

Appendix 1

EVALUATION OF THE PPC/WID - UNIVERSITY OF FLORIDA
WOMEN IN AGRICULTURAL DEVELOPMENT PROJECT
(Project 930-0300)
(Contract No. AID-OTR-0300-C-00-2081-00)

Introduction

The Women in Agricultural Development Project (WIADP) in Malawi is nearing completion. An evaluation of the project was undertaken in conjunction with a midterm evaluation of the USAID/Malawi Agricultural Research Project. Part of the purpose of the two evaluations was to provide guidance for a follow-on project in agricultural research and extension to be obligated in FY 1983. The findings of the WIADP evaluation indicate that the project has been highly successful and contains elements that should be incorporated into the follow-on project. In addition, with certain modifications for variation in country situation, the WIADP could serve as a model for other, similar PPC/WID-funded activities complementary to larger bilateral assistance efforts.

Background

In March, 1981, Dr. Anita Spring, University of Florida, submitted an unsolicited proposal on Women and Agricultural Production in Malawi.^{1/} After a number of delays, the project proposal was approved by the Government of Malawi (GOM) and USAID/Malawi and funded by the Program and Policy Coordination Bureau's Women in Development Office (PPC/WID). The project was funded for the period from March 1, 1982 to March 31, 1983. The project Scope of Work had three major elements:

1. Collection of data on women's agricultural work in diverse contexts;
2. Identification of women farmers' needs which might be addressed through AID projects; and
3. Preparation of a manual that will allow project workers and host country planners to ascertain whether or not their projects consider women in terms of training and benefits.

^{1/} The project is now formally titled the Women in Agricultural Development Project.

These elements were designed to meet the project's objective of developing guidelines based on the study of women farmers and agricultural development in selected agroeconomic areas in Malawi in order to strengthen project planning and extension services to rural women.

Evaluation Methodology

This evaluation was conducted in conjunction with the midterm external evaluation of the USAID/Malawi Agricultural Research Project (612-0202), implemented under a contract with the University of Florida (UF). A separate scope of work (Attachment 1) was prepared for the conduct of the WIADP evaluation, and, as with the larger project evaluation, the findings will contribute to the design of the follow-on agricultural research and extension project now under consideration by USAID/M and the GOM.

The evaluation took place during the period January 25 - February 8, 1983. Documents produced by the WIADP during the past year, including reports, survey instruments and handouts, were reviewed (see Attachment 2 for a listing of documents). Interviews were conducted with project personnel, selected Ministry of Agriculture (MOA) officials, University of Florida technical assistance (t.a.) and USAID/M staff (see Attachment 3 for a list of persons contacted). Two field visits were undertaken, one to Ngabu Agricultural Development Division (ADD) to interview the Women's Programmes Officer (WPO), and one in Lilongwe ADD to observe the on-farm trials being conducted by the project agronomist. The evaluator has also benefited from copious notes prepared by WIADP project staff in response to the specific elements in the evaluation scope of work. Many factual elements of the evaluation report were drawn from this material.

Project Inputs

The project was funded in the amount of \$125,766.00. That amount covered salaries for the Principal Investigator, Dr. Anita Spring, a Research Associate, Mr. Craig Smith, short-term consultants and secretarial staff; travel and per diem; equipment and supplies (including computer time) and administrative costs. In addition, the Government of Malawi made substantial contributions to the project. The GOM seconded Miss Frieda Kayuni, a Bunda College graduate, to the project from the Development Department. Material contributions include office space and furnishings; use of the Chitedze Agricultural Research Station's (ARS) facilities

(i.e., utilities, mail and messenger services); vehicles from the central MOA and various ADD motor pools, often without charge for petrol and maintenance; staff housing; interpreters for fieldwork and support for attendance at a number of workshops and conferences. The MOA has also provided support services, such as official memoranda and clearance letters, and the processing of various administrative matters. The WIADP is in all respects considered a section of the Department of Agricultural Research, although it does not formally appear on the organization chart.

The project has also benefited from close association with the Farming Systems Analysis (FSA) Section (funded under the USAID/M Agricultural Research Project) of the Chitedze research station. Joint data collection efforts have been undertaken using the combined staffs, augmented by ADD-level personnel and enumerators hired by both the FSA and WIADP Sections (WIADP paid the majority of the salary costs for the enumerators.). This section also provided transport on occasion, and has undertaken microcomputer storage and analysis of jointly collected data. Advice and counsel from both long-term and short-term technical assistance staff provided by UF have also been solicited by the WIADP from time to time.

Project Outputs

Discussion of project outputs will follow the scope of work (Attachment 1) provided for the WIADP evaluation. The scope of work notes that the WIADP has provided progress reports sufficient to detail the project activities (Attachment 4 is a recent publication summarizing major WIADP activities.). Copies of these reports are available from the WIADP section, USAID/M, the AID/W Malawi Desk and the PPC/WID Office. This report will therefore concentrate on an analysis of project outputs in achieving the project objectives.

A. Research Objectives

1. Appropriateness of socio-economic data to achieve stated project objectives

Data have been collected on a wide range of factors affecting rural women. In addition to farm-level socio-economic data, agronomic information has been gathered. Data have also been collected on the organization of agricultural services for reaching rural women. Formal and informal information on attitudes toward reaching women farmers has been obtained as well.

Data collection has taken place in several of Malawi's agroecological zones with diverse farming systems. Principal zones covered include:

a. high plateau - characterized by mixed rainfed crop and livestock agriculture, looking at both a GOM-designated Rural Development Project (RDP) area and tobacco estate agriculture

b. lakeshore - characterized by rainfed and irrigated rice schemes and fishery at lower altitudes

c. middle altitude semi-arid plain - characterized by drought-prone climate, maize intercropped with legumes and oilseeds and rainfed rice agriculture, high population densities and male outmigration for off-farm employment.

This range of agroecological zones and subsistence patterns allowed disaggregation of data according to several parameters: gender, socio-economic status, traditional vs. progressive farming, participation in the cash economy, level of education, access to social services, etc. Although much of this information had been collected as parts of the National Sample Survey of Agriculture, other national surveys, the annual evaluation surveys conducted at the ADD level and the farming systems diagnostic surveys, there had been no systematic effort to disaggregate data and analysis by gender and in terms of women as agricultural producers rather than as "homemakers." Progress has been made in several ADDs in disaggregating the NSSA data by male and female household heads under the leadership of the WIADP.

The data collection has been more complete than some of the more selective surveys routinely performed by the GOM. This has allowed a holistic analysis of the roles of all household members in productive enterprises, domestic tasks, social and political activities, etc. Such an analysis should provide to both AID project designers and GOM clients of the projected manual insights into present rural activities and values and development trends that might be enhanced, with an emphasis on the differences between men and women, heretofore downplayed or overlooked. It is important to note that project data have not focussed exclusively on women (in its farm-level surveys), but has collected information to highlight the similarities and differences between men and women.

