



CONSORTIUM FOR INTERNATIONAL  
AGRICULTURAL EDUCATION  
DEVELOPMENT

Academy for Educational Development, Inc.  
The Pennsylvania State University  
Texas A&M University  
Virginia Polytechnic Institute and State University



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Agricultural Education Development Project

THIRD ANNUAL FIELD OFFICE REPORT

1981

January 1982

Peradeniya, Sri Lanka

Prepared under Contract No. AID/ASIA-C-1397  
for Technical Services to Project 383-0049  
for Agricultural Education Development  
(Sri Lanka)

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## Foreword

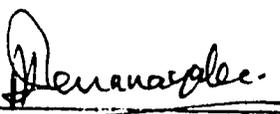
We are pleased to report the substantial progress made in development of the PGIA and Faculty of Agriculture during 1981 with much-needed assistance provided by the Agricultural Education Development Project and other donor agencies. The details of that progress, and the contribution of the AED Project toward it, are contained in the pages of this Third Annual Project Field Office Report. Preparation of the Report has been a joint effort, to which many others have also contributed, and we subscribe fully to its contents and recommendations.

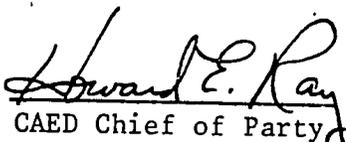
Problems still remain; a major concern relates to the availability of sufficient resources to implement the Project as originally conceived. Informal notice received in December that some additional funds will be authorized was welcome news, as that additional input will help greatly to alleviate the Project's critical financial situation. It may not be sufficient, however, to accomplish all that had been anticipated, and it is hoped that another increment of support may be forthcoming in the future.

A project of this nature involves several different institutions and requires extensive interaction among numerous individuals with varying viewpoints. That it has been possible to reconcile the various views and resolve problems to the benefit of the PGIA, Faculty and Project speaks well for the close involvement of all concerned. Appreciation must be extended to each and everyone associated with the Project. With this spirit of interaction, cooperation and working together to achieve our mutual goals, we are optimistic that the Project will continue to make good progress.

Peradeniya, January 1982.

  
AED Project Director

  
Dean, Faculty of Agric.

  
CAED Chief of Party

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## Abbreviations, Definitions

- AED (used alone) - Academy for Educational Development.
- AED Project, Project - Agricultural Education Development Project.
- Agricultural library - integrated PGIA/Faculty of Agriculture library.
- AID - United States Agency for International Development.
- Board of Study - academic board in the PGIA; the PGIA is comprised of six Boards of Study, paralleling the six academic Departments in the Faculty.
- CAED, Consortium - Consortium for International Agricultural Education Development, comprised of the Academy for Educational Development, Inc., The Pennsylvania State University, Texas A & M University, and Virginia Polytechnic Institute and State University.
- CAED Council - policy and coordination body of the CAED, comprised of CAED member institution representatives, a senior administrator of the University of Peradeniya, and a representative of USAID (the latter two being ex officio).
- Contract - AID Negotiated Contract No. AID/ASIA-C-1397 for technical services to AID Project No. 383-0049 for Agricultural Education Development.
- Contractor - Academy for Educational Development (which in turn has subcontracts with other CAED members in accordance with the terms of the Contract).
- DANIDA - Danish International Development Agency.
- Dean - Dean of the Faculty of Agriculture of the University of Peradeniya.
- Department - an academic Department of the Faculty. The following Departments comprise the Faculty: Crop Science, Agricultural Chemistry, Agricultural Biology, Agricultural Economics and Extension, Animal Husbandry, Agricultural Engineering.
- Dodangalla farm - an experimental farm of the Faculty, located about 12 miles from the campus; major area comes under purview of Crop Science Department, with smaller area under Animal Husbandry.
- Faculty, FA - Faculty of Agriculture of the University of Peradeniya.
- GSL - Government of Sri Lanka.
- ICRISAT - International Centre for Research in Semi-Arid Tropics, India.
- IDRC - International Development Research Centre (Canada).
- IRRI - International Rice Research Institute, Los Banos, the Philippines.

