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ENHANCED OUTREACH PROGRAMS IN THE FACULTY OF AGRICULTURE  
AT  
THE UNIVERSITY OF SWAZILAND

COMMERCIAL AGRICULTURAL PRODUCTION AND MARKETING PROJECT

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and

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and the University of Swaziland  
Faculty of Agriculture  
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SECTION I  
INTRODUCTION

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**A. Objectives**

This paper is designed to describe how the University of Swaziland (UNISWA) Faculty of Agriculture at the Luyengo campus, in conjunction with the United States Agency for International Development (USAID/Swaziland), can develop an expanded outreach program to the agricultural industry in Swaziland. This paper will use the recently restructured curriculum at UNISWA, with its increased emphasis on experiential learning in the community, as the basis for an expanded outreach program to the agricultural community. This paper also details how a University Linkage Program (ULP) between an experienced U.S. university and UNISWA can be used to provide technical assistance to the Faculty of Agriculture in its efforts to expand outreach. In particular, emphasis will be given to building on the existing plans for a Student Attachment Program (SAP) as the first phase of an Expanded Outreach Program (EOP). In the second phase of an EOP, additional procedures and programs would be developed to facilitate further training by the Faculty of Agriculture for Swaziland's agricultural community.

The conclusions and recommendations presented in this paper were developed after reviewing existing documents and discussions with administrators and faculty at UNISWA and others (See Annex A and B).

**B. Background**

Swaziland is a country with the natural and human resources required for significant agricultural development. However, its potential has not been fully maximized. The University of Swaziland, through its Faculty of Agriculture is eager to begin a renewed effort to contribute to a appropriately educated work force through its graduates and the development of an outreach program.

A number of studies have pointed out that for the University to effectively impact Swaziland's agriculture, it must not only educate individuals who are grounded in the scientific principles of agriculture but who are also proficient in translating theory into practical income generating activities. These two concepts are not mutually exclusive. It can be argued that individuals don't fully understand theory if they are unable to put it into practice, and likewise, practice can take strange turns if there is not an adequate understanding of theory.

The University has taken an important step by changing their curriculum to accommodate more agribusiness theory courses and by providing more time for experiential learning of agricultural and agribusiness concepts. These changes are well documented in publications available at the University (See Annex 1). One of the key studies entitled, "Agricultural Employment Demand and Proposed UNISWA Response" was conducted by McCorkle in 1987. The results of

that study indicated the necessity for restructuring the curriculum in the manner that has been done to increase students' business skills and to provide improved capability for employment in private agriculture and agribusiness.

The study also provided insight into the size and needs of Swaziland's agricultural and agribusiness workforce. The study included interviews with 32 agribusiness firms in the country and noted there were an additional 800 farms in the modern sub sector with an average farm size of 800 hectares. For a developing country this is a formidable concentration of agricultural experience. The university in it's restructured curriculum, plans to take advantage of these resources by providing an intensive attachment program for it's students through selected organizations during various stages of the students' educational careers.

For some time, UNISWA has been interested in involving it's staff in the activities of an outreach program. The restructured curriculum provides an excellent opportunity to increase faculty participation by supervising students in the attachment program. Student supervision for the attachment program will facilitate closer and more frequent contact with agriculture and agribusiness in Swaziland. It will also provide an excellent opportunity for the faculty to share their knowledge with agricultural and agribusiness operators and to "pick up" ideas to bring back to their classrooms at UNISWA.

Through USAID, the university has requested that a U.S. university provide assistance to establish an improved outreach program at the university. A quality attachment program is key to the successful implementation of an outreach program. Thus, a linking university that could concurrently assist in improving the university's outreach program and developing the attachment program would necessarily be an important factor in the successful implementation of this program.

### C. Purpose

The purpose of this paper is to detail ideas that may be used to enhance the ability of the Faculty of Agriculture at the University of Swaziland to use the restructured business-oriented curriculum as a basis for an expanded outreach program. The specific tasks to be completed are:

- To provide suggestions to UNISWA on how to develop an "outreach" program to complement their new curriculum direction which prepares students to enter private employment in agriculture and agribusiness
- To assist the University in identifying and selecting linkages with U.S. universities that can assist UNISWA in implementing a linkage program
- To assure the appropriateness of the commodities procurement list developed to facilitate the implementation of the new curriculum
- To suggest a monitoring program for the work conducted with the University of Swaziland.