2. Relevance to GOM agricultural research programming and policy

The GOM and MOA have informally articulated their concerns to increase smallholder production. At the same time, there is a recognition that women are a significant element in that

production. The thrust of the Malawi National Rural Development Program (NRDP) since 1978 has been to improve the well being of the rural population through delivery of services for both social welfare and agricultural production. No special provisions for women in agricultural production were incorporated in the early phases of NRDP; however, in 1981 the MOA moved to change the emphasis of its extension to women from home economics to agriculture. This was implemented by creating a WPO position in each ADD and in the central ministry, and by beginning to retrain the Farm Home Assistants (FHAs - female extension workers). The WIADP has helped to document women's lack of access to agricultural information and services, such as extension and credit, needed to increase agricultural production. The Department of Agricultural Research (DAR) has also moved to adopt a farming systems approach to adaptive research. The WIADP participated in diagnostic surveys to identify smallholder farming constraints with particular emphasis on disaggregation of data by sex.

One of the most impressive features of the project is that it has exceeded the original scope of work in a number of ways, while still accomplishing the original objectives. In this case, the project has gone on from the identification of smallholder problems through the data collection and analysis to making recommendations and taking action to improve service delivery to women (beyond the scope of the manual stipulated in the contract). Specifically, members of the project staff have:

- assisted in revising the curriculum for refresher training for the female extension service (FHAs);
- contributed to the curriculum planning for the FHA program at the new Natural Resources College (certificate training for extension);
- worked on proposed revision in the career ladder for women in the Department of Agricultural Development (extension);
- made presentations to ADD headquarters staffs at the request of the Programme Managers and made specific recommendations on handling data to evaluate differences between male and female farmers;
- made recommendations to ADD Evaluation sections for disaggregation by sex of data and analyses; and
- been asked to evaluate all ADD programs for ways to improve assistance to women farmers.

Overall, it appears that the MOA has had a longstanding, but somewhat undefined, concern to improve its programs for women in agricultural production. The WIADP has been able to offer concrete proposals for action to address this concern and has most likely contributed to the evolution of a more coherent policy (as yet unarticulated, but potentially part of NRDP V) on women in agricultural development.

B. Methodology

1. Effectiveness of social scientist/agronomist team approach in gathering socio-economic information relevant to the agricultural research program

The interdisciplinary approach has been critical to the achievement of project objectives and to some of the additional tasks undertaken by the project. First, the project collected agronomic as well as socio-economic information, using a modified farming systems approach. This allowed an analysis of the whole farm system, with disaggregation by sex, rather than a piecemeal look at women's roles within the system. Second, the combination of disciplines lent credibility to the research effort in the eyes of other DAR professional staff. Thus, it was key to establishing credentials as researchers whose results were worthy of attention. The DAR has had little past experience with socio-economic research, and many of the biological scientists believe that it is insubstantive by comparison. It was less difficult to establish credibility with the extension service, and the whole farm system approach has identified problems that can be addressed under current programs (such as lack of access to credit by women, or inappropriate credit and technology packages for women).

Perhaps one of the most interesting outgrowths of the interdisciplinary approach is a small agronomic adaptive research activity that was initiated at the request of women farmers in Unit 2 of Lilongwe ADD. The activity is a series of on-farm soybean trials under women farmers' management. In 1982, the need for more information on soybean production (as opposed to information on cooking already available) was identified by the WIADP during an early farmer survey. That year, the WIADP prepared handouts using research station recommendations, held a planting demonstration with Chitedze ARS staff and coordinated the provision of inputs for planting demonstration plots.

In 1983, recognizing that farmers had some objections to the research station recommendations (i.e., plant spacing, etc.), a series of simple, women-farmer-planted-and-managed trials were designed and carried out. The method used to implement these

soybean trials in 1982-83 is a model that other sections of the DAR should look to in planning and carrying out adaptive trials. Each of the women trial cooperators assisted in planting an identical soybean trial at the Unit Centre under the supervision of research and extension staff. Each woman farmer received supplies for one trial, and planted the next day in her own field. This approach involves research and extension staff in a more participatory manner with the farmers than in other models, and is thus an excellent candidate for replication. The specific focus on women farmers should also be maintained, although more attention will have to be given to follow-through by the male extension service. The project has gotten researchers and extension workers onto women farmers' fields and talking to women farmers, and this is an important first step. It allowed the WIADP to respond to a women-farmer-identified need, and to complement the data collection and analysis made with a more action-oriented hands-on approach.

It has been important for maximum program impact that the WIADP has provided effective liaison between research and extension. Both socio-economic and agronomic researchers have been able to provide specific expertise and analytical skills at various levels - farm, extension service, research and policy/program. The interdisciplinary approach is particularly replicable in the Malawian research and extension organizations, and should be assured in any subsequent effort in Malawi.

2. Workability of questionnaire

The following WIADP sets of questionnaires were reviewed:

- a. Farm Home Assistants
- b. Soyabean Project
- c. Karonga Farmer Survey
- d. Phalombe Interviews
- e. LRDP Survey
- f. Women's Programmes Evaluation for MOA -
Questionnaires for Management and Every ADD Section
- g. Stall-feeders
- h. Groundnut Production
- i. Agricultural College Students

The Phalombe Interviews and LRDP Survey were developed and administered jointly with the Farming Systems Analysis section. Each of the other questionnaires was designed to elicit information on a specific topic. This has facilitated a quick turn-around of actionable recommendations. The larger, longer-term surveys have provided more holistic information on the farming systems and have necessarily been more detailed. The LRDP Survey is a longitudinal study relying on baseline

data collected in 1969/70 and NSSA data collected in 1980/81. One hundred forty-four of the original households were reinterviewed in the 1982 survey, using approximately 15 different survey instruments over a two-month period. This type of survey with extensive questionnaires provides a very rich data base for studying development trends. The WIADP was instrumental in assuring that all questionnaires disaggregated information by sex, and will participate in the analysis of the data with emphasis on the role of women in all phases of the rural economy. The evaluator considers it crucial that policy implications and recommendations be made on the basis of the longitudinal survey. Such recommendations will enhance the support for this type of in-depth survey work, which is currently regarded with skepticism by many DAR and MOA decisionmakers.

3. Complementarity and coordination of WIADP and larger farming systems research (FSR) methodology

Some of the complementarity and coordination between the WIADP and FSA sections has been discussed in the foregoing two sections. In addition, it should be noted that WIADP has a specific emphasis on women as a client group, while the larger FSA section has a more general concern with the smallholder farmer. The WIADP has also pointed out the statistical significance of women as farmers and encouraged the FSA section to take that into account in the design of its diagnostic surveys and on-farm research. The WIADP has both drawn from the FSA section, in terms of data, manpower, logistical and financial support and contributed the same elements to FSA section efforts by working in tandem in two surveys. In these efforts, the project agronomist has been involved in the collection of agronomic data equally with DAR and extension personnel, while the WIADP Principal Investigator and the FSA section head have supervised the collection of socio-economic information and its analysis.