LOP	- Life of Project.
Maha Illuppallama	- facility of the Faculty for first year students, located approximately 70 miles from Kandy adjacent to the Dry Zone Experiment Station of the Department of Agriculture.
Mawella farm	- Animal Husbandry Field Laboratory located on University of Peradeniya property about 3 miles from Agricultural subcampus.
Meewatura farm	- Agricultural Engineering experimental farm located across the Mahaweli River from the agricultural subcampus.
MPhil	- research Masters degree offered by PGIA.
MSc	- (when referring to PGIA) non-research Masters degree offered by PGIA.
NORAD	- Norwegian aid agency.
ODA	- Overseas Development Agency of the U.K.
PACD	- Project Activity Completion Date.
Participants	- Assistant Lecturers of the Faculty receiving post-graduate training under the Project.
Penn State, PSU	- The Pennsylvania State University.
PGIA	- Postgraduate Institute of Agriculture of the University of Peradeniya.
PI	- Plan of Implementation for the AED Project, <u>in</u> First Annual Field Office Report and Plan of Implementation, February 1980.
p.mo., p.mos.	- person-month(s).
PP	- AID Project Paper, the document on which the AED Project is based.
Texas A & M , TAMU	- Texas A & M University.
UGC	- University Grants Commission of the GSL.
USAID, USAID/SL	- Sri Lanka Mission of the United States Agency for International Development.
VPI	- Virginia Polytechnic Institute and State University.

# Agricultural Education Development Project

## THIRD ANNUAL FIELD OFFICE REPORT

1981

The Agricultural Education Development (AED) Project is an AID-supported project of assistance in the development of the Postgraduate Institute of Agriculture and Faculty of Agriculture of the University of Peradeniya. The AID assistance is being provided through a contract with the Academy for Educational Development functioning in consortium with The Pennsylvania State University, Texas A & M University, and Virginia Polytechnic Institute and State University. Professor T. Jogaratnam, PGIA Director, serves as Project Director and Professor Y.D.A. Senanayake, Dean of Agriculture, is its Co-Director. Dr. Howard E. Ray represents the Consortium in Sri Lanka as CAED Chief of Party.

Intensive Project activity continued during 1981. Ten more junior staff were sent to the U.S. for training, bringing the total to the 38 projected in the Project Grant Agreement and Contract. Approximately 42 person-months of technical assistance were provided. Equipment valued at more than U.S.\$260,000 was received, and another shipment is expected to arrive in early 1982. Procurement of other items approved for purchase was in process as the year ended. Some 750 books and 40 periodicals were provided to the library, and nearly 1000 more titles were in the approval and procurement process or enroute to Sri Lanka by December.

Development of facilities by the Faculty continued to gain momentum. Site preparation for the new Agricultural Biology/Chemistry complex was completed, and tenders for construction of the main building were under evaluation at the end of the year. Substantive improvements were made on the Dodangolla and Mawella experimental farms, and at the Faculty's Maha Illuppallama Unit.

It was also another year of some anxiety concerning the future of the Project, alleviated in part by informal notification in mid-December that some quantum of additional funding might be forthcoming. In the interim, it was necessary to hold expenditures to the minimum possible, with the result that technical assistance provided during the year was significantly less than had been projected in the Plan of Implementation. The CAED Consortium Council Meeting at Peradeniya in October, a series of meetings with USAID/SL, and continuing interaction among the Faculty, PGIA and Consortium members were most helpful in determining how remaining resources can be utilized to provide maximum effective Project assistance.

## 1.0. Background And Current Situation

The present Agricultural Education Development Project had its origins in a request for assistance submitted to USAID in early 1977 by the Director of the recently established Postgraduate Institute of Agriculture (PGIA) of the University of Sri Lanka (now the University of Peradeniya). That request documented the need for outside assistance to permit the PGIA to develop the capability to meet most of Sri Lanka's demand for high level agriculturally trained manpower, and indicated the kinds of assistance that would be required.

The Director's request culminated in the signing, on 31 August 1978, of a Project Grant Agreement between the Governments of Sri Lanka and the United States of America for Agricultural Education Development (A.I.D. Project No. 383-0049). The U.S. Agency for International Development later contracted with the Academy for Educational Development (in consortium with The Pennsylvania State University, Texas A & M University and Virginia Polytechnic Institute and State University) to provide the technical services specified in the Project Grant Agreement.

