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PURDUE UNIVERSITY
International Education and Research
International Programs in Agriculture



**PORTUGAL UNIVERSITY
INSTITUTES
DEVELOPMENT PROJECT**

**FIRST SEMI-ANNUAL REPORT
August 25, 1980 to February 25, 1981**

PORTUGAL UNIVERSITY INSTITUTES DEVELOPMENT PROJECT

(AID CONTRACT - AID/NE-C-1701)

FIRST SEMI-ANNUAL REPORT

AUGUST 25, 1980 TO FEBRUARY 25, 1981

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INTRODUCTION

This is the first semi-annual report on the Portugal University Institutes Development Project. It covers the initial six month contractual period and, for historical perspective, information about a series of pre-contract activities associated with this project.

The contract supporting the Portugal University Institutes Development Project is between Purdue University and the U. S. Agency for International Development. It is a four-year contract. Its term will be from August 25, 1980 through August 24, 1984.

Chronologically, Purdue University submitted a proposal to conduct the work to the Agency for International Development on January 11, 1980. This proposal was accepted, formally, on March 21, 1980.

A pre-contract series of planning meetings was held in Portugal during the period April 5-16, 1980. Dr. James L. Collom, Associate Director of International Education and Research and International Programs in Agriculture, Purdue University, represented the University at that series of meetings. The pre-contract planning and discussions which took place involved the AID representative to Portugal and his staff, the leadership of the three university institutes in Portugal which are

cooperating in this activity and representatives of associated Portuguese Institutions.

The contract between Purdue University and AID was signed on August 25, 1980. This was followed by a post-contract planning exercise in Portugal between November 10 and December 4, 1980. Dr. James L. Collom represented Purdue University in this exercise. While in Portugal, he worked closely with the leadership of the three Portuguese university institutes, faculty at these institutions, the Office of AID Representative in Portugal, the Ministry of Education and Science and the Ministry of Agriculture. The purpose of this planning exercise was to bring together sufficient information for the development of a detailed project implementation plan for the four-year program.

Participating Institutions

Purdue University holds the prime contract with the Agency for International Development for the conduct of the project. In view of the fact that one of the three Portuguese universities is very heavily involved in the technical and managerial aspects of the textile industry, Purdue University felt it wise to involve a university having great depth and strengths in these areas as a partner in the operation. Consequently, Purdue sub-contracted with Clemson University to handle specific aspects of the textile technology and associated management portions of the program.

Three Portuguese university institutes are collaborating in the program. These are:

1. Instituto Universitario da Beira Interior (IUBI),
Covilha, Portugal

2. Instituto Universitario de Tras-os-Montes e Alto Douro (IUTAD), Vila Real, Portugal
3. Universidade de Evora (UE), Evora, Portugal

These Portuguese Institutions operate under the auspices of the Ministry of Education and Science (MEC); hence, the Purdue project in Portugal will interact, as appropriate, with the MEC. Equally, some aspects of the project deal with the development of a public service or extension function in the university institutes. Fundamental responsibility for extension activities in Portugal rests with the Ministry of Agriculture and Fisheries (MAP). Hence, the project will also interact in an appropriate way with the MAP and, in particular, its extension operations.

The Office of AID Representative to Portugal is the responsible office of the principal donor. The project, therefore, will work closely with the representative and his staff in all matters associated with the conduct of the work of the project.

Substantive Content of the Report

This first semi-annual report is designed to give a comprehensive overview of the nature and scope of the project and to record those activities which have taken place in the period preceding the signing of the formal contract and in the period of time immediately thereafter. The report will include information on:

1. Project objectives
2. Project staff
3. Pre-contract activities
4. Post-contract activities
5. Training and education

6. Commodity purchases
7. Budgetary support and expenditures
8. Projected future activities
9. Summary statement

PROJECT OBJECTIVES

Agriculture in Portugal has not progressed, technically and economically, as rapidly as agriculture in other more developed societies. The agricultural sector is not in position to contribute optimally to the continued growth and development of the Portuguese economy. This is particularly significant when viewed in light of Portugal's imminent association with the European Economic Community (EEC).

The above is generally true of Portugal's rural sector; it is more true of the interior regions of the country. While there are a variety of reasons for this, a highly significant factor is that the interior regions have not benefited from locally available services for higher education in the agricultural and related sciences, regionally specific and adapted agricultural research programs and an effective institutional means of extending improved technology and related information to decision-makers at the farm level. Higher education opportunities in the agricultural sciences have been available only in universities in the coastal regions. Employment opportunities in agriculture tend to have been concentrated in these same regions. Through time, this has resulted in an exodus of professional agriculturists from the interior to the coastal regions.

These phenomena and their consequences were recognized by the Government of Portugal. This led to the creation of a set of three

regional universities in the interior. These are the three universities with which this project is collaborating. The universities were created to serve the educational, research and extension requirements of agriculture in their particular zones of influence. They were created under a philosophy considerably different than that of the traditional Portuguese university.

In seeking means by which the United States might make specific contributions to the acceleration of the rate of modernization of Portuguese agriculture, the Office of AID Representative in Portugal identified and promulgated the bilateral agricultural development assistance program which is the basis of this project.