4. Difficulties specific to working with women farmers in Malawi

The WIADP staff itself has experienced no difficulty in working with women farmers. However, they have identified others' difficulties, particularly the male extension agents' inability or lack of incentive to reach women farmers. The WIADP suggested and developed an extension aids circular on techniques for male extension workers to reach women farmers and is writing it. The project has also been closely monitoring an innovative technique being tried in Blantyre ADD to allow more women farmers access to credit. Further work could be carried out in improving women's access to credit and extension, and it is hoped that the WIADP project, particularly

in its review of programs for women in the ADDs will be able to offer some suggestions that can be implemented subsequent to project termination.

C. Institutional Linkages

1. GOM support

The GOM has been very materially supportive of the project, as detailed in the Project Inputs section of the evaluation report. From the project's inception, a high level of interest has been demonstrated by MOA officials such as the Secretary for Agriculture, the Chief Agricultural Research Officer, the Chief Agricultural Officer (extension head) and the ADD Programme Managers. Evidence of acceptance of the need for such an activity by the GOM is twofold: 1) the fact that the WIADP staff is treated as a section in the DAR and accorded all the benefits that entails; and 2) the WIADP has been asked to take on additional tasks as outgrowths of the original scope of work. Recent examples of the latter include the request by the Secretary for Agriculture to review women's programs in all ADDs and a formal request from the MOA to prepare the manual specified in the contract scope of work, thus assuring the manual a wider audience and a serious reception by MOA officials.

2. GOM expectations for the future of the project

Unfortunately, the MOA has no immediate plans to continue the project activities. They are, however, undertaking two exercises that may allow for the inclusion of a women's section within the next year. First, the DAR is undergoing a major reorganization that will place greater emphasis on adaptive research and closer linkages to the extension service. Secondly, the MOA is participating with USAID/Malawi in the design of a follow-on to the Agricultural Research Project. The technical assistance and training components of the follow-on project could include provision for the WIADP section to be continued.

3. Degree of collaboration between the Malawi Agricultural Research Project and the WIADP

As noted above, there has been substantial collaboration between the FSA section (funded under the USAID Agricultural Research Project) and the WIADP. Other collaboration has been on a one-time and very limited basis. The WIADP agronomist was advised by one of the UF technical assistance team, for example. Similarly, the WIADP has had limited access to the short-term t.a. provided under the UF contract. In the main,

though, the WIADP has not interacted with most of the technical assistance team from UF.

The lack of collaboration appears to be an artifact of problems in WIADP project start-up, so that the project began significantly later and under a cloud of ambivalence on the part of USAID/Malawi (see Section D below). The GOM and UF/Gainesville perceive the two projects as more closely linked than they are in reality. Thus, when short-term technical assistance has been sent from UF, the WIADP project has occasionally benefited as though it were part of the larger project. The UF long-term technical assistance team has been informally on call for consultation; however, that team has not taken full advantage of the additional expertise and information available from the WIADP. This problem has likely been compounded by the close alliance between the WIADP and the FSA section. As detailed in the evaluation to which this report is annexed, the FSA section has also had problems of integration within the larger project. There is a general perception by the biological researchers (including the members of the UF team) that socio-economic data collection and analysis are not actually "research." Quantity of empirical data appears to carry more weight than quality of analysis. Perceptions of this sort are not limited to the UF technical assistance team nor to Malawi. The WIADP, in its institutional-strengthening, programmatic orientation has helped somewhat to bridge the gap in understanding, but it will not be closed during the life of the project, or in the foreseeable future.

D. Assessment of the WID Component Add-on Approach

1. Impact

The project has achieved its objectives of data collection on all aspects of women's agricultural work, of drawing implications for AID-sponsored activities to respond to women farmers' needs and is in the process of preparing the manual for GOM extension agents and planners. It has also embarked on several unanticipated, related activities, such as the research-extension liaison, the agronomic trials directed at women farmers and the advisory role to MOA on policy for reaching women farmers. A concern with women as agricultural producers has been institutionalized within the MOA, although the GOM looks to the donor community to provide personnel to address that concern. Thus, the project has not only been successful in assuring that sex-disaggregated socio-economic and agronomic data have been collected and utilized, it has created a demand for further work, from the Departments of Agricultural Research and Agricultural Development (at both headquarters and ADD levels) and the Planning Office of the MOA.

2. Replicability

The WIADP staff has identified several elements of the project that are appropriate for replication elsewhere:

- working with the Ministry of Agriculture staff to assure that the project proposal addresses their concerns and incorporates their advice
- use of the farming systems research approach
- use of key indicators
- working at various levels (farm, extension service, research, program and policy)
- use of an interdisciplinary team approach with both male and female staff members, where possible
- using specific strategies for disaggregating data
- meeting with section personnel and policy makers
- obtaining reports from field staff, sections, etc. with disaggregated data
- writing reports with the specific objective of disaggregating data
- designing new report formats

The evaluator believes that the following additional elements should be considered for replication:

- focus on institutionalization of WID concerns as well as data collection and analysis
- careful attention to the institutional structure onto which the project is grafted
- emphasis on policy-oriented, actionable recommendations for the host country as a project output (during the entire life of the project as well as the type of output represented by the manual)
- movement into action research and extension activities, such as the soybean research and extension training elements
- coordination with host country farming systems research

- adoption of a holistic approach, looking at the similarities and differences between male and female farmers rather than a single focus on women.

The WIADP staff points out that the Malawian organization for agricultural development may be unique, and certainly facilitated the project. The NRDP approach, with areally-based development programs (the ADDs) makes a substantial impact possible, as the approach is both highly organized and relatively decentralized. Also, Malawi is a fairly small country, making the NRDP approach manageable. In larger, less well articulated host country programs, more staff and higher funding levels would be necessary to achieve similar impact.

3. Contributions to project success

The WIADP staff feel the following have contributed to project success:

- excellent encouragement and support from the MOA
- well organized extension staff with good record-keeping to which the WIADP had access for documentation, data and farmer interviewing
- facilities at and affiliation with Chitedze ARS
- media coverage of the National Workshop on Women in Agricultural Development
- an enthusiastic, independent staff, willing to work overtime, learn Chichewa, tolerate village conditions, etc.
- support of ADD Programme Managers
- staff versatility in working at many levels, and good access to those levels
- excellent secretarial assistance
- autonomy in funding and decisionmaking.

The evaluator would add that

- the interdisciplinarity of the team and the high quality of research lent considerable credibility to the project, particularly as far as the MOA is concerned, and facilitated institutional strengthening
- the project staff has actively sought opportunities to advise on policy decisions and work in programming and training

- the liaison with extension allowed the research to bear immediate fruit
- the unanticipated institutional strengthening element reinforced the original project objectives and contributed heavily to the GOM perception of a successful activity.

4. Problems experienced by the project

The project's original objectives were fairly modest. The project has expanded beyond its research role and this has had implications for project resources. The project had difficulty securing consistent support from USAID/Malawi. Among other things, this delayed project start-up by almost nine months and resulted in the loss of one of the proposed researchers to another activity. The UF technical assistance team from the Agricultural Research Project has largely ignored the WIADP, instead of taking advantage of it. The WIADP activity suffered from inadequate backstopping from PPC/WID.