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## SECTION II OUTREACH PROGRAM

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### A. Program Concept

The University is interested in expanding its outreach efforts to a wider segment of the agricultural society in Swaziland. The term "outreach program" refers to a system that UNISWA would like to develop that would provide the opportunity for members of the Faculty of Agriculture to share their expertise with Swaziland's agricultural community. The current outreach program is conducted by the Home Economics Department through a grant from the Kellogg Foundation and demonstrates the capabilities of the staff to undertake outreach activities and portrays the value of such a program to the university and the citizens of Swaziland.

The focus of the proposed outreach program has been prompted by the restructuring of the curriculum to include more emphasis on preparing students for employment in private agriculture or agribusiness. The restructured curriculum relies on the agricultural community to provide opportunities for much of the experiential education that is planned. The outreach program is expected to develop in phases. The first phase envisaged by UNISWA is expected to develop concurrently with the implementation of an internship or attachment program for its students.

The proposed student internships are expected to be supervised by lecturers in the Faculty of Agriculture. It is anticipated that 10 lecturers and an internship coordinator will be engaged in the supervision of students on attachment per year. Each year, new lecturers will be rotated through this activity until a total of 30 lecturers will have been involved by the beginning of the fourth year of the program. Part of the activity of student attachment supervision will be interaction with agricultural and agribusiness employers. During supervisory visits, it is anticipated that lecturers will be called on to provide advice to cooperating employers related to their specialty area. This activity is expected to lead to further interaction between the university and the agriculture industry in Swaziland. The second phase of the expanded outreach project will be to build on the contacts made during student supervision to develop further consultancies with agriculture employers or short-term training for the agriculture community at the Faculty of Agriculture.

The Faculty of Agriculture have heavy teaching loads of 16-20 contact hours per week. Thus, it seems appropriate to launch the first phase of the outreach program through the mechanism of the planned attachment process. Plans include eight-ten week student internships or attachments after the 1st, 2nd and 4th years of their educational program with the Faculty of Agriculture.

The students will enter the attachment program during the university break in 1992, after their first year of attendance at UNISWA. The first attachment schedule will concentrate on basic agricultural skills and will be conducted entirely at the university farm at Luyengo. All students will have common basic skills experiences for the first year. Enrollments expected for 1992 are 90 students with approximately 30 being females and 60 males.

The second attachment period will occur after the 2nd year during the 1993 university break. Approximately 85 students are projected to be involved in this attachment program. Approximately 28 will be female and 57 will be male. This attachment will focus on placing students in part time experiential learning situations in commercial agriculture and agribusiness institutions.

A final attachment period is expected to occur after the 4th year of the student's academic program in 1995. It is expected to involve a smaller group of students, with approximately 30 students from the Departments of Agricultural Economics and Management, Animal Production and Health, and Crop Production. There will be approximately 25 male and 5 female student participants. This attachment program is expected to concentrate on developing the leadership and mid-management skills needed by the agricultural industry as indicated in the McCorkle study.

Thus, if these projections occur, by 1995, the university will be in a position to place 120 students each year for attachment experiences (90 second year completers and 30 fourth year completers). An additional 30 students from Home Economics and Agricultural Education will be attached to schools.

The study conducted by McCorkle in 1987, which provides the basis for curriculum change in the Faculty of Agriculture, detailed both the concern of agribusiness for the lack of desirable skills in UNISWA graduates and their willingness to provide attachment opportunities to help rectify the situation. In his study of the agribusiness sector, McCorkle found "that 56.25% of the respondents were interested in offering vacation employment to University students". There were 32 firms/organizations involved in the survey. In addition to large agribusiness firms, the university expects to use modern sector farms and "well organized" smaller farmers as part of the attachment program.

#### **B. Linkage Program**

As part of the proposed activities that are expected to result from this consultancy, a linkage program will be developed between UNISWA and a U.S. university. The purpose of this linkage is to provide technical assistance to the Faculty of Agriculture to develop an attachment program and an expanded outreach program. One of the first activities of that linkage program will be a joint research project with the linking university to conduct a comprehensive survey of the anticipated agribusiness and farming opportunities available to UNISWA for the attachment program.

