF RESPONDENT(S) JUSTICE R. PICKETT, ADD, USAID/2

REDSO / ESA

**FOOD SECURITY IN AFRICA PROJECT (931-1190):
EVALUATION QUESTIONNAIRE**

A. Project Impact and Relevance

1. Who benefited from the project's research?

- a. USAID
- b. Host country (specify) Zimbabwe, Malawi, Tanzania, and a
number of other SADCC countries
- c. Other donors (specify) World, CIDA
- d. Other researchers (specify) esp at Mich State
- e. Private sector entities (specify) SADCC Food Security Council
- f. Regional institutions (specify) _____

2. How useful was the project to USAID/host country?

- a. Very useful
- b. Moderately useful) depends on country
- c. Not useful
- d. Not sure because:
 - i. research still in process
 - ii. impact not evident
 - iii. personnel knowledgeable of the project no longer around

3. What have been the most important accomplishments of the project to date? Please be as specific as possible.

the training of indigenous policy analysts.

making senior level government officials aware of food security issues in the SADCC region.

setting in motion a process which is beginning to make serious analysis a part of the policy making process in a number of areas of the region.

4. What has been the most significant impact of the project? Please be as specific as possible.

Increasing the number of quality of local policy analysts.

5. What factors contributed to the accomplishments and impact listed above? (Assign "3" to factors which have made a MAJOR contribution; "2" to factors which have made a MODERATE contribution; and "1" to factors which have made LITTLE or NO contribution.)

- 2 a. Quality of research and analysis
- 3 b. Involvement of host country analysts
- 3 c. Project's capacity-building (training) program
- 2 d. Dissemination/articulation of research findings
- 3 e. Ability to provide information in a timely manner
- 2 f. Ability to identify issues most important to decision-makers
- 2 g. Ability to provide institutional support, such as computers, software, vehicles, etc.

 h. Other (specify) _____

6. Did the project's research generate "new" knowledge (defined as information not previously known to or used by USAID or the host country)?

- a. Yes
- b. No

7. If the answer to question no. 6 is "yes", in what areas was "new" knowledge generated?

Extent and shape of bean marketing in Rwanda
Maize distributional problems in Zimbabwe

8. Of the areas listed in question no. 7, which ones made the greatest difference to USAID/host country programs and projects?

9. How effectively did the project's research respond to USAID's information/analytical needs?

- a. Very effective
- b. Moderately effective
- c. Unresponsive

10. How effectively did the project's research respond to the host country's information/analytical needs?

- a. Very effective
- b. Moderately effective
- c. Unresponsive

- 3 -

11. How were the project's research results used by USAID?

- a.X To inform development of USAID program strategy
- b.X To identify/design project or non-project assistance
- c. To improve project/program implementation
- d. To identify/track project/program impact
- e.X To inform policy dialogue with host government
- f. To inform dialogue/interactions with other donors
- g. Other (specify) _____

h. Research results were not used.

12. How were the project's research results used by host country?

- a. To formulate new food security policy
- b. To amend existing policy
- c. To improve policy implementation
- d. To strengthen public sector performance
- e. To strengthen private sector performance
- f. Other (specify) not sure

g. Research results were not used.

13. How can the project's research be made more useful/relevant to host country and USAID? (Assign "3" to factors which will contribute MOST to improving usefulness; "2" to factors which will make a MODERATE contribution; and "1" to factors which will make LITTLE OR NO contribution.)

- 3 a. By increasing level of host country involvement in research design, implementation, and analysis.
- b. By improving timeliness of generating research results.
- c. By improving quality of research outputs/analysis.
- d. By improving research design.
- 3 e. By improving dissemination of research findings.
- f. By improving articulation/presentation of research findings/recommendations.
- 3 g. By improving selection/identification of research issues/topics
- h. Other (specify) _____

14. Has the project helped to strengthen host country/regional capability to design and undertake food security research/analysis?