Resources: The project was underbudgeted and underfunded. Funds for transport (a vehicle, maintenance and petrol), Malawian counterparts and staff for interpretation and clerical work and operating costs should be more carefully and realistically planned and included in future contracts. A contingency factor should be built in. Another way for PPC/WID to address this problem is to work to have a similar component incorporated in major bilateral projects (especially those implemented through Title XII universities), drawing on project funds and Title XII strengthening grant monies.

Coordination and support: The project start-up suffered almost a year's delay due to obstacles emanating from the Malawi AAO and the AID/W/SER Contracts Management Office. This is well documented in the USAID/Malawi files. In addition, certain administrative problems developed between USAID/Malawi and WIADP after project implementation began. Although it is unlikely that all of these circumstances would converge again, PPC/WID should have assessed the situation early on and attempted to intervene constructively. Certainly, once the contract was signed, PPC/WID should have maintained more active contact with the project rather than relying on a one-way flow of reports. This holds true of USAID/M as well - once it had cleared the project, it should have been more consistent in its support. Administrative procedures should have been more clearly spelled out so that centrally-funded contractors' rights and responsibilities vis a vis the country AID mission are fully understood by all parties. The relationships with the bilateral projects to which the WID activity was added should have been clarified at the outset.

E. Evaluation Recommendations

1. The WIADP add-on should be brought into the mainstream of USAID/Malawi activities. The most appropriate way to accomplish this is to include a technical assistance position to carry on the work of the WIADP in the agricultural research and extension project being planned for obligation in FY 1983. USAID should note the following considerations in designing this aspect of the technical assistance:

- an organizational "home" for WIAD will have to be found in the structure of the DAR. The project designers should explore the most cost-effective arrangement for devoting resources to WIAD. Under the current reorganization plan, a likely place would be as part of the Farming Systems division. It would be useful for the WIAD technical advisor to have complementary skills to the Farming Systems Analyst t.a. (e.g., if that person is a social scientist, the WIAD coordinator might be an agricultural economist; if the FSA is male, the WIAD coordinator should be female or vice versa). Preference should be given to selecting a social scientist for the position, as the GOM has many fewer trained social scientists than biological scientists.

- whatever choices are made for the technical assistance to WIAD under the follow-on project are likely to be permanent, as far as the GOM is concerned. Therefore, organizational structure and advisor's discipline should be carefully considered during the project design.

- the WIAD position description should include the specific mandate to work with the Department of Agricultural Development to enhance agricultural extension service delivery to women farmers.

2. To support the above-recommended technical assistance position, AID should covenant with the GOM to

- second an agronomist to the section

- assign Malawian counterparts and include them in the participant training plan (Ms. F. Kayuni would be a likely candidate.).

3. The technical advisor's terms of reference should specifically include:

- continuing work on ways for male extension workers to reach women farmers

- devising bureaucratic incentives to assure that male extension workers utilize these techniques (see, for example, the work of David Korten on the NIA in the Philippines)

- embarking on small action research projects such as the soybean trials begun by the WIADP.

4. The Principal Investigator should assure that the results of the longitudinal survey return to Malawi as policy recommendations. This is important methodologically in terms of setting a pattern for subsequent work by Malawian research staff, and in terms of decisionmakers' perceptions of the utility and further support for this kind of research.

5. PPC/WID should be more careful to assess individual missions' receptiveness to centrally-funded add-ons, and the administrative capacity to accommodate them. An exploratory field visit by PPC/WID staff would be an appropriate means of assessment. PPC/WID should also improve its backstopping during project implementation.

Conclusion

The Women in Agricultural Development Project has exceeded original expectations. It has not only achieved research objectives, but has had a substantial impact on institutional development. Although it has not been as fully integrated with the USAID/Malawi Agricultural Research Project as it might have been, it can be treated as a blueprint for an activity to be integrated into the next bilateral project. As far as replication by PPC/WID is concerned, other similar efforts should place as much emphasis on the institutional strengthening aspects as on the data collection and analysis aspects.

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TAGS:

SUBJECT: WOMEN IN AGRICULTURAL DEVELOPMENT PROJECT
 EVALUATION

REF: STATE 350165

1. AS PER REFTEL, THE FOLLOWING IS SCOPE OF WORK FOR PPC/WID PROJECT EVALUATION. SOCIAL SCIENTIST J. ATHERTON WILL CONDUCT EVALUATION AS PART OF HER RESPONSIBILITIES ON MALAWI AG RESEARCH {612-0202} EVALUATION, SINCE SUGGESTIONS AND RECOMMENDATIONS FROM WID PROJECT MAY BE USEFUL FOR FOLLOW-ON PID DESIGN. AS AGREED TO PRIOR TO HER DEPARTURE, ATHERTON WILL PREPARE SEPARATE REPORT ON WID PROJECT--WOMEN IN AGRICULTURAL DEVELOPMENT {WIA DP} CONTRACT NO. AID-OTR-0300-C-00-2081-00 FOR PPC/WID.

2. STATEMENT OF WORK FOR TEAM {DR. SPRING AND RESEARCH ASSOCIATE} WAS TO {1} COLLECT DATA ON WOMEN'S AGRICULTURAL WORK IN DIVERSE CONTEXTS; {2} IDENTIFY NEEDS OF WOMEN FARMERS WHICH MIGHT BE ADDRESSED THROUGH AID PROJECT; AND {3} PREPARE A MANUAL FOR PROJECT WORKERS AND HOST COUNTRY PLANNERS THAT WILL ALLOW THEM TO ASCERTAIN WHETHER OR NOT THEIR PROJECTS CONSIDER WOMEN IN TERMS OF TRAINING AND BENEFITS.

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3. SINCE DR. SPRING HAS PROVIDED PPC/WID WITH REGULAR MONTHLY REPORTS INCLUDING AGRONOMIC FINDINGS AND TRAINING SESSIONS, AND THE RESEARCH RESULTS AND POLICY RECOMMENDATIONS WILL BE CONTAINED IN FINAL REPORT EVALUATOR SHOULD FOCUS ON RESEARCH OBJECTIVES, METHODOLOGY, INSTITUTIONAL LINKAGES, AND LESSONS LEARNED.

{A} RESEARCH OBJECTIVES: EVALUATOR SHOULD DISCUSS:

--APPROPRIATENESS OF SOCIO-ECONOMIC DATA TO ACHIEVE STATED PROJECT OBJECTIVES;

--RELEVANCE TO GOM AGRICULTURAL RESEARCH PROGRAMMING AND POLICY.

{B} METHODOLOGY. EVALUATOR SHOULD ASSESS:

--EFFECTIVENESS OF SOCIAL SCIENTIST/AGRONOMIST TEAM APPROACH IN GATHERING SOCIO-ECONOMIC INFORMATION RELEVANT TO AGRICULTURAL RESEARCH PROGRAM;

--WORKABILITY OF QUESTIONNAIRE;

--COMPLEMENTARITY AND CO-ORDINATION OF WIADP AND LARGER FSR PROJECT METHODOLOGY;

--DIFFICULTIES SPECIFIC TO WORKING WITH WOMEN FARMERS IN MALAWI.