Linking university staff and UNISWA staff could jointly offer workshops on techniques for operating both attachment and outreach programs.

The university also envisages using staff from the U.S. university to help prepare the designated lecturers in the Faculty of Agriculture to supervise the students placed on attachment. Specific skills are needed to develop training agreements, training plans, student evaluations and to supervise the experience so that students gain maximum benefit from their attachment assignments. It is expected that approximately 30 lecturers will become involved in the supervision of the attachment program and that they will need additional assistance in developing their supervisory skills over the three-year period.

The university expects that through the supervision of students in the attachment program in agriculture and agribusiness, Faculty of Agriculture lecturers will be more actively involved with the agricultural community. These contacts should provide valuable interchanges between the lecturers and the Swazi agricultural industry and will lead to further contacts and an expanded outreach program as a natural result of the interaction.

Additional effort is required to strengthen relationships with government ministries. A committee should be established between the Research Division and UNISWA and between the Extension Division and UNISWA to examine ways for the two agencies to interact with the Faculty of Agriculture at UNISWA.

### **C. Outreach Program Phase I Goals**

Several goals are expected to be met as a result of an improved outreach program by the Faculty of Agriculture at the University of Swaziland.

#### **● Goal 1**

The University wants to provide a mechanism for it's students to expand and improve their agricultural and business skills and knowledge.

#### **● Goal 2**

The University wants to use the program to upgrade and update lecturers on real issues and ideas that need attention in Swazi agriculture and to develop a sustainable outreach program to deal with the issues.

#### **● Goal 3**

The University want to use the program to promote better relations with the Swazi agricultural community including the Ministry of Agriculture and the Ministry of Education.

The implementation of an internship or attachment program is a decision on the part of the University that will encourage varied learning opportunities and skills as well as the knowledge required to work in Swaziland's agricultural industry. Educational doctrine has long acknowledged that the closer one gets to the intended application situation when learning, the faster and more complete the learning becomes.

### 1. Guidelines

The Faculty of Agriculture at UNISWA has established guidelines for implementation of attachment program as published in Occupational Internship Handbook (see Annex B). Included in the guidelines are provision for written attachment agreements. There is the expectation that Faculty of Agriculture members will visit students at their attachment sites to augment and guide the instruction taking place. Provision should be made for the development of 1) training plans to specify interaction of on-the-job with learning at the university, 2) staff training in supervision techniques specific to attachment programs, and 3) the assignment of a coordinator with a charge to work across departments to coordinate the attachment program and the overarching outreach program.

### 2. Phases and Contingencies

There are several phases and contingencies that should be considered when implementing an outreach program as presently envisaged. Students can be better prepared to operate in private enterprise if their training at University can closely mirror day to day working life in a private enterprise. The competencies students are expected to learn must be clearly defined. The competencies for both the technical aspects and the business acumen of agriculture need to be identified and the capability of students in each area should be assessed. Another anticipated linking university activity is to assist departments in the Faculty of Agriculture in identifying specific required competencies to be taught by each department.

### 3. Program Decisions

One of the first program decisions that must be made on behalf of students interested in working in the private sector is how to provide the best training needed to operate in private enterprise and how to best gain experience in the "ways" of private enterprise operations. Students need experiences in taking economic risks. Therefore, the students preparation program should include the opportunity to engage in private enterprise as preparation for the attachment program. Part of this preparation can be implemented through participation in courses designed to provide agricultural and agribusiness skills and knowledge. Another part of the educational improvement package could be the development of an experiential-based education program modeled after activities common to agriculture and agribusiness in Swaziland and locating the program on the University farm.

Experience has shown that not all students are ready for an attachment experience at the same time in their educational careers. Some need assistance in working through a simulated experience before they are ready for placement in an actual attachment situation.

#### 4. Student Enterprises

An alternative to the attachment process should be developed for those who cannot take advantage of it, either because of the lack of available space or the lack of readiness on the part of the student. A small section of the University farm could be allocated to the development of modern Swazi agricultural enterprises by students who would benefit from this type of experience. Student agricultural enterprises would be of particular value for students who have completed their second year of studies.