General Objective

The general objective of the Portugal University Institutes Development Project is one of providing technical and other external assistance to the cooperating Portuguese university and institutes to help develop and strengthen their capacities to serve agriculture in their respective regions.

Specific Objectives

The above general objective holds for the entire project and the three Portuguese institutions collaborating with Purdue and Clemson in this effort. However, each of these institutions is different in terms of the specific nature of the objectives and its stage of development. The specific objectives of this project, as it relates to these individual institutions, are given immediately below.

Instituto Universitario de Tras-os-Montes e Alto Douro (IUTAD), Vila

Real

1. to develop a rural extension training and communications program.
2. to inventory and analyze the availability and use of regional resources.
3. to develop teaching/research expertise in the areas of farm management and farm cooperatives.
4. to establish a regional program for soil testing and surveying which will provide farmers with fertilizer recommendations.
5. to develop a program of research, analysis and teaching in the forage crops production and management area.
6. to design and implement a horticulture research and plant testing program.
7. to design and implement a program to adapt mechanical equipment to small farm use.
8. to develop an artificial livestock breeding program and initiate investigations of the poor reproductive productive performance of native cattle.
9. to develop a feeding and management program for cattle, based on maximum use of grass and forages.
10. to initiate a teaching and applied research program in forest products technology.
11. to develop a teaching/learning resource center to support teaching, research and extension activities.

Instituto Universitario da Beira Interior (IUBI), Covilha

1. to develop new, and strengthen existing, teaching and research programs in textile technology and production.
2. to develop short-courses in industrial and agricultural business administration.
3. to develop and strengthen the Institute's capability to participate in regional planning exercises.
4. to develop a program of extension services which will

support local industries in the plant management and textile production areas.

5. to develop a teaching/learning resource center to support teaching, research and extension activities.

Universidade de Evora, (UE), Evora

1. to develop rural extension training and communication programs.
2. to develop training programs in agribusiness and farm cooperatives.
3. to develop and test more effective systems of agriculture production and farm management.
4. to strengthen the Institute's program in agricultural production with emphasis on forage and cropping systems.
5. to improve regional systems of livestock management
6. to strengthen the Institute's analytical and teaching capabilities in soil management and fertility.
7. to strengthen research and teaching programs in irrigation and drainage.
8. to develop a teaching/learning resource center to support teaching, research and extension activities.
9. to strengthen teacher training program.
10. to develop a regional resource planning unit

PROJECT STAFF

Professional staff involved in this project include (1) long-term, professional agricultural educators and scientists in-residence at the three cooperating Portuguese universities, (2) a relatively large number of short-term agricultural scientists and educators serving specific needs, identified jointly by Purdue project staff and their Portuguese colleagues, and (3) essential backstopping staff on the campuses of Purdue and Clemson Universities.

Long-term Staff In-residence in Portugal

The Purdue contract calls for four professional agricultural staff members to be in-residence at the three Portuguese institutions during the first two years of the project. Two of these individuals are located at Vila Real, one at Covilha and one at Evora. These positions are filled by tenured or tenure-track members of the faculty of the School of Agriculture of Purdue University. Incumbents in these positions are:

1. Dr. Julian H. Atkinson, Professor of Agricultural Economics at Purdue University, serves as Purdue University's coordinator in the field for the Portugal University Institutes Development Project. He also serves as Purdue University's project coordinator at Covilha. In professional capacity, he serves that university as a long-term advisor in agricultural business management and regional planning.

Dr. Atkinson arrived in Portugal on September 30, 1980, and will complete his two-year assignment at the end of September, 1982.

Dr. Atkinson is a specialist in farm management, agricultural finance and agricultural credit. He is well-known, nationally and internationally, for his research and other scholarly endeavors in these fields.

Dr. Atkinson has had extensive experience in institutional development activities abroad. He served nearly six years in Brazil as a professional staff member of the Purdue/Brazil Project with the Federal University of Vicosa. During this time he worked as a visiting professor of agricultural economics in the continued development of graduate education and research programs to the Master of Science and Ph.D. levels in the Institute of Agricultural Economics at the Federal University of Vicosa. He served nearly three years as the Chief of Party of that project and was responsible for all aspects of Purdue University's contributions to the development of undergraduate and graduate educational programs, agricultural extension activities and agricultural research functions of that university. He is well-versed in the process of institutional development and the contributions which a cooperating external organization might make to the acceleration of that process.

Dr. Atkinson is fluent in Portuguese.

2. Professor John R. Foley is an agricultural engineer who served many years as an extension specialist in agricultural engineering at Purdue University and, most recently, as regional administrator for Purdue University's cooperative extension program.

Professor Foley is serving as Purdue University's project coordinator at Vila Real. In professional capacity, he is serving as a long-term advisor in rural extension, extension methodology, administration and training.

Professor Foley arrived in Portugal August 20, 1980 and will return to the U.S. in August, 1982.