{C} INSTITUTIONAL LINKAGES. EVALUATOR SHOULD DESCRIBE GOM SUPPORT--ESPECIALLY MINISTRY OF AGRICULTURE ASSISTANCE--FINANCIALLY AND LOGISTICALLY:

--GOM EXPECTATIONS FOR FUTURE OF PROJECT;

--DEGREE OF COLLABORATION BETWEEN MALAWI AG RESEARCH PROJECT AND WIADP.

{D} FINALLY, IN A SEPARATE SECTION FOR PPC/WID, THE EVALUATOR SHOULD ASSESS THE WID COMPONENT ADD-ON APPROACH TO ASSURING THAT SEX-DISAGGREGATED SOCIO-ECONOMIC DATA COLLECTION BE USED IN FORMULATION OF POLICY, AND SPECIFICALLY IN THIS PROJECT, THAT THE DATA CAN CONTRIBUTE TO THE DEFINITION OF AN AG RESEARCH PROGRAM.

ADDITIONALLY, PROJECT SHOULD BE EVALUATED IN TERMS OF
{1} REPLICABILITY {ESPECIALLY IN FIELD METHODOLOGY}; AND
{2} PARTICULAR FACTORS WHICH CONTRIBUTED TO THE SUCCESS/ PROBLEMS OF THE PROJECT.

Attachment 2

DOCUMENTS REVIEWED FOR THE EVALUATION REPORT
WOMEN IN AGRICULTURAL DEVELOPMENT PROJECTReports

1. Dr. A. Spring - Farm Home Assistants and Agricultural Training. September 1981 (9 pages)
2. Dr. A. Spring - NSSA Series - KRADD: A Preliminary Analysis of 3 Surveys in Terms of Male and Female Household Heads. October 1981 (10 pages)
3. Dr. A. Spring - Soyabean Production in Unit 2. December 1981 (6 pages)
4. Dr. A. Spring - Stall-feeding in LRDP. January 1982 (8 pages)
5. Dr. A. Spring - Adapting CIMMYT Farming Systems Survey Guidelines to the Malawian Situation. February 1982 (4 pages)
6. Dr. A. Spring - Background Data on Women and Men Farmers in Kawinga and Lake Chilwa, Liwonde Agricultural Development Division. March 1982 (5 pages)
7. Miss F. Kayuni - Agricultural Refresher Course for LADD Female Extension Workers. February 1982 (10 pages)
8. Dr. A. Spring - Women in Agricultural Production in Malawi. Address to Extension Workers. April 30, 1982 (5 pages)
9. Mr. C. Smith - Report on Unit 2 Soyabean Trials. April 30, 1982 (3 pages)
10. Miss F. Kayuni - Female Extension Workers and Agriculture: Training for Women. Address to Extension Workers. April 30, 1982 (3 pages)
11. Mr. C. Smith - Agronomic Report on Unit 2 Soyabean Trials. May 10, 1982 (7 pages)

12. Dr. A. Spring - Report on Soyabean Farmers in the Thiwi-Lifidzi Project Area. June 24, 1982 (4 pages)
13. Dr. A. Spring - Karonga Farmer Survey. June 30, 1982
Miss F. Kayuni (28 pages)
Mr. C. Smith
14. Mr. C. Smith - NSSA Series: Comparisons between Female and Male-Headed Households from the NSSA 1980-81 Garden Survey of LRDP, Malawi. October 1982 (4 pages)
15. Dr. A. Spring - Farmer Survey in Karonga: Considering the Role of Women in Agriculture. October 1982 (6 pages)
16. Mr. C. Smith - NSSA Series: An Analysis of the Yields from the NSSA Yield Survey in Terms of Male and Female-Headed Households. December 1982 (13 pages)
17. Miss K. Utterback - Appropriate Technology: Women's Responses to the Hand Operated Chitedze Maize Sheller. (8 pages)
18. Dr. A. Spring - Women in Agricultural Development Project, USAID/University of Florida. February 1983. (9 pages)

Proceedings

Proceedings of the National Workshop on Women in Agricultural Development, March 9-10, 1982, compiled and edited by Dr. A. Spring (76 pages).

Monthly Reports

December 1981 - present

Miscellaneous Handouts

1. Recommendations for Growing Soyabeans (English and Chitedze Versions) November 1981
2. Syllabus for Teaching Soyabean Agronomy and Recipes to Farmers. Dr. A. Spring and Training Section, LADD. March 1982 (7 pages)

3. Tables Analyzing the Breakdown of Classroom Hours of Agriculture and Home Economics Courses in the Syllabus for Farmer Training at Day Training Centers, Residential Training Centres and Farm Institutes (prepared by Mr. C. R. Smith). November 1982 (7 pages)
4. Tables from "The Work Done by Rural Women in Malawi," by B. Clark (6 pages)
5. Summary of Women and Handicrafts: Myth and Reality by J. Dhamija (adapted by Dr. A. Spring) (5 pages)
6. Tables on Male and Female Labour Allocation in LRDP extracted from J. Kydd "Farm Management Report No. 1, Labour Allocation and Crop Labour Requirements," LRDP 1978
7. Annual Work Plans (prepared by Dr. A. Spring, December 1982)
 - (a) Format
 - (b) Recommendations and strategies for increasing women's participation in credit programs
 - (c) Recommendations and strategies for introducing the Chitedze Maize Sheller to women farmers

Evaluation of Women's Programmes

Reports on the evaluation of Women's Programmes for Ministry of Agriculture, Agricultural Development Divisions (ADD) and Training Institutes - Dr. A. Spring, Mr. C. Smith and Miss F. Kayuni.

1. An Evaluation of Women's Programmes in Salima ADD: How SLADD Sections and Projects Can Incorporate More Women Farmers in their Programmes. January 1983 (15 pages)

List of Persons Contacted

WIADP Staff

Dr. A. Spring, Principal Investigator
Mr. Craig Smith, Research Associate
Miss F. Kayuni, Project Staff

Ministry of Agriculture

Dr. H. Mwandamere, Acting Chief Agricultural Research Officer
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Mrs. C. Chibwana, Women's Programmes Officer
Mrs. M. Chiligo, Food and Nutrition Officer
Mrs. R. Ayoade, Assistant Food and Nutrition Officer

Ngabu ADD

Miss Chimberenga, Women's Programmes Officer

University of Florida Technical Assistance Team

Dr. D. McCloud, Chief of Party
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WOMEN IN AGRICULTURAL DEVELOPMENT PROJECT
USAID/UNIVERSITY OF FLORIDA

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The Women in Agricultural Development Project (WIADP) aims to develop guidelines based on the study of women farmers in relation to agricultural development in selected agro-economic areas in Malawi in order to strengthen project planning and extension service to rural women. Data on women in diverse agricultural contexts are being collected in terms of socio-economic and cultural variables, household decision-making, knowledge and utilization of improved agriculture, indigenous and modern agronomic practices and interaction with extension services. The second aim of WIADP is to prepare a manual of topics and questions which will allow development planners to ascertain whether or not their projects consider women in terms of participating in project programmes and receiving project benefits. To reach this end, the Project is collecting data on project planning and implementation. Finally, WIADP is studying the needs of women farmers and extension staff which might be addressed in USAID projects.