The enterprise zone of the university farm should be rented to students at current commercial rates. A fund should be established for students to borrow money at commercial rates to purchase enterprises and buy supplies. Students should develop plans for appropriate agricultural enterprises that are approved by their lecturers. Projects should be large enough in nature to challenge the student. They should operate, manage and market their products from their enterprises. After students pay the principal, interest, rental charges and other expenses, they should be allowed to keep the profits. The student enterprise activity should be voluntary. Students should be closely supervised by their lecturers.

The suggested outreach program is built on the concept of complementing the current activities of an already busy group of university lecturers. It is necessary for the proposed outreach program to fit as naturally as possible into the work of the university while it expands opportunities for both staff and students.

#### D. Outreach Program Phase II

As the Outreach program moves into Phase II, consideration should be made to formalizing the program. In Phase II, it is expected that educational meetings will be organized in which lecturers from the Faculty of Agriculture will share their expertise with interested individuals from the agricultural community. A Coordinator of Outreach Programs will need to be identified. The coordinator should be responsible for liaising with the Swazi community and the university to ensure accessibility by community members and to assist lecturers with access to the Swazi community. The coordinator needs to provide leadership in reviewing rules and regulations relative to the university outreach programming needed to integrate the promotion of outreach with the academic functions of the university. The coordinator should be responsible for a vigorous publicity program including both the attachment and outreach programs of the Faculty of Agriculture.

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### SECTION III LINKAGE PROGRAM

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#### A. Linkages with a Sister University

The University of Swaziland has established linkages, both formal and informal, with other universities around the world. The proposed linkage is an intensification of the general linkage concept previously described but with a focus toward expanding cooperation between the restructured, business-oriented curriculum and the expanded outreach program. Universities around the world are in the process of reorienting their curricula toward agribusiness in colleges and schools of agriculture.

The University of Swaziland is seeking to link with an institution that will work cooperatively with them to improve the educational opportunities of agricultural students. Most importantly, UNISWA is seeking an institution with expertise in the areas of agribusiness curriculum development and educational outreach program development. To expand the concept of university linkage programs, the CAPM project is prepared to link a U.S. university college of agriculture with UNISWA Faculty of Agriculture to achieve a restructured business-oriented curriculum with a primary focus on developing an educational outreach program.

#### B. Linkage Program Goal and Objectives

The university linkage program has both a goal and a broad objective. The linkage goal is the enhancement of scholarly exchanges in agricultural instruction, extension and research between the two institutions for the present and for an extended period into the future.

The broad objective of the linkage program is to identify an institution that can work with UNISWA in a cooperative venture to improve the Faculty of Agriculture. There are no plans for long-term personnel from the U.S. linking university to be located in Swaziland. Rather, someone from the Faculty of Agriculture will become the Swaziland Coordinator and in conjunction with the Dean of the Faculty of Agriculture, will be responsible for coordinating project activities based in Swaziland. Regular visits from the linking university to liaise with colleagues at UNISWA are expected in order to carry out the required assistance.

It is expected that the two linking institutions will have flexibility to jointly refine the specific objectives to meet the dynamic needs of the universities. A suggested specific objective for the project would be to establish a collegial relationship between a U.S. University and the University of Swaziland to:

- Assist with the implementation of restructured curriculum focusing on additional business and experiential education opportunities in the Faculty of Agriculture
- Develop a short-term and long-term training program in Swaziland and in the U.S. to meet the needs of the Faculty of Agriculture
- Facilitate the availability of faculty at the linking university, as well as faculty from other universities, to meet the long- and short-term training needs of the Faculty of Agriculture in Swaziland and in the U.S.
- Assist with the development of the UNISWA Faculty of Agriculture Outreach Program with particular attention given to the establishment of the proposed agribusiness-oriented attachment program
- Develop joint research projects between faculty at the linking university and the Faculty of Agriculture
- Work with UNISWA to identify additional funding sources to expand learning opportunities and enhance teaching skills in the Faculty of Agriculture

### C. Selection Criteria

The institution selected for the university linkage project with an outreach focus should qualify in terms of the following criteria:

#### 1. Commitment

The institution and its project personnel have demonstrated a commitment and have had past success in assisting in the improvement of University level agricultural programs in international settings. Evidence of long term commitments to linkage program thrusts by the institutions are particularly important.