The Project is more fully described in the First Annual Field Office Report<sup>1</sup>\*. Since the writing of that report, the following changes in key personnel have been made: Dr. James Bonner is now USAID Project Manager and Ms. Barbara O'Grady is Consortium Coordinator.

A detailed Plan of Implementation<sup>2</sup> developed<sup>3</sup> in late 1979 and early 1980 updated the Operational Plan in the Contract<sup>3</sup> and identified the need for some additional critical inputs. That Plan was accepted by the CAED Council at its meeting held in Peradeniya in February 1980. Although the recommendations for increased inputs were modest, it was obvious at the time of this meeting that supplemental funding would be required to implement the Plan fully, largely due to the impact of inflation.

An analysis<sup>4</sup> of the budgetary implications inherent in the Plan of Implementation, completed in October 1980, was approved by the CAED Consortium Council which recommended to USAID that the needed supplemental funding be authorized. The GSL subsequently requested a supplemental grant to the Project, based on the above analysis. Unofficial notification was received in mid-December 1981 that a portion of the funds requested had been recommended by USAID, and was awaiting congressional approval.

The Project was approximately on target with respect to programmed inputs at the end of the year except for technical assistance that had to be reduced during 1981 due to uncertainties concerning availability of resources. End-of-year status, the current situation with respect to progress toward achieving Project objectives, and recommended modifications in the Plan of Implementation are presented in the sections which follow.

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\* see page 25 following Section 5.0 for footnotes.

## 2.0. Plans And Progress

Progress in 1981 was considered to be satisfactory, although technical assistance was curtailed as the result of uncertainties about the Project's financial situation. Achievements are presented below, and discussed in relation to Project Paper, Contract and Plan of Implementation projections.

### 2.1. Student enrollments

As stated in the PP, the Project purpose is "to double the annual number of indigenously trained B.Sc. graduates and triple the number of indigenously trained postgraduates by 1985." In quantitative terms, that implies an annual output by 1985 of 200 BSc graduates and about 72 postgraduates.

Historical records of enrollments and degrees granted by the Faculty and PGIA through 1980 were included in the Second Annual Field Office Report, and 1981 statistics are presented in Tables 1, 2 and 3 of this report. Student enrollments in both the Faculty and PGIA are now expected to increase somewhat more slowly than originally projected. Several factors will contribute to this slowdown.

2.1.1. Faculty of Agriculture. Two new Faculties of Agriculture, at Ruhunu University College in the South and Batticaloa University College in the East, have been established in Sri Lanka since the AED Project was formulated in 1977-78. Both are affiliated with and assisted by the Peradeniya Faculty, hitherto the only Sri Lankan institution offering training leading to the baccalaureate degree in agriculture. Progress toward achieving the Project purpose of doubling the annual number of indigenously trained BSc graduates is therefore now expressed in terms of the combined outturn of the three Faculties.

It is still projected that the Peradeniya FA intake will stabilize at about 200 students per year. However, the 130 students admitted in 1981 represent the maximum number that can be accommodated until planned expansion of the first year facility at Maha Illuppallama has been completed in 1984 or 1985. Of the 130 admitted in 1981, 119 registered for the course (Table 1).

As shown in Table 4, it is now projected that the combined annual intake of students into the three Faculties will be 250 - 275 by 1985, well above the number anticipated in the PP. It will probably be 1987 or 1988, however, before the annual outturn of BSc graduates reaches the projected 200.

2.1.2. Postgraduate Institute of Agriculture. Registrations in the PGIA (Table 2) continued at about the same level (59) as 1980. About 75 students have been admitted to the PGIA annually for the past two years. The discrepancy between admissions and registrations is due to the fact that Government-sponsored candidates still experience difficulty in securing releases from their departments.

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\* All tables are placed together, beginning on page 26.

Registrants for research degrees constituted 50 percent of the total postgraduate students entering the PGIA in 1981, continuing the trend toward research degrees reported last year. The lack of sufficient staff for research supervision will remain a serious constraint until staff return from training, with the consequence that admissions will have to be held down until that time. In the meantime, arrangements are being worked out with institutions such as IRRI and ICRISAT to enable PGIA candidates to undertake research in those institutions. Also, assistance in research supervision is being received from the ODA. Such arrangements will help to relieve pressure on local staff, and are expected to permit the PGIA to reach the projected outturn of 75 graduates by 1985 shown in Table 5.