Professor Foley has had extensive experience in international agricultural development activities, particularly those directed toward institutional development. He served for five years in Brazil as a long-term staff member of the Purdue/Brazil project with the Federal University of Vicosa. While in Brazil, he served as a visiting professor of agricultural engineering at the Federal University of Vicosa. He contributed significantly to the development of the agricultural extension specialist function of that university's Department of Agricultural Engineering, its undergraduate and graduate educational endeavors, its informal extension education programs and its problem-oriented research programs. He has also worked on a variety of short-term assignments in Latin America and in Africa.

Professor Foley is fluent in Portuguese.

3. Dr. James L. Ahlrichs is Professor of Agronomy at Purdue University. He is a senior faculty person in Purdue University's School of Agriculture and is nationally and internationally recognized for his scientific, scholarly and educational work in the field of soil science.

Dr. Ahlrichs is serving as a long-term visiting professor at Vila Real concentrating his efforts in assisting that university in the development of its soil science research and testing programs and in strengthening its educational programs in the agricultural sciences.

Dr. Ahlrichs has served abroad on various assignments including a visiting professorship at the University of Madrid in Spain.

Professor Ahlrichs' assignment at Vila Real began January 26, 1981. He will complete his assignment in January, 1983.

Professor Ahlrichs is fluent in the Spanish language. Upon acceptance of this assignment in Portugal, he made a

major investment in converting his language skills from the Spanish to the Portuguese language. He is now operationally effective in Portuguese.

4. Dr. John H. Sanders is Associate Professor of Agricultural Economics at Purdue University. He is well known, nationally and internationally, for his work in agricultural production economics, agricultural development economics and related fields.

Dr. Sanders is serving as Purdue University's project coordinator at Evora. In professional capacity, he is serving that university as a visiting social scientist in agricultural economics and resource planning.

Dr. Sanders began his assignment in Portugal on March 11, 1981, and will complete his two-year assignment in 1983.

Dr. Sanders has had nearly ten years professional experience in agricultural development activities in developing countries. He served nearly five years as a visiting professor in the Department of Agricultural Economics at the Federal University of Ceara, at Fortaleza, Ceara, Brazil.

In this capacity, Dr. Sanders contributed to the development of graduate level education in agricultural economics and related fields at that University. He worked in a wide range of research and educational endeavors dealing with the economic problems of modernizing agriculture in the Northeast of Brazil. Under this Ford Foundation-funded project, he made significant contributions to the development of that institution's capacity to do meaningful agricultural economics research and to train young Brazilians to the Master of Science and Ph.D. levels.

Following this assignment, Dr. Sanders spent over four years as an agricultural economist with the Centro Internacional de Agricultura Tropical (CIAT) in Cali, Colombia. During this period, he served as the agricultural economist of a multi-disciplinary research team including the physical and biological sciences, which concentrated on the improvement of edible bean varieties and the technical, economic and social information required to bring about adoption of improved varieties by farmers.

During his assignment in Brazil, Professor Sanders was completely fluent in the Portuguese language. During his assignment in Colombia, he became fluent in the Spanish language. The reconversion to Portuguese is being assisted via tutorial help in Portugal.

Purdue University faculty serving as long-term staff in Portugal have been involved in a variety of activities since their arrival at assigned university or institute posts. In addition to necessary "settling in", both personally and professionally, each has made a concerted effort to acquaint himself with the realities of Portuguese agriculture in both a broad context and in the problem-specific context of the particular region in which he is located. Equally, a considerable amount of time has been spent in becoming acquainted with the institutions with which each is working. This has included getting to know counterpart faculty at these universities and establishing rapport and working relationships.

Dr. Atkinson, as Purdue University's project coordinator in Portugal, has spent a considerable amount of time on administrative matters, conferences with USAID, participating in the development of information for the project implementation plan, coordinating and planning the Joint Institutes Program and planning the extension training workshop to be conducted in June and July of 1981 and the teaching/learning resource center workshop to be conducted in October of 1981. Dr. Atkinson has interacted appropriately with the Reitor at Covilha and the leadership of the other cooperating institutions. He has dedicated a considerable amount of time to planning assignments of short-term advisors and participant trainees. Specifically, he dedicated a considerable amount of time making arrangements for the short-term assignment at Covilha of Dr. E. A. LaRoche of Clemson University. He has presented several seminars on such things as the contributions of extension to regional development, the institutional development process and the like. He has also been instrumental in making arrangements for English language training of IUBI staff. There are now in place two classes of 15 students studying the English language. The above is but

illustrative of the many activities in which Professor Atkinson has been involved during the first six months of the project.

Professor Foley has spent a considerable amount of time in working with the Joint Institutes Program, particularly in planning for the June/July workshop on extension training. He has dedicated substantial amounts of time to the identification and scheduling of short-term advisors and in the identification and preparation of participants for study abroad. In addition, he has worked closely with his colleagues at the University in the areas of his specific professional responsibilities.

Professor Ahlrichs has developed programs for change in the soil testing laboratory which will increase laboratory capacity and insure quality of the results, designed a study of rapid "buffer" methods for determining lime requirements of soils for the north of Portugal, prepared methods and procedures for use in the study of clay mineralogy and chemistry, cooperated with Portuguese scientists doing field research in forages, vineyards, and cereal grains, contributed to the improvement in classroom teaching methods through visual aid approaches, presented several lectures, consulted with University faculty about short-term training and Master of Science programs in U.S. universities and has initiated a program to improve the research library facilities at IUTAD through obtaining complete sets of scientific journals in the relevant fields of agricultural science.