#### 2. Willingness

The willingness of the institution to serve as a facilitating linkage university is a critical factor. The selected linkage university is not expected to provide all the scholarly opportunities required as there are a variety of units and individuals at many U.S. universities with which members of the Faculty of Agriculture will wish to interact. The successful linkage university will demonstrate an understanding and the ability to facilitate access of UNISWA to universities and their personnel which possess identified areas of expertise.

#### 3. Demonstrated Competency

The institution must have a demonstrated competency and track record of developing programs which focus on learning about the business of agriculture.

#### 4. Experienced Project Coordinator

The U.S. linking university will be expected to identify a Project Coordinator who has demonstrated capabilities in international programs, experience in developing and operating outreach programs, experience in developing agribusiness programs and who is well grounded in experiential education. The project coordinator and other technical assistants are expected to routinely be in Swaziland working with the university at regular intervals. A list of possible universities to contact about the feasibility of a linking relationship include:

- Pennsylvania State University
- Ohio State University
- California Polytechnic University at San Luis Obispo
- Michigan State University
- Iowa State University

It is expected that project coordination between UNISWA, the U.S. linking university and USAID will be accomplished by hiring one of the UNISWA lecturers or administrators to act as coordinator of the attachment process and the emerging outreach program. This local project coordinator could also coordinate the commodity purchasing program. A time table of events and the individual/agency responsible can be found in Annex C.

#### 5. Similar Program and Personnel Identification

The institution must be able to identify program and personnel available which are comparable to the programs offered by the Faculty of Agriculture at UNISWA. Individuals from the proposed university would be identified to engage in collaborative research, professional exchange programs, long or short term technical assistance and other types of exchanges with UNISWA faculty members in:

- Agricultural Economics and Management
- Agricultural and Extension Education
- Crops and Soils
- Land Use Planning and Agricultural Engineering
- Animal Production and Health
- Home Economics

#### 6. Funding Plan

The institution must present a plan for utilizing the linkage funds available in the current project to maximize the programming and staffing of the Faculty of Agriculture at UNISWA.

#### 7. Continuing Linkage Plans

The linkage developed between the two institutions is envisaged to continue to flourish after the current project is completed. In order for future activities to continue, new sources of funding should be continually explored. The successful linking university should be able to provide a tentative plan for continuing the linkage with UNISWA for at least 10 years by detailing how future funding could be secured.

D. Linkage Program Activities

Specific activities expected from the linking university include providing short-term consultants to assist the Faculty of Agriculture in the following areas:

- Collaborate with the Faculty of Agriculture in conducting a comprehensive survey of placement opportunities in commercial agriculture and agribusiness in Swaziland (1992)
- Provide a workshop on the process of coordinating internship programs for member of the Faculty of Agriculture (1992)
- Provide workshops and advice to the Faculty of Agriculture on the process and skills required to implement Phase II of the outreach program (1993)
- Provide assistance to the Faculty Departments to develop appropriate competencies to be taught by each department to meet the new objectives of the restructured curriculum

E. Short-Term Training

The linking university is expected to provide short-term training opportunities for the UNISWA staff. These training activities include visits from UNISWA staff to the U.S. to observe:

- Techniques and policies used by U.S. university(s) to implement internship programs (1992)
- Methods and procedures used in U.S. university school farms (1992)
- University outreach programs and to discuss operational and incentive programs (1993)
- The implementation of agribusiness concepts in the curriculum

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SECTION IV  
FACILITIES AND EQUIPMENT

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The University of Swaziland Administration has spent a significant amount of time assessing the type of restructured programs that are needed to meet modern agricultural work force demands in Swaziland, as suggested in the McCorkle study. The Faculty of Agriculture has restructured its curriculum to meet those needs. It is important for the success of the restructured curriculum and its impact on the attachment and expanded outreach program, that a number of additions and/or renovations of facilities and equipment at the campus and on the associated farm be carried out.

In August 1990, the Faculty of Agriculture at UNISWA/Luyengo published a document entitled, Restructuring the Academic Programmes and Training Facilities. In the document, the Faculty systematically listed facilities and equipment necessary for implementation of the restructured curriculum in the Faculty. In general, that procurement list developed in 1990, is still valid in 1991. However, the procurement list is considerably larger than anticipated funds allocated to the UNISWA Faculty of Agriculture Restructuring Project. One of the key activities of the linkage program is to locate other potential sources of funding so that a larger segment of the proposed procurement program can be accomplished.