## 2.2. Postgraduate Institute of Agriculture and Faculty of Agriculture programs

Upgrading the quality of undergraduate and postgraduate training in agriculture is of even greater importance than increasing enrollments, in the judgment of the PGIA and Faculty. Efforts towards achieving this objective continued to be directed along the lines described in the Second Annual Field Office Report.

2.2.1. Academic program. Far reaching revisions of the undergraduate curriculum and examination system were completed and approved by the Faculty in 1981. The revised syllabus and scheme of examinations will go before the University Senate for approval in early 1982. Major changes include: introduction of biology, chemistry, and mathematics in the first year, and biometry in the second through fourth years; revision of course contents; reduction of duplications; shift to a modified unit/course system in the fourth year; and more time made available to students for library work.

The decision of the Faculty to teach all fourth year courses in English was implemented beginning October 1981. Intensive English training for first year students will also be initiated during the 1981/82 academic year, with classes scheduled to commence in early January 1982.

Outlines of courses proposed for the new agricultural curriculum at Batticaloa were examined and approved by the Faculty. Detailed syllabuses are now being prepared by Batticaloa University College staff in consultation with academic departments of the Faculty.

In the PGIA, the Crop Science Board of Study undertook a review and revision of their postgraduate curriculum that should be completed by early 1982.

2.2.2. Research program. The shortage of senior staff to conduct and direct research continued to be a major constraint in development of the strong research program vital to the development of the PGIA and Faculty as premier institutions of higher learning in agriculture. This constraint will be relieved only as junior staff complete their training abroad and return to fulltime duty.

Lack of adequate space and facilities constituted another important constraint in the development of the research program. The space constraint will be relieved as the building program is completed, of which the new Agricultural Biology/Chemistry complex (see Section 2,3) will be a major component. Significant progress was made during 1981 in improving facilities at the Dodangalla (for crop research) and Mawella (for animal research) farms to facilitate field and production-oriented research, and further improvement is anticipated during the coming year. The equipment constraint was alleviated to a degree by the arrival of the first consignment of much-needed equipment in late 1981, and additional shipments are scheduled for arrival during 1982.

In this interim period, steps are being taken to prepare for management and coordination of an expanded research program as the above constraints are alleviated. A workshop and a course on agricultural research management are discussed in Section 2.2.3. It has not as yet proved feasible to implement the Faculty decision to create a position of research coordinator to facilitate internal research coordination due to the overload on present staff. It is now anticipated that this position will be filled in about 1983 as staff presently away for training begin to return in sufficient numbers to lighten workloads of senior staff.

The PGIA and Faculty continued to receive substantial support for research and development in addition to the GSL appropriation reviewed in Section 4.1. As shown in Table 6, support received in 1981 totaled Rs. 1,701,800, marginally more than in 1980. Another major grant expected last year had not yet been received at year's end, so will be included in the 1982 Annual Report. In addition to the above, the PGIA received research support and some equipment as part of ten studentships funded by ODA (U.K.) and two by INTSOY-FAO.

Outside support for longer range research also continued to develop during 1981.

Activation of an agricultural economics research unit in the Department of Agricultural Economics and Extension neared reality when IDRC (Canada) approved a research project. Formal notification was awaited as the year ended.

The Governments of Belgium and Sri Lanka approved a project on nitrogen fixation to be undertaken by the Department of Agricultural Biology. In addition to equipment and technical assistance to be received under that project, invitations were received to send a senior member of the Faculty to Belgium for a short term assignment and an assistant lecturer for PhD level training.

As a followup to the Second International Seminar on Winged Bean, the GSL accepted a proposal to establish an International Institute for Winged Bean. A site for the Institute was selected at Pallakelle adjacent to the Faculty's Dodangalla Experimental farm and the Kundasale Farm School. Staff of the Faculty were closely associated with arrangements for the Seminar and creation of the Institute, including selection of the site. If this Institute develops as planned, staff of several departments of the Faculty are expected to receive support for winged bean-related research.