Dr. Sanders did not arrive at his assigned post in Evora until after the end of the reporting period. However, he is rapidly becoming acquainted with the agriculture and the agricultural problems of the zone of influence of the University of Evora; he is working on developing appropriate assignments for short-term advisors, acquainting himself with

the university and colleagues with whom he will be working during the next two years and, more generally, planning his approach to this new assignment.

Short-term Professional Advisors

The project calls for the utilization of 159 man months (43 individuals) short-term advisory service covering a wide range of professional areas over the four-year life of the project. This component of the project input structure was initiated during the first six months of the contract. Two major short-term assignments were initiated during this reporting period. These were as follows:

Dr. Amanda Brown, Human Resource Development Specialist, at the University of Georgia, spent the period September 15, 1980, through December 15, 1980, at the University of Evora. Dr. Brown assisted the University in the organization and development of a new course in the management of family resources. She participated with the faculty of the University of Evora in the development of appropriate course materials and in the initial presentation of the course. She also worked with the faculty of the University of Evora in the evaluation of existing research efforts in the management of family resources and in the identification of new, high pay-off research efforts needed in this field. She will continue to work at the University of Georgia in a series of activities in the continued support of the development of the teaching program at Evora.

Dr. Evan A. LaRoche, Professor of Management at Clemson University, is the second short-term advisor sponsored by the project. Dr. LaRoche accepted a four-month assignment at Covilha to work on the organization and management of production in the textile industry as this relates to the academic and research programs of the University. Dr. LaRoche is currently in Portugal having started this assignment on February 3, 1981. It will be completed on June 3, 1981.

Numerous other recommended short-term advisors have been contacted and are being programmed to work at the cooperating institutions in Portugal.

The professional specialty and the objectives of each of the short-term advisors programmed over the life of the project are included in the Proposed Project Implementation Plan.^{1/}

On-campus Staff - Purdue University and Clemson University

The Purdue/Portugal contract provides for essential professional and administrative support on the Purdue campus. In view of the fact that Purdue University has entered into a sub-contract with Clemson University to contribute importantly in the textile area, the contractually allowable resources for this purpose have been shared with Clemson.

On-campus project staff are as follows:

Purdue University

The on-campus staff under this project consists of a part-time campus coordinator, and a full-time administrative assistant/executive secretary.

Dr. James L. Collom, Associate Director of International Education and Research and International Programs in Agriculture, has been designated as Purdue University's Campus Coordinator. Dr. Collom devotes 50% of his efforts to this activity.

Dr. Collom is well-qualified for this position. He has been involved in Purdue University's international agricultural development work for some 15 years. For the last seven years he has been Assistant Director and Associate Director of the International Programs in Agriculture Division. In this capacity, he has been responsible for project development, implementation and management of a variety of projects in Latin America and in Africa. Additionally, he has been responsible for the degree and non-degree training of all sponsored foreign students in the School of Agriculture.

Dr. Collom spent a total of seven years in Brazil as a member of Purdue University's faculty working at the Federal University of Vicosa. Professionally, Dr. Collom is a forester specializing in silvaculture. While in Brazil, he was instrumental in helping that University start the first School of Forestry in all of Brazil. During his tenure in that assignment, this new school grew into a highly respected teaching, research and extension institution. In the proc-

^{1/} Proposed Project Implementation Plan, Portugal University Institutes Development Project, Purdue University, April 1981

ess, he became familiar with the inputs which are productive in terms of external assistance to the development and strengthening of institutions of higher education, research and extension.

Dr. Collom's address is: International Programs in Agriculture; Purdue University; AGAD Building, Room 120; West Lafayette, IN 47907. His telephone number is (317) 494-8753

Ms. Vivian Rider serves as the Administrative Assistant/Executive Secretary to the Purdue/Portugal project. She spends 100% of her time on this activity. Ms. Rider is well-qualified to handle the massive administrative, logistical and fiscal set of responsibilities associated with the conduct of this project. She has been a staff member of the Division of International Programs in Agriculture for eight years. In this capacity, she has dealt with the logistical and administrative problems of numerous International agricultural development assistance programs in Latin America, Africa, Asia and Europe.

Ms. Rider's address is: International Programs in Agriculture; Purdue University; AGAD Building, Room 120; West Lafayette, IN 47907. Her telephone number is (317)494-8753.

Clemson University

In order to discharge its responsibilities under the sub-contract with Purdue University, Clemson University has designated a faculty person as the part-time campus coordinator for their responsibilities within the Purdue/Portugal project.

Dr. Hassan Behery has been designated to act in this capacity. Dr. Behery is well-qualified to conduct the on-campus administrative, logistical and managerial role associated with Clemson University's contributions and participation in this activity.

Dr. Behery's address is: Department of Textiles; School of Industrial Management and Textile Science; Clemson University; Clemson, SC 29631. His telephone number is (803) 656-3176.