WIADP is concentrating on three of the eight Agricultural Development Divisions (ADDs) of the country chosen by the Ministry of Agriculture. These are Karonga Agricultural Development Division (KRADD) in Northern Region, Lilongwe Agricultural Development Division (LADD) in Central Region, and Blantyre Agricultural Development Division (BLADD) in Southern Region. Other ADDs are being contacted as well. The Project is attempting national coverage and recommendations, although some coverage and recommendations will be area specific.

The following lists the various programmes and activities being undertaken by the Women in Agricultural Development Project. Many are on-going, some have been completed. WIADP is attempting to carry out a variety of extension and research activities to reach its objectives.

BEST AVAILABLE

RESEARCH ACTIVITIES

1. FARMING SYSTEMS SURVEYS
 - (a) Liwonde Agricultural Development Division

WIADP participated in a Farming Systems Research (FSR) Survey in February 1982 in Kawinga Rural Development Project (RDP) of Liwonde ADD which formed the basis for research trials. This survey utilized the rapid reconnaissance, or first phase of FSR. A short report giving background data (Report No. 6) and a brief methodology paper (Report No. 5) were products of this survey. Women in the area are involved in a diversity of farming practices ranging from intercropping of maize and dry land rice to rain-fed rice schemes, and maize and tobacco estates.

(b) Lilongwe and Blantyre Agricultural Development Divisions

We did not carry out FSR surveys in LADD and BLADD because these had already been done in Lilongwe RDP of LADD and Phalombe RDP of BLADD by the Farming Systems Section at Chitedze Agricultural Research Station before the Project started. Although they did not specifically focus on women farmers, enough information was included to be of use to the Project.

(c) Karonga Agricultural Development Division

The team, working with staff from KRADD and local extension personnel, carried out a survey in June 1982. It focused on women farmers in irrigated and rain-fed rice schemes, cotton and maize schemes, and non-scheme maize and cassava growing areas in the Karonga Lakeshore areas. Reports 13 and 16 detail the farming systems of women in the various locations.

3. SURVEY OF DEVELOPMENT INDICATORS IN THE LILONGWE RURAL DEVELOPMENT PROJECT (LRDP) IN LADD

WIADP coordinated with the Farming Systems Section at Chitedze Agricultural Research Station to survey 144 households in LRDP in August-September 1982. There were fifteen survey instruments which included a measured dietary intake collected by interviewers who lived in the villages. The households were a sub-sample of the National Sample Survey of Agriculture (NSSA) households and a sub-sample of households originally surveyed in 1969. The people studied reside on the Lilongwe Plain (high plateau) and primarily monocrop maize, groundnuts, tobacco, beans and sweet potatoes under rainfed conditions. The instruments administered to men and women in a household were:

Household Composition

Natality

Education

Status and Resources

Farm Planning and Agri-

cultural Knowledge

Garden Land Tenure
Migration and Work
Garden Inventory
Garden History
Garden Labour

Distance and Storage of
Maize
Dietary
Anthropometry
Change and Development
Maize

In addition, fields and grain storage bins were measured. The data is in the process of being coded and computerized. The purpose of the Survey is to study:

- (a) Changes in peoples lives as a result of a development Project.
- (b) Sex differences in farming practices between men and women (in the same household) and between male and female household heads.
- (c) The significant indicators of farmer development.

3. STAFF-FEEDERS IN LRDP, LADD:

This project involved coordinating with extension personnel in the Animal Husbandry Section of LADD and interviewing farmers from October-December 1981 who did stall-feeding of steers from crop residues. The study looked at sex differences in recruitment, operations, remuneration, and how the enterprise fitted into the farming system (Report No. 4).

4. SOYABEAN PROGRAMME AND TRIALS IN LADD

In the 1981/82 cropping season, we had farmer-managed demonstrations in which 60 women farmers grew soyabeans. This programme came about through our interest in extension training for women (discussed below see Report No. 3). In one unit of the Lilongwe Rural Development Project (LRDP) in LADD, 64 women were taught soyabean cookery but not soyabean agronomy. WIADF instructed them on how to grow soyabeans and gave them seed, fertilizer and inoculant. We translated the research and extension information from Chitedze and Extension Aids into a concise handout which was subsequently given to all extension staff in LADD (Handout No. 1). A version in Chichewa was given to farmers. A syllabus was prepared for female extension

workers (Handout No. 2). We did follow-up on how the women fared, studied whether or not they followed recommendations, and measured their yields (Reports 9 and 11). Farmers growing soyabeans in the Thiwi-Lifidzi area were interviewed to discover their experiences with the crop (Report No. 12).

As a result of the interviews and demonstrations, a technical problem concerning the method of inoculating the seed was identified. Research recommends a slurry method in which the seed is coated; however, the inoculant loses its viability in the time between being coated at the training centre and when the farmers actually plant the seed. There are problems with keeping the inoculant refrigerated until it is needed as the day training centres do not have refrigeration. On farm farmer-managed trials in the 1982/83 cropping season will compare three methods of soyabean inoculation. The treatments are 1) no inoculum, 2) inoculum mixed with seed, and 3) inoculum mixed with sand and applied in the furrow. Besides the Unit Centres, five women farmers from each of four units have planted this trial.

This soyabean programme is intended to point out that (a) home economic training is not sufficient for women farmers who also need agronomic information; (b) research station recommendations may present difficulties under smallholder conditions; (c) women farmers should be included in on-farm, farmer-managed trials; and (d) research and extension need to relate to smallholder problems.

Additionally, WIADP convinced the management of LADD to embark on a free soyabean seed (with some seed being supplied by WIADP) distribution programme for women farmers. The programme is being administered by the Women's Programmes and Training Officers.

5. MAIZE TRIAL FARMERS IN ZHALONDE, BLADD

WIADP studied the farming systems and labour participation for the farmers who participated in the 1981/82 maize trials set up by the Farming Systems Analysis Section at Chitedze. Additionally a large baseline survey carried out by J. Evans

and data from the Evaluation Section in BLADD will be correlated in the report. The farming systems of most women farmers in this semi-arid, medium altitude terrain is intensive intercropping of maize and sorghum/millet, legumes and pulses (pigeon and cowpeas, green grams, chick peas) on small holdings.

6. NATIONAL SAMPLE SURVEY OF AGRICULTURE

In 1980-81 a nation-wide survey of households was carried out by the Ministry of Agriculture and National Statistical Office. WIADP is attempting to disaggregate the data by sex of the household head (an average of 29% of rural households sampled are headed by women) by going through computer print-outs and preparing tables. This will determine women's involvement in agriculture (crops grown and cultural practices, yields, extension services, resources, livestock, crop storage, etc.). Reports have been prepared commencing in September 1981 and continuing to the present based on the availability of the data (Reports Nos. 2, 14 and 16). Additionally, WIADP has inspired and convinced other ADDs (KRADD, LWADD, NADE, BLADD) to do this same kind of analysis and is making use of their reports.