As a part of the requirements of this consultancy, the consultant reviewed the proposed procurement list with the Executive Committee of the Faculty of Agriculture and visited the present facilities at the Faculty of Agriculture. The utilization of the facilities of the Faculty of Agriculture will change under the restructured curriculum. More intense use of the school farm for educational purposes is anticipated. More students will spend more time on the school farm engaging in the process of farming. Improved and expanded facilities are needed in certain areas to exploit the educational purpose of the farm. The exercise led to the development of the proposed commodity line items in Annex D.

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SECTION V  
MONITORING INDICATORS AND EXPECTED OUTPUTS

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A. Monitoring Indicators

The key events associated with the project and the numbers of individuals involved are summarized in Table 1. A timetable of events and which agency is responsible for each segment is found in Annex C.

B. Expected Outputs

The outputs expected as a result of the project should include the following:

- An improved educational facility at the UNISWA Faculty of agriculture
- Approximately 180 students will have completed the attachment experience
- A total of 30 lecturers will have had training in
  - (1) supervisory techniques critical to attachment programs
  - (2) techniques of operating agricultural outreach programs
- The 30 lecturers will have contacted a minimum of 80 agricultural sites suitable for supervisory and outreach activities
- Five Faculty of Agriculture sponsored outreach programs will have been carried out in addition to the outreach as a result of the attachment program
- Six workshops and/or consultancies will have been completed through cooperative programming with UNISWA
- Four short-term visits will have been made to the U.S. to observe
  - (1) outreach programming in agriculture
  - (2) attachment procedures in colleges of agriculture
  - (3) development of competency based curriculum
- A formal outreach program will have been established in the Faculty of Agriculture at UNISWA
- One collaborative research project will have been undertaken between UNISWA and the U.S. linking university
- A mechanism will be in place to maintain a long-term linking relationship between the U.S. linking university and UNISWA
- The curriculum of the Faculty of Agriculture will be further developed to include the concept of competency based education

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SECTION VI  
CONSULTANCY CONSTRAINTS

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A. Teaching Load

Throughout the development of the consultancy report, there was excellent cooperation by everyone involved with developing the concept. Where conflicts in techniques and procedures were identified, an effort was made to develop mutually acceptable alternatives. There were a few constraints that had to be taken into account in developing the paper which did have a major impact on the direction the paper.

The fact that the teaching load of the lecturers in the Faculty of Agriculture is heavy, means that there is only a small amount of time that can be used to conduct outreach programming, and as a result has limited the type of outreach program that can be recommended. The most logical time to involve staff in an outreach thrust is during the school break periods. However, even this time will be occupied in the restructured curriculum with the addition of the attachment program. In addition, staff use break time for personal vacations. Thus, the direction and scope of the outreach program is limited to what is practical.

B. Funding Limitations

Funds available to develop the linkage program are limited. This constraint produced problems in constructing a logical set of project activities to distinguish between the activities taking place in Swaziland and the activities associated with the linking university.

C. Site Management

A third circumstance that influenced the direction of the paper was UNISWA's desire to manage the on-site activities of the project. The Faculty of Agriculture has made plans for changes they believe are important for the future. They want the opportunity to manage the Swaziland component of the project toward achieving those objectives. This desire is consistent with the maturity of the members of the Faculty and the development stage of the Faculty.

D. Addendum

As a result of a meeting on August 27, 1991 with the Pro Vice Chancellor and Dean of the Faculty of Agriculture of UNISWA to discuss this paper, a number of suggestions were made that have been incorporated into the paper. One particular sentence was suggested to be highlighted and added to the paper. The statement was that a memorandum must be developed between the two linking universities that outlines the mutual activities and costs to be incurred before the linkage is established.