PRE-CONTRACT ACTIVITIES

Initiation of this project required a series of pre-contract activities involving cooperating institutions in Portugal and Purdue

University. Important among these were:

1. A visit to Purdue University by key persons in the administrative hierarchy of the Instituto Universitario de Tras-os-Montes e Alto Douro (IUTAD).
2. Visit to Purdue University by members of the administrative hierarchy of the Instituto Universitario da Beira Interior (IUBI).
3. Administrative visit to Portugal by Dr. James L. Collom, Purdue/Portugal Campus Coordinator.

Visit to Purdue University by Officials of the Instituto Universitario de Tras-os-Montes e Alto Douro (IUTAD)

During the period July 10-17, 1980, Purdue University was pleased to host three officials from the university at Vila Real. These were:

1. Dr. Virgilio Pinto de Andrade, Vice Reitor and Chief of Animal Pathology and Hygiene Support Laboratory.
2. Dr. Orlando Henriques de Almeida, Chief of Animal Husbandry and Extension Department.
3. Dr. Amadeu de Sousa Campos, veterinary scientist with MAP Rural Extension Service.

The officials from Vila Real studied Purdue University's programs in agricultural and related extension service activities, field operations and direct and indirect support to farm-level decision makers. They were also exposed to Purdue University's involvement in animal science and veterinary science research and utilization of experimental farms for research and educational purposes. They made numerous field visits to observe Purdue University in its role in support of extension operations. This included work with the Purdue research laboratories and extension activity support facilities in a problem-solving context. They obtained information on Purdue University's extension education curriculum, extension methodologies, and teaching and communications approaches to small and less

affluent farm families. They were particularly interested in the meat technology laboratories and quality and sanitation control in the State of Indiana under auspices of Purdue University and the U.S. Department of Agriculture.

Our colleagues from Vila Real studied farms within the area, consulted with responsible administrators in the School of Agriculture and the School of Veterinary Science and Medicine, and observed animal diagnostic laboratories in regional areas.

As supporting activities, they visited the School of Veterinary Science and Medicine at Blacksburg, Virginia, and attended the annual national conference of the U.S. veterinary profession in Washington, DC.

Visit to Purdue and Clemson Universities by Officials of the Instituto Universitario da Beira Interior (IUBI)

Purdue University was pleased to host two administrators from the cooperating university at Covilha during the period July 15-29, 1980. Visitors from Covilha included:

1. Dr. Passos Morgado, Reitor of the Instituto Universitario da Beira Interior (IUBI).
2. Dr. Fernando de Jesus, Senior Faculty Advisor, Management, Instituto Universitario da Beira Interior (IUBI).

During this study tour, the leaders from the university of Covilha spent four days studying the textile program at Clemson University. The remainder of the time was spent at Purdue University where they were involved in a study of Purdue University's Krannert School of Industrial Management and Purdue University's Department of Agricultural Economics. Purdue was pleased to have Reitor Morgado and Professor de Jesus present a

formal seminar to the Purdue Agricultural Faculty on July 25.

The purpose of this visit was multi-faceted. One of the purposes was to review and study teaching and practical training activities at Clemson and Purdue associated with the chemical, physical and engineering aspects of textiles. They also had opportunity to study and observe on-going research projects in the several laboratories at these institutions. They were greatly interested in university activities related to university contributions to regional development in both the Clemson and the Purdue areas. Other activities included opportunities to study the planning and management of industries, including agricultural business programs, to discuss possibilities of advanced degree training at Purdue University and at Clemson University, to visit with potential short-term consultants proposed to work with IUBI in the textile area and to dialogue relative to the role and responsibilities of the UIBI in the Joint Institutes Program of the Purdue/Portugal project.

The visits of the individuals indicated above from Vila Real and Covilha were extremely helpful in terms of creating an atmosphere of cooperation between Purdue University and the university institutes in Portugal. Purdue University has formally invited the leadership of the University of Evora to spend a similar period of time on the Purdue campus.

Purdue University Campus Coordinator Pre-contract Visit to Portugal

During the period April 5-16, 1980, Dr. James L. Collom, Campus Coordinator of the Purdue/Portugal project, was in Portugal to work out details of the project. This administrative visit had several purposes. Important among these was the need to clarify various aspects of the proposed contract with U.S. Agency for International Development's representative in Lisbon. It was also necessary to spend a considerable

amount of time in similar discussions with the leadership of the three Portuguese university Institutes collaborating in the work. Finally, there was need for additional clarification of personnel matters and logistical issues associated with the provision of long-term and short-term technical assistance staff to work in Portugal.

This visit was extremely useful. It resulted in clarification and specification of the contract costs which would be covered by escudo and dollar funds, respectively. It also helped surface the inadequacy of training provisions under the original design of the project. Numerous other administrative matters were resolved including major contractual issues between the USAID Mission in Portugal and Purdue University.

POST-CONTRACT ACTIVITIES

Initiation of the Purdue/Portugal project necessitated several activities as conditions precedent to the implementation and activation of the proposed program. Important among these were:

1. Administrative visit to Portugal by the Purdue University Campus Coordinator.
2. Development and consumation of agreements between Purdue University and the University of Georgia and Clemson University for participation in the project.