7. FEMALE EXTENSION WORKERS: AGRICULTURAL AND HOME ECONOMICS TRAINING

The training, attitudes, interests and problems of the female extension workers (called Farm Home Assistants or FHAs) have been studied in August 1981 and January 1982 Reports No. 1, 7 and 10). The curricula of the training institutions (Thuchila Farm Institute and Natural Resource College) were also examined (December 1982 to January 1983).

8. GROUNDNUT PRODUCTION - INTERACTION OF ECONOMIC AND SOCIAL FACTORS

The production, marketing and consumption of groundnuts, one of Malawi's most important domestic and export crops, are being studied. The purpose is to consider 1) the interactions between pricing and producer decisions, 2) the relationship of groundnuts to other components of the producer's farming system, 3) the division of labour with special emphasis on..

women's role in groundnut production and remuneration and, 4) the agronomic methods employed in groundnut production. Two units in LRDP are being studied intensively (January-March 1983). If time permits another area where groundnut production is either marginal or non-existent will be used for comparison.

9. MISCELLANEOUS RESEARCH STUDIES

(a) Labour Studies

WIADP correlates (Handouts Nos. 4 and 5) studies which document the involvement of women in Malawi's small holder agricultural sector. (Women do 50-70% of crop operations). Labour data was collected in the Karonga Farmer Survey, LRDP study of development indicators, and Phalombe Study of maize trial farmers.

(b) Appropriate Technology

A small study on farmer knowledge and interest concerning a hand maize sheller called the Chitedze Maize Sheller was carried out in November-December 1982 (Report No. 17).

(c) Methods of Working with Extension Staff

Methods by which the male field staff can work with female farmers have been studied informally as a background to extension work described below (Report No. 8 and Extension Aids Circular).

(d) Survey of Market Vendors

A brief survey of vendors in Lilongwe urban and rural markets in December 1982-January 1983 was carried out to look at 1) sex differences in commodities sold and 2) producer-sellers versus buyer-sellers.

(e) Interviews with Agricultural College Students

Female students from Bunda College of Agriculture and Colby College of Agriculture were interviewed in November 1982 and February 1983 respectively. The purpose is to find out about their recruitment into

the field of agriculture, experience as students, career plans, and problems women face in the agricultural profession in Malawi.

EXTENSION ACTIVITIES

1. NATIONAL WORKSHOP ON WOMEN IN AGRICULTURAL DEVELOPMENT

In March 1982 a National Workshop on Women in Agricultural Development was held by WIADP to provide background on the topic of women in development and specific information on women farmers in Malawi. Participants were Women's Programmes Officers and others from the Ministry of Agriculture, researchers in the country working on women, and staff and students from Bunda College of Agriculture, Chancellor College, Colby College of Agriculture, and Thuchila Farm Institute. The Workshop received national media coverage. Proceedings from the workshop were published by WIADP.

2. WOMEN'S PROGRAMMES - MINISTRY OF AGRICULTURE

(a) Evaluation of Women's Programmes

In November 1982 WIADP was asked by the Ministry of Agriculture to help develop priorities, work plans and coordination strategies with other ministries for the Women's Programmes Section. WIADP is interviewing personnel from Ministry Headquarters, training institutions and the ADDs plus personnel from other ministries. Recording formats and work plans also are being reviewed (Evaluation of Women's Programmes 1-8 and Mandate No. 7). Thus far, WIADP has interviewed management, heads of every section, and some project officers in 6 of the 8 ADDs and training institutions such as Thuchila Farm Institute, Mgomero Training College and Malawi Young Pioneers. Discussions have been held with them concerning ways in which they can 1) incorporate women farmers in their programmes and 2) change the collection of field data and reporting formats so as to disaggregate the data on farmers by sex.

(b) Women's Programmes Officers and National Machinery Meetings

WIADP coordinates with the Women's Programme Officer

at Ministry of Agriculture Headquarters^{and} participates in the Women's Programmes Section meetings and workshops at Ministry of Agriculture. WIADP assists in Women's Programmes Workshops in the ADDs (e.g., KRADD) and is a member of the National Committee on the Integration of Women in Development. In the latter, we helped to review the draft constitution and to write a plan of action for a National Machinery for Women in Development (August-October 1982). In December 1982, WIADP participated in the Extension Management Seminar for Women's Programmes Officers and helped draft the recommendations.

(c) Curriculum and Refresher courses

WIADP investigates the nature of refresher courses to women extension workers and has aided LADD in the preparation of a curriculum for a refresher course which included more agriculture than home economics training (Reports Nos. 7 and 12, Handout No. 3). WIADP has also made suggestions for the curriculum for female extension workers at the new National Resources College.

3. GRASSROOTS EXTENSION WORKERS

(a) Talks to Extension Staff

The project has given talks on methodologies for involving the large male extension staff in working with female farmers (Report No.8).

(b) Extension Aids Circular

WIADP has prepared a technical circular for all extension staff in the country in conjunction with the Extension Aids Division. The theme is methodologies, strategies and techniques by which the male extension staff can work with female farmers in training courses, extension advice, and credit programmes. Additionally, other materials and media events from Extension Aids will be including more information about women farmers because of WIADP's involvement.

4. EXTENSION MANAGEMENT

WIADP works with extension management at the ADDs to provide data on women farmers, instruct staff and give input on project design. With the concern for disaggregating data by sex of farmer, WIADP was able to have Sexes in the National Credit Manual changed to reflect this concern."

PLANNING ACTIVITIES

1. Long and Short Range Planning, Ministry of Agriculture

The Planning Division, Ministry of Agriculture, has asked WIADP to work with them in terms of long range planning in general and on some Rural Development Projects in particular. The purpose is to set up mechanisms and make suggestions as to how rural women can be specifically included in Project proposals and design. Issues to be addressed are:

- a critical assessment of the present situation
- a description and evaluation of on-going activities
- a forecast for the future if nothing is done
- the organizational set up and how activities and programmes to include women agriculturalists can be carried out.
- assessment of personnel, budgets and timetables
- incorporation of the concern with women in agricultural development into a nationwide programme.

2. USAID Projects

WIADP meets with USAID teams who are planning projects in Malawi to provide input on the needs of rural women in development. Thus far the following teams have been briefed: Country Development Strategy Statement Teams (January 1982), Nelling Report on Extension and Training Team (April-May 1982), and the Pre-Project Identification Document Team (October-November 1982). It is anticipated that WIADP will contribute information to the Project Identification Document and Project Paper teams in the near future. The goals are to 1) build components into AID projects that will focus on women and 2) continue the work WIADP has started.