Table 1

## MONITORING INDICATORS FOR LINKAGE PROGRAM

OUTPUT INDICATOR	MEASUREMENT UNITS	DATA SOURCE	REPORTING SCHEDULE
Restructured curriculum leading to increased private employment by UNISWA/Luyengo graduates	Number of graduates entering private employment in agriculture each year. Fifteen of 30 students are expected to enter private employment by 1995.	Follow-up survey of graduates	Once per year. Survey to be conducted 8 months after graduation.
Provide short-term and long-term training opportunities for UNISWA faculty	Number and quality of training programs offered. Six training programs for 30 staff are planned	End-of-Training reports completed by training participants and their instructors	Every six months and annually
Facilitate the availability of faculty at the linking university and other appropriate universities to provide for the short-term training needs of UNISWA	Number of faculty members made available. Number that were requested that were not available. Four staff members will participate.	Project Coordinator's records	Every six months and annually
Assist UNISWA with the development of their outreach program	Number of training programs offered. Over the life of the project, 130 students, 30 staff and approx. 200 farmers and agribusiness persons will be served.  Follow-up reports on the effectiveness of the attachment program	Project Coordinator's records	Every six months and annually
Develop and carry out an efficient and effective procurement program	Summary of procurement requests and procurement accomplished.  Maintenance of a continually updated procurement needs list	Procurement records	Every six months and annually
Develop joint research links between faculty at U.S. universities and UNISWA	Number of joint research efforts undertaken. At least six joint efforts are planned	Project Coordinator's records	Every six months and annually
Work with UNISWA to identify additional sources of funds for their programs	Amount of additional funds/funding sources identified	Faculty Dean	Every six months and annually

ANNEX A

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**DOCUMENTS IMPORTANT TO THE PROJECT**

## Documents Important to the Project

- "Curriculum and course Description for the Diploma/Degree Programme in Agriculture", Faculty of Agriculture, University of Swaziland, March, 1990
- "Curriculum and Course Description for the Diploma/Degree in Agricultural Education", Faculty of Agriculture, University of Swaziland, March, 1990.
- Curriculum and Course Descriptions for the Remedial Year for Diploma Holders", Faculty of Agriculture, University of Swaziland, March, 1990
- "Curriculum and Course Description for the Diploma in Home Economics", Faculty of Agriculture University of Swaziland, March, 1990.
- "Curriculum and Course Descriptions for the Diploma/Degree In Home Economics; Part III", Faculty of Agriculture, University of Swaziland, January, 1991.
- "Special Regulations for the Proposed BSc. Degree Programme in Home Economics; Part II", Faculty of Agriculture, University of Swaziland, January, 1991.
- "Project Proposal for the Establishment of a Regional Diploma/Degree Programme in Home Economics for the SADCC Countries", Faculty of Agriculture, University of Swaziland, January, 1991.
- Allen, Irma A., "Farming and Agribusiness Training Needs Consultancy Report", Commercial Agricultural Production and Marketing Project, Mbabane, Swaziland, July 1990.
- Boyd-Clark, M., Wood, M., Sensenig, B., and Olson, R.E., "Concept Paper and Analysis Redirection and Extension", Mbabane, Swaziland, June 1991.
- "Life-of-Project Workplan", Swaziland commercial Agricultural Production and Marketing, Mbabane, Swaziland, February 28, 1990.
- Allen, Irma A., "Farming and Agribusiness Training Needs Assess Seminar Report", Swaziland Commercial Agricultural Production and Marketing (CAPM) Project, Mbabane, Swaziland, July 1990.
- "Proposed Components of Project Redirection and Extension", Commercial Agricultural Production and Marketing Project, Mbabane, Swaziland, March, 1991
- "Future Department Plans", Crop Production, Faculty of Agriculture, University of Swaziland

- "Departmental Minutes", Home Economics Department, Faculty of Agriculture, University of Swaziland, April, 1991.
- "Future Developments of the A.P.H. Department", Animal Production and Health Department, Faculty of Agriculture, University of Swaziland.
- "Future Directions", Agricultural and Extension Education Department, Faculty of Agriculture, University of Swaziland, May 1991.
- "Future Activities", Department of Agricultural Economics and Management, Faculty of Agriculture, University of Swaziland.
- "Action Plan for Period 1991-92", Department of Land Use and Mechanization, Faculty of Agriculture, University of Swaziland.
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ANNEX B