Dr. James L. Collom made a second administrative visit to Portugal during the period November 10 - December 4, 1980. The principal purpose of this visit was to obtain and develop information essential to the construction of the proposed project implementation plan. As a corollary purposes, it was necessary to again visit the cooperating Portuguese institutions and to help establish the Purdue long-term staff in their assignments.

This administrative visit was instrumental in developing sufficient information and data to serve as a basis for the development of the Proposed Project Implementation Plan.^{1/}

It was extremely useful in identifying a number of issues and problems, of a substantive character, with which the project would need to deal if it were to be successful in attaining its objectives. These issues include such things as changes in the missions and responsibilities of the Portuguese university institutes from the time the project was originally conceived until it was consummated as an active project with Purdue University. It also surfaced the impacts of this upon the faculty teaching load as compared to research and extension loads, differences in the nature of research potential and the intent of the institutions including essential research relationships with other Portuguese institutions, and identification of internal institutional realities which may require important adjustments at the ministerial level.

This visit was instrumental in obtaining agreement and specification on project inputs of personnel. This turned out to be four (4) long-term in-residence professional staff and forty-three (43) short-term professional advisors. In addition, it was agreed that some fifty-eight (58) staff members from the cooperating institutions would participate in formal and informal training programs in the United States and elsewhere, as appropriate.

Based on this administrative visit and subsequent observations and information provided by collaborating institutions and by Purdue staff in the field, the Proposed Project Implementation Plan was developed and transmitted to the cooperating institutions and to the USAID representative's office in Lisbon. This Proposed Project Implementation Plan is

^{1/} op. cit., pp. 15

still under review prior to finalization by Purdue University and the collaborating institutions.

Other post-contract activities, principally the identification and assignment of Purdue University faculty to long-term positions in Portugal, the identification and provision of the first set of short-term advisors, the identification of Portuguese faculty for short- and long-term training in the United States, and the planning of workshops, seminars and related matters are described elsewhere in this report.

EDUCATIONAL AND TRAINING PROGRAMS FOR FACULTY OF THE COOPERATING PORTUGUESE INSTITUTIONS

A highly significant component of this institutional development activity consists of expanding the professional capacities of faculty members of the cooperating Portuguese institutions. In this regard, the Project Implementation Plan calls for educational and training programs for fifty-eight (58) faculty members of these institutions.

This process was initiated in the first six months of the project.

Advanced Degree Educational Programs

Pre-contract activities identified two Portuguese faculty members for advanced degree level training in U.S. universities. These individuals started their degree programs prior to the formal implementation of the Purdue/Portugal contract. Responsibility for these degree candidate participants was passed to Purdue University upon affirmation of the contract by the relevant parties. Portuguese faculty members undertaking advanced degree training include:

1. Manuel Teles Oliveira, a faculty member at Vila Real, is

a Master of Science degree candidate in soil science at the University of Wisconsin, Madison, Wisconsin. Sr. Oliveira will complete the Master of Science degree at that institution in December, 1981.

2. Carlos Alberto Sequeira. Sr. Sequeira is a faculty member at Vila Real. He is currently pursuing a course of study leading to the Master of Science degree in animal nutrition at Cornell University. It is anticipated that Sr. Sequeira will complete the requirements for the M.S. degree in December, 1981.

Non-degree Specialized Training Programs

The Purdue/Portugal project envisions a substantial number of short-term, non-degree, specialized training programs for faculty members of the collaborating Portuguese institutions. The first of these programs was conducted during the first six months of the project. This participant trainee was as follows:

1. Sra. Maria Barrisco. Sra. Barrisco is a faculty member at the University of Evora. Her specialty is animal reproduction. She was in the United States as a short-term participant from January 9, 1981, through March 9, 1981. She participated in an animal reproduction short-course, International Stockmen's School, at San Antonio, Texas; laboratory training at Colorado State University; practical training at Roswell, New Mexico; laboratory training at the University of California at Davis; and laboratory experience and training at Purdue University.

Sra. Barrisco proved to be an excellent student who took advantage fully of the educational opportunities provided under this short-term training program. We believe that the work she undertook while in the United States will be extremely helpful to her as she continues to develop her career in animal reproduction at the University of Evora.

COMMODITIES FOR PROJECT USE

The Purdue/Portugal project contract provides for the purchase of scientific equipment and other commodities essential to the conduct of the expanded programs envisioned under this project. The bulk of these physical capital items were provided for in the escudo allocations by USAID to

the three universities. Many of the material and equipment items had been purchased prior to the initiation of this contract. Reports of commodities purchased from escudo funds are provided directly by the Portuguese institutions to AID.

During the first six months of the Purdue contract, several small items provided for in the dollar budget were purchased and made available to the cooperating institutions in Portugal. These included:

1. Stainless steel soil scoops.
2. Numerous voltage regulators for scientific purposes.
3. Computer, printer, transformer and supplies for computer for Covilha.
4. Tape recorders for Covilha.
5. Textbooks in scientific areas for Covilha.
6. Various books and publications for the cooperating Portuguese Universities.
7. Multi-language textile dictionary and users' guide.