Research support from the ODA (for postgraduate student research) continued and is likely to be extended. The Review Team commented favourably on the coordinated teaching and research program between the PGIA, ODA and Department of Agriculture, and recommended its expansion subject to availability of funds. This program has provided a prototype for other organisations to follow. NORAD (Norway), DANIDA (Denmark), the Netherlands Government, IRRI, and ICRISAT have all indicated willingness to support research leading toward PGIA degree. The Mahaweli Authority has also turned to such an arrangement for research into its area of interest. Such arrangements help to make PGIA teaching and research programs relevant to the needs of the country. In all, more than 25 studentships with research support components were sponsored by the above-cited organisations during 1981.

2.2.3. Outreach program. Institutionalization of the PGIA/Faculty outreach program will be possible only when staff have returned from training. By that time, present constraints of facilities will also have been alleviated to a large degree by equipment presently being procured under the Project. In the meantime, staff continued their active involvement in numerous outreach activities, some of which are described below.

PGIA/Faculty staff had key roles in planning and conducting the highly successful Second International Winged Bean Seminar held in Colombo in January. The Head of the Agricultural Biology Department served as National Chairman for that event.

Courses in agricultural extension were conducted for staff of the Departments of Animal Production and Health (2 courses), Agriculture (1 course) and Minor Export Crops (1 course).

A seminar/workshop on Agricultural Research Management was organized for young staff of the agricultural faculties of Peradeniya, Ruhunu and Batticaloa. A postgraduate course on the same subject will be offered in early 1982 for agricultural research workers in other organizations in the country.

A number of research studies were related to outreach programs, such as: a World Bank-assisted project to rehabilitate irrigation schemes, sponsored by the Ministry of Lands and Land Development; integrated district development projects in Mannar, Nuwara Eliya and Hambantota; and evaluation of the Agricultural Development Authority outputs in Kurunegala District, supported by the World Bank and sponsored by the Ministry of Plan Implementation. The Mannar District Plan was later published by ILO/ARTEP, Bangkok. Consulting assistance was provided to ARTI (Agrarian Research and Training Institute) for a study on the Rubber Rehabilitation Project, and, at the request of the Ministry of Plan Implementation, the PGIA Director served as chairman of the Research Panel on Food and Nutrition Planning.

The staff continued to be drawn upon to serve on numerous committees, sub-committees, panels, advisory bodies etc. A partial list of such bodies on which staff served during 1980 is presented below. (Although information has not yet been compiled for 1981, it will be similar to that of 1980.)

Ministry of Higher Education

Academic Syndicate of Ruhunu University College  
Advisory Board of Batticaloa University College  
Academic Syndicate of Institute of Workers Education  
Several Selection Committees

Ministry of Education

Committee on Parallel Education in Vocation Streams

Ministry of Agricultural Development and Research

Committee on proposed Agricultural Research Council  
National Committee on Seed and Planting Materials  
Mahaweli Research Committee  
Canada-Sri Lanka Dry Zone Project Committee  
Soyabean Development Committee  
Committee on 2nd International Seminar on Winged Bean  
National Mechanization Committee  
Seed Production Committee  
Education and Training Committee  
Board of Governors of Agrarian Research and Training Institute  
Several Selection Committees

Ministry of Industries and Scientific Affairs

Committee on Agricultural Sciences of the National Science  
Council  
Panel of Plant Sciences of the National Science Council  
Committee on Agriculture of the Atomic Energy Authority  
Bureau of Standards Committee

Ministry of Lands and Land Development

National Committee on Village Tank Rehabilitation

Ministry of Rural Industries Development

Board of Directors of Oils and Fats Corporation  
Pasture Committee

Ministry of Plan Implementation

Fact Finding Committee on Problems of Animal Feed

Ministry of Plantation Industries

Board of Governors of National Institute of Plantation  
Management

In addition to the activities described above, the Faculty and PGIA continued to maintain links with Ministries and Departments of Government and Universities in Sri Lanka and abroad, as well as with foreign agencies that assist in teaching and research. The faculty drew upon the resources of other institutions to train undergraduate and postgraduate students. Many officers served as Visiting Lecturers, others supervised undergraduate and postgraduate research studies and the directorates readily offered their facilities for student training.