S T A F F

Dr. Anita Spring, Chief of Party, Social Scientist

Mr. Craig Smith, Agronomist,

Miss Frieda Kayuni, Women's Programmes Officer (Seconded to WIADP by the Ministry of Agriculture)

Ms. Karin Utterback, Socio-economist/Agronomist (affiliated with WIADP).

Mrs. Cecilia Ndacheredwa, Secretary

Appendix 2JOB DESCRIPTION - RESEARCH ECONOMISTQualifications:

Ph.D in agricultural economics with a minimum of five years of research experience in production economics farm management and substantial knowledge of smallholder mechanization. Field experience must include a long-term assignment (one year or more) in a developing country. Ability and willingness to carry on interdisciplinary research and to work effectively with host country personnel.

Duties:

Develop smallholder production economics research program;

Conduct economic analysis of research results, and make substantial contributions with other disciplines to all smallholder research packages regarding production practices (use of inputs, enterprise combination, rotations, etc.) that will increase incomes of small farmers;

Assist in the design of and carry on the economic analysis component of field trials in the unit farms;

Develop research program in smallholder appropriate technology, comparing different alternatives and identifying possible bottlenecks or economic factors that inhibit adoption such as credit, cost, land characteristics, etc.;

Assist research administrators in the selection of criteria for determining smallholder research priorities and in the periodic revisions of those priorities to fit overall Government development policy and work with all team members in selecting smallholder research projects and collecting/analyzing feedback;

Assist in development and implementation of research/extension liaison procedures and systems;

Assist in selection and processing of personnel for training in production economics research and in the selection of training institutions and in the design of training programs and follow up progress;

Prepare trainees and counterparts to take over the responsibilities of production economics and smallholder appropriate technology programs;

Assist with short courses and other in-service training for counterparts and other DAR personnel in production economics research and smallholder appropriate technology research, to include development of syllabi and course materials and course presentation where GOM resources not available;

Assure proper use and maintenance of research equipment;

Identify other areas of necessary research and communicate them to the research administrators.

Approximate Duration: Four years.

Appendix 3PUBLICATIONS OF THE AGRICULTURAL ECONOMICS SECTION REVIEWED BY EVALUATORS:

1. Pervis, D. W. 12/81 (Revised 3/82). "An Analysis of the Introduction of the Eicher Tractor into Malawi."
2. Pervis, D. W. 1/82. "Proposal for Irrigation of Research Land at Chitedze Agricultural Research Station."
3. Pervis, D. W. 3/82. "Comments on Unit Farms at Chitedze, Bvumbwe Kasinthula and Mbawa Research Stations."
4. Agricultural Economics Section. 3/25/82. "Economists and Agricultural Economists in Malawi."
5. Agricultural Economics Section. 11/82 (Revised 12/4/82). "Agricultural Economics Data Bank Standards."
6. Pervis, D. W. "A Preliminary Report on the Economic Analysis of District Maize Trials." Presented at the Workshop on Planning Methodology held at the Capital Hotel, Lilongwe, January 17 to 20, 1983.
7. Nthakomwa, B. R. Undated. "Economic Evaluation of Powertiller vs. Oxen for Rice Production in Malawi."

Related Publications Reviewed by Evaluators:

1. Chikwana, R. 10/82. "Economic Behavior of Smallholder Farmers in the Lilongwe Rural Development Project of Malawi." (An M.S. Thesis Proposal).

Appendix 4:PUBLICATIONS OF THE FARMING SYSTEMS ANALYSIS SECTION REVIEWED BY EVALUATORS:

1. Hansen, A. 9/81. "Farming Systems Research": Theory and Practice in Malawi." Presented in September at Chitedze Research Station and in October at Bvumbwe Research Station.
2. Hansen, A. 3/82. "Five Kawinga Farming Systems." Presented at a meeting at Liwonde ADD.
2. Hansen, A., E.N. Mwango and B.S.C. Phiri. 7/82. "Farming Systems Research in Phalombe Project, Malawi: Another Approach to Smallholder Research and Development." Presented at International Conference on Development in Malawi in the 1980s. Zomba, Malawi. Presented again at the November monthly meeting of Blantyre ADD management to assess implications of this research to Phalombe.
4. Hansen, A., 11/82 "Research-Extension Linkages." Written as part of the USAID team effort in conceptualizing the proposed USAID-funded Agricultural Research and Extension Project. Lilongwe, Malawi.
5. Hansen, A. 11/82. "Generation and Use and Data about Smallholders." Written as part of the USAID team effort in conceptualizing the proposed USAID-funded Agricultural Research and Extension Project. Lilongwe, Malawi.
6. Hansen, A. 1/83 "Farming Systems Research and Adaptive Research Programs: How May They Help Programme Managers Plan and Implement ADD Development?" Presented at the First Workshop on Planning Methodology and ADD Participation in Long Range Planning Exercise. Lilongwe, Malawi.
7. Hansen, A. 1/83 "Introduction and Demonstration of Micro-Computer Capability for Agricultural Research at Chitedze-Computer Programs to Handle Farmer Survey Material: 1. A Data Management Program, 2. A Word Processing Program." Presented at First Workshop on Planning Methodology and ADD Participation in Long Range Planning Exercise. Lilongwe, Malawi.

Related Publications Reviewed by Evaluators

1. Kydd J. and R. Christiansen, undated. "Structural Change in Malawi Since Independence: Consequences of a Development Strategy Based on Large Scale Agriculture."

Other Publications not Reviewed by Evaluators:

1. Hansen, A. 3/81 "The LRDP/North East Team Notes for Discussions." Presented around the Ministry of Agriculture and Chitedze to generate initial feedback to the first preliminary farmer surveying.
2. Hansen, A. 4/81 "General Features of LRDP Farming Systems" Presented in a meeting in Lilongwe ADD to assess priorities for project activities and adaptive research.

3. Hansen, A. 8/81. "Report on the Farming Systems Survey Conducted in Phalombe Rural Development Project of Blantyre Agricultural Development Division (BLADD)." Presented at a meeting at Blantyre ADD to assess priorities for project activities and adaptive research.
4. Hansen, A. 10/81 "Intercropping and Farming Systems in Malawi." Presented at the 20th October Intercropping Research Conference at Chitedze Research Station. Drs. Hansen, Edje (Bunda College) and McLean co-sponsored this conference.
5. Bell, K.L. and E.N. Mwangi 1/82. "Agricultural Change in Lilongwe Programme Households." Presented at the 23 January Conference on Socio-Economic Research in Rural Lilongwe which was held at Chitedze Research Station.
6. Hansen, A. 1/82 "Farming Systems Research in Malawi and Specifically in the Lilongwe Project Area (LRDP)." Presented at the 23 January Conference on Socio-Economic Research in Rural Lilongwe which was held at Chitedze Research Station.
7. Hansen, A. 3/83. "Farming Systems Research and Women in Malawi." In Proceedings and Materials from the National Workshop on Women in Agricultural Development March 9 - 10, 1982. The workshop was sponsored by the USAID-funded Women in Agricultural Development (WIAD) Project and was held at Chitedze Research Station.