PROJECTED PROJECT ACTIVITIES DURING THE NEXT SIX MONTHS

The activities which will be undertaken by Purdue University under the Portugal University Institutes Development Project are specified in detail in the Proposed Project Implementation Plan.^{1/}

Of special significance in the projected plan for the next six months are the following:

1. Continuation of the activities of the four long-term Purdue faculty members in-residence at the cooperating Portuguese institutions.
2. The conduct of two inter-university workshops. These are:
 - a. Joint Institute Program Extension Training Workshop (May or June, 1981)

^{1/} op. cit., pp. 15

- b. Teaching/Learning Resource Center Workshop
(October, 1981)
3. Expansion of the short-term training activities specified in the project implementation plan. There are three specialized study tours planned during the next six months.
4. The identification and placement of additional faculty members of cooperating Portuguese institution in advanced degree programs at the M.S. and Ph.D. levels in U.S. universities.
5. Sharp acceleration in the numbers of short-term staff assignments to work with colleagues in the cooperating Portuguese institutions. Those programmed for the last six months of the first year of the project include:
 - a. Dr. R. L. Thompson - six week short-term assignment at Vila Real and Evora, in economic analyses of agricultural production.
 - b. Dr. Hassan Behery - two-month assignment at Covilha in textiles and rheology.
 - c. Dr. Robert Frist - one-month assignment at Covilha to participate in Extension Training Workshop.
 - d. Dr. Robert Pricer - one-month assignment at Covilha to participate in Extension Training Workshop.
 - e. Dr. Charles Rhykerd - two-month assignment at Evora and Vila Real in pasture and forage production.
 - f. Dr. Clifford Spies - visits to Covilha, Evora, and Vila Real in cooperation with USDA/Portugal Limestone project in area of farm-level extension education.
 - g. Dr. Edward Ferringer - visits to Covilha, Evora, and Vila Real in cooperation with USDA/Portugal Limestone project in area of farm-level extension education.

PROJECT BUDGETARY SUPPORT

The Purdue University contract to conduct the Portugal University Institutes Development Project is supported from two sources. One is an

escudo budget made available by USAID/Portugal directly to the cooperating Portuguese universities. The second is a dollar budget made available directly to Purdue University.

Contract Dollar Budget and Expenditures

Project Inputs to be paid for in U.S. dollars include salaries and wages, including fringe benefits, of Purdue and other university short-term and long-term faculty advisors in Portugal, non-international travel and transportation necessities, participant training of Portuguese faculty, other direct project costs and indirect costs. Included in these items are the sub-contract costs with Clemson University and the provision of services sub-contracted to the University of Georgia.

A dollar budget summary is provided in table I. The dollar budget for year one of the project totaled \$870,284. Expenditures through March 30, 1981, amounted to \$199,753. The shortfall of actual expenditures and obligations during the first half of the first project year is attributable to unavoidable delays in the start-up of certain aspects of the project. This, as in all similar cases, is normal and was anticipated.

Under the Proposed Project Implementation Plan, Purdue University envisions no particular problems on the dollar budget side during the remaining life of the project. However, should major changes in the Proposed Project Implementation Plan be mutually agreed upon by the Government of Portugal, USAID and Purdue University, modifications in the projected budget will undoubtedly be necessary.

Escudo Budget Support

Purdue University is not privy to budgetary details of the escudo sup-

port components of this project. These funds were made available directly to the cooperating Portuguese institutions by USAID Portugal. We presume that appropriate reporting is done directly by these institutions to the USAID/Lisbon.

Project costs funded in local currency under the escudo budget include:

1. Office space.
2. Equipment and supplies purchased in the cooperating country.
3. Housing, utilities, maintenance, household furnishings and household equipment for Purdue University faculty in-residence in Portugal.
4. Official travel and transportation in the cooperating country.
5. International travel and transportation of people and things.
6. Secretarial and interpreter services.
7. Educational allowances and educational travel for dependents of Purdue faculty in-residence.
8. International shipment of personal effects, household effects and privately owned vehicles.

SUMMARY

The Portugal University Institutes Development Project is an important development assistance endeavor in the portfolio of U.S. bilateral development assistance activities. Portugal is an extremely important and key country of the Mediterranean and European region.

Agriculture can be extremely important to the continued economic development and social progress of Portugal. USAID/Lisbon has been most discerning in identifying agriculture as one major thrust of its bilateral development assistance program. Further, the Mission is to be congratulated in identifying

assistance to the cooperating institutions as potentially high pay-off investments through assistance from this project and related activities.

While there have been a certain number of unavoidable delays in initiating various aspects of this project, Purdue University believes that remarkable progress has been made in a relatively short period of time. Top quality staff with extensive international agricultural development experience and Portuguese language capabilities have been made available as core, long-term staff in the cooperating Portuguese institutions. These faculty members are solidly in place and are actively developing major programs of work in collaboration with their institutional colleagues in Portugal.

Several short-term advisors have been made available in the first six months for major inputs into the program. Short-term advisory activities are rapidly accelerating and will have major impact in the period ahead.