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INDIVIDUALS AND MEETINGS

## Individuals and Meetings

Prof. L.P. Makhubu	Vice Chancellor, UNISWA
Prof. Glen Magagula	Pro Vice Chancellor, UNISWA
Dr. Barnabas Dlamini	Dean, Faculty of Agriculture, UNISWA
Dr. M. K. Habedi	Faculty Tutor, Faculty of Agriculture, UNISWA
Mr. David T. Mavimbela	Head, Animal Production and Health, Department, UNISWA
Ms. Sabina Silaula	Head, Home Economics Department, UNISWA
Mr. A.M. Manyatsi	Head, Land Use and Mechanization, UNISWA
Dr. G.N. Shongwe	Head of the Crops Production Department, UNISWA
Mr. Moses L. Vilakati	Farm Director, UNISWA
Mr. William Mukabwe	Lecturer, Land Use and Mechanization, UNISWA
Ms. Busile Tfwala	Lecturer, Agricultural Economics and Management Department, UNISWA
Mr. Kim Kennedy	Chief of Party, CAPM project
Dr. Conrad Fritsch	CAPM project
Mr. Roger Carlson	Director, USAID, Swaziland
Ms. Mary Huntington	Deputy Director, USAID, Swaziland
Dr. Dennis Sharma	Agricultural Development Officer, USAID, Swaziland
Mr. Victor Vilikati	Technician, Land Use and Mechanization, UNISWA
Dr. R.C. Kuhn	Lecturer, Crop Production Department, UNISWA
Mr. Giles Rogues	Lecturer, Agricultural and Extension Education, UNISWA
Ms. J. K. Rwelamira	Lecturer, Agricultural Economics and Management Department, UNISWA

Dr. P. M. Dlamini

Head, Agricultural Economics and  
Management Department, UNISWA

Mr. Patrick Fine

USAID, Swaziland

Dr. Richard Betts

Chief of Party, STRIDE Project

ANNEX C

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**TIMETABLE OF EVENTS AND AGENCY RESPONSIBLE**



U = CNISWA-initiated Activity  
 A = University/USAID-initiated Activity  
 J = Linking University/UNISWA-initiated Activity  
 C = Local Project Coordinator-initiated Activity

ACTIVITY	MONTH (1992)												MONTH (1993)												MONTH (1994)										
	J	P	M	A	M	J	J	A	S	O	N	D	J	P	M	A	M	J	J	A	S	O	N	D	J	P	M	A	M	J					
Facilitate and Monitor Outreach Program												C	C	C	C	C					J	J	J	J	J	J	J	J	J	J					
Annual Report on Outreach Program												C												C											
Annual Report on Attachment Program												C																							
Follow-up on Former Students																														U	U	U	U		
Swazi Visits to U.S.																																			
Semi-Annual Report												AC												AC						AC					
Annual Report												AC												AC											
Final Report																																			AC

ANNEX D

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**PROPOSED COMMODITY LINE ITEMS  
AND PROJECT BUDGET**

25

Proposed Commodity Line Items

Commodity	USAID Funds	GOS Funds
1. Computer Hardware and Software	\$36,000	
2. Workshop Equipment (Welders, Tools etc)	25,000	
3. Animal lab equipment (Holding equip, layer cages waterers etc)	18,000	
4. Crop production (Improve fields, field equipment, cold storage, post harvest facility etc)	45,000	
5. Student marketing facility	4,000	
6. Home Economics equipment	13,000	
8. Audio Visual Equipment	8,000	
9. Education Center	4,000	
10. Practical lab equipment	14,000	
11. Renovation to silos, waterways, cribs etc.	14,000	
12. Land survey	7,000	
13. Farm Equipment	13,000	
14. Cattle handling unit		E30,000
15. Farm Mechanics workshop		200,000
16. Layer House		100,000
17. Ruminant barn		20,000
18. Construct feedlot		30,000
19. Install water systems		20,000
20. Greenhouse		<u>100,000</u>
Totals	<u>\$200,000</u>	E500,000

Project Budget

	USAID	GOS
Facilities and Equipment	\$200,000	E500,000
Linkage Program		
5 visits by Linking Faculty	\$50,000	
3 person-months short-term TA		
@ \$20,000/person-month	\$60,000	
Direct costs i.e.		
communications etc.	\$3,000	
Indirect costs	\$15,000	
Workshops	\$22,000	
5 visits by Swazi @ \$10,000/each	\$50,000	
Sub-Total	\$200,000	
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Total	\$400,000	E500,000

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