- aX Yes
- b. No
- c. Don't know
- d. Too soon to tell

If answer is "b", "c", or "d" please move on to question no. 16.

15. What factors contributed to the development/strengthening of local capacity to undertake food security research and analysis? (Assign "3" to factors that made a MAJOR

contribution; "2" to factors that made a MODERATE contribution; and "1" to factors that made LITTLE or NO contribution.)

- 3 a. By involving host country research institutions and/or host government entities.
- 3 b. By providing research assistantships to host country graduate students.
- X c. Through on-the-job training programs.
- 3 d. Through seminars, workshops, and conferences.
- e. Through publications.
- f. Other (specify) _____

16. Has the project contributed to the achievement of sustainable institutional changes?

- a. Yes (specify how) _____
- b. No
- X c. Too soon to tell
- d. Not sure

17. This project includes a sub-regional approach to undertaking food security research (in addition to country-level research). In your opinion, did the sub-regional approach enhance or hinder the utility of research at the country level?

- a. X Enhanced
- b. Hindered
- c. Did not significantly affect it.
- d. Don't know

18. Has the project effectively disseminated research results?

- a. X Yes
- b. No
- c. Not sure

B. Research Quality

1. How do you assess the quality of research/analysis produced by the project?

- a. X High
- b. Medium
- c. Low

2. What factors affected the quality of research produced by the project? (Assign "3" to factors which had a MAJOR effect; "2" to factors which had a MODERATE effect; and "1" to factors which had LITTLE or NO effect.)

- 3 a. Quality of MSU staff assigned to project
- 3 b. Quality of local staff involved in project
- 3 c. Degree of collaboration between MSU and local researchers

10 02 1990

09:30

AID W/ IPR SA-18 *****

703 875 4394

P. 07

- 3 d. Appropriateness/relevance of research topics
- e. Other (specify) _____

3. To what extent did the quality of research affect acceptance and utilization of the project's outputs?

- a.^X It was a major factor
- b. Made no difference
- c. Not sure

C. Project Management and Implementation

1. Do you have comments on MSU's management of the project?

- a. No
- b.^X Yes (specify) For the most part it has been of the highest quality - needed more attention to need to fill COP sent to Harare

2. Do you have comments on AID/W's management of the project?

- a. No
- b.^X Yes (specify) The work benefits from having S.& T support
While it may be desirable to have single Bureau activities within the Bureau, the current organization allows some additional support for a research approach

3. Did the project impose a heavy management burden on USAID?

- a.^X No
- b. Yes

4. If answer to question no. 3 is "b", can A.I.D./W help to reduce the management burden on USAID?

- a. No
- b. Yes (specify how) _____

5. What have been the most significant problems (management, implementation, and/or technical) encountered in carrying out the project? Please specify.

It is proper for MSU to limit their involvement as a small set of countries because of staff limits

But, the need is larger. Perhaps developing cooperative arrangements with other universities would be in order.

D. Implications for the Future

1. Should a centrally-managed follow-on food security project be supported, and why?

a. **Yes, because** Important topic, ease of mission access and management, level of activity will drop without some central seed money.

b. **No, because** _____

2. If a follow-on food security project were supported, should that follow-on activity continue to be research oriented?

a. **Yes**

b. **No, it should:**

i. include technical assistance on a 50%-50% basis.

ii. include some amount of technical assistance (less than 50%).

iii. be primarily technical assistance (more than 50%).

iv. be 100% technical assistance.

3. If a centrally-managed follow-on food security project with a research component were supported, do you have suggestions for substantive areas that should receive priority attention?

a. **No**

b. **Yes (specify)** Impact of alternative market structures on food security (esp. privatization of large parastatals)

- Inter-regional trade

- Nutrition assessments and food distribution

4. If a decision were made to discontinue the S&T Bureau's support for a follow-on food security project, what would the effect be on USAID/host country?

Much less quality policy analysis

NAME OF RESPONDENT(S) RICHARD J. EDWARDS

REDSO/ESA