Both long-term advanced degree training programs and short-term specialized non-degree training programs have been initiated. Firm plans are afoot for accelerating this aspect of the program.

A detailed Proposed Project Implementation Plan, reflecting the judgments of cooperating institutions in Portugal, Purdue University and the USAID Mission, has been developed and is under review by the parties concerned. With appropriate adjustments, in light of additional information and new insights, this Project Implementation Plan will constitute a significant set of guidelines for project activities over the next three-and-one-half years.

Perhaps most importantly, pre-contract interactions and the first six months of the project, per se, have been an effective and essential learning experience by Purdue University and by the cooperating Portuguese institutions. In these early months of interaction, Purdue University has had opportunity to learn a great deal about the constraints to the continued development of

Portuguese agriculture and the roles which these new Portuguese institutions of higher education and research must play if that potential is to be realized. Purdue has also been able to identify the kinds of high pay-off contributions which it has the potential of making to the continued development of these institutions and to the maximization of their inputs into the economic development process of Portuguese agriculture.

By the same token, we believe that our colleagues in these institutions have gotten to know a little more about Purdue University and its capabilities to contribute to their long-term growth and development. Purdue University faculty in-residence have established essential rapport with their colleagues in the host institutions. We believe this to be extremely important in terms of the long-term payoffs from this cooperative program.

In the learning process which has taken place, several significant issues have become clear. For the most part, these issues turn on the changes which have occurred in the policy and programs of the Portuguese government relative to the role and responsibilities of the universities with which Purdue is cooperating. These changes took place after the initial project planning exercise by consultants to USAID and the affirmation of the Purdue contract and the initiation of the program of work under that contract. Specifically, three major issues have surfaced. These are:

1. The need to establish a viable doctrine of and permanent long-run support for an effective agricultural extension role within the three institutions of higher education with which this project is concerned. It is clear that the productivity of these three university institutes will depend importantly upon the creation and acceptance of this philosophy and the provision of support for the creation of appropriate extension roles.
2. The need for the development and acceptance of an institutional philosophy defining explicitly the scientific and research roles of these institutions in the agricultural area. This was not much of an issue when these three

Institutions were conceived as three-year, technical training schools. They have now been accorded much greater responsibilities of an educational and scientific nature. To discharge these responsibilities with excellence, it is clear that each of these institutions must develop an extensive research capacity to deal with physical, biological, economic and social problems constituting constraints to accelerated development of agriculture in their particular zones of influence. This will require explicit recognition that the development of this type of research program must be among the principal missions of these institutions. This recognition must be backed by appropriate support for agricultural research and the development of major emphasis in this aspect of the Purdue/Portugal contract operation.

3. The initial conceptualization of project inputs was heavily weighted toward short-term, non-degree, specialized training programs for faculty members of the Portuguese institutions. At this point, given the sharply altered role and responsibilities accorded these institutions, it is abundantly clear that this form of participant training program is not consistent with the professional human capital needs of these institutions. It is our finding that these institutions must concentrate on the development of higher-level scientific and educational skills than those which are possible through short-term, non-degree training activities. If the faculties of these institutions are to be in position to provide five-year curricular offerings at the baccalaureate level in the agricultural sciences, conduct basic and applied research into the complex problems constraining agriculture in Portugal, to develop graduate level education programs at the M.S. and Ph.D. levels and to provide continuing educational services to agricultural clientele in their respective zones of influence, they must be accorded the opportunity for graduate level educational experience at the Master of Science and Doctor of Philosophy levels.

It is the recommendation of Purdue University that these three issues be formally surfaced and dealt with appropriately during the review of the Proposed Project Implementation Plan and in the annual project review to be undertaken in Portugal in late July of 1981.

TABLE 1. Dollar Budget; Portugal University Institutes Development Project--
Life of Project Funding, 1980-1984

Budget Item	Total 4 Year Budget	Year 1 Budget	Spent/ Committed Thru 3/30/81	Balance Year 1	Year 2 Budget	Year 3 Budget	Year 4 Budget	Four Year Balance
Salaries and Wages	\$1,152,472	\$362,010	\$101,880	\$260,130	\$ 451,036	\$246,413	\$ 93,013	\$1,050,592
Fringe Benefits	330,543	107,054	18,660	88,394	127,669	70,545	25,275	311,883
Travel and Transportation	43,015	16,175	14,321	1,854	9,670	13,170	4,000	28,694
Participant Training	629,695	152,250	15,553	136,697	245,775	87,820	143,850	614,142
Other Direct Costs	46,700	15,500	3,538	11,962	15,500	11,400	4,300	43,162
Indirect Costs	<u>695,000</u>	<u>217,295</u>	<u>45,801</u>	<u>171,494</u>	<u>262,813</u>	<u>152,387</u>	<u>62,505</u>	<u>649,199</u>
TOTAL	<u><u>\$2,897,425</u></u>	<u><u>\$870,284</u></u>	<u><u>\$199,753</u></u>	<u><u>\$670,531</u></u>	<u><u>\$1,112,463</u></u>	<u><u>\$581,735</u></u>	<u><u>\$332,943</u></u>	<u><u>\$2,697,672</u></u>