### 2.3. Facilities development

The buildings and improvements projected in the eight year plan for phased development of the agricultural subcampus will be more comprehensive and more nearly meet the needs of the PGIA/Faculty than those identified in the PP. The end of year status with respect to development of facilities on and off campus is summarized below:

#### 1) Completed

- \* Demolition of old plant houses, poultry shed and rear section of house occupied by the University Registrar to prepare site for new Agricultural Biology/Chemistry complex.
- \* New septic tank, kitchen and toilets in Registrar's house to replace sections demolished.
- \* Site preparation for Agricultural Biology/Chemistry complex.
- \* Remodeling of room in PGIA building to house micro-computer system.
- \* Remodeling and improvement of laying hen unit.
- \* Construction of broiler unit, battery cages and slaughter house on Mawella farm.
- \* Construction of additional fish ponds at Mawella.
- \* Phase I of dairy unit at Mawella, including biogas production unit.
- \* Renovation at Maha Illuppallama to provide library room, laboratory, workshop, and staff cubicles.
- \* Shed for tractor, implements and van storage at Maha Illuppallama.
- \* Construction of main irrigation flow channel to field plots for instruction at Maha Illuppallama.

## 2) Underway

- \* Evaluation of tenders for new Agricultural Biology/Chemistry building.
- \* Preparation of plans for headhouses, greenhouses and insectories for Agricultural Biology/Chemistry.
- \* Preparation of plans for remodeling old Agricultural Biology building.
- \* Renovation of Crop Science building.
- \* Construction of plant and potting shed at Dodangolla farm.
- \* Award of tenders for construction of student dormitory at Dodangolla (to permit students to stay at farm during weekends and vacation periods for additional practical training).
- \* Improvements to livestock units at Mawella.
- \* Renovation of milkers' quarters at Mawella.
- \* Construction of staff house, wall around hostel, incinerator, and drying floor cum basketball court at Maha Illuppallama.

## 3) Planned

- \* Completion by 1984-85 of upgraded and expanded facilities at Maha Illuppallama.
- \* Construction to be underway before 1985 of:
  - new Animal Science building and ancillary facilities,
  - new Agricultural Engineering workshop,
  - addition to Agricultural Economics building.
- \* Advanced stage of planning by 1985 for new library/classroom/administration complex.
- \* Continuing new construction and development at Mawella, Dodangolla, and Meewatura farms.

Construction and improvements planned for the future will be contingent upon availability of funds for capital development.

## 2.4. Staff training and development

The PGIA and Faculty have given top priority to staff training and development in their plans for development of their institution. The principal contribution projected under the Project in this area is postgraduate training to the PhD level of up to 38 junior staff members. In addition, a small increment of support is projected under the Contract for adding to the value of staff trips funded from other sources through permitting them to extend the length of such trips for specific professional improvement purposes.

2.4.J. Postgraduate training abroad. Ten Assistant Lecturers entered PhD training under the Project during the year (one in January, three in March and six in August/September) to bring the total number of participants to 38, the full complement specified in the Contract (see Table 7). Plans for sending two more, projected in the PI, were abandoned due to the critical funding situation.

Four of the participants arrived back in Sri Lanka at the beginning of the year to undertake their dissertation research, and a fifth returned in December (Table 8). After some initial adjustment problems, the first four returnees made satisfactory progress on their research during the year. One, Mr. C. Bogahawatte, completed his research and returned to Texas A & M in July to finish the requirements for his PhD degree. He completed his degree work, successfully defended his dissertation, and was expected back in January to assume fulltime duties in the Department of Agricultural Economics and Extension. The other three were on schedule at the end of the year. The fifth returnee was expected to initiate his dissertation research in early January 1982.

One of the returnees, Miss B. Dayawathie, benefited greatly from a brief visit to Sri Lanka in November by her major advisor. His report of that visit again highlighted the need for careful selection and early involvement of local advisors, and for on-site visits by major advisors (U.S.) during the dissertation research period. These needs were discussed at length during the CAED Consortium Council meeting held at Peradeniya in October (see Section 2.8.4). Both Sri Lankan faculty and U.S. representatives strongly endorsed the principle of utilizing as much of the remaining available technical assistance as is necessary for the latter purpose (see Section 2.5).

The Chief of Party interviewed nearly all participants and their advisors during visits to the three Consortium University campuses in July. A major objective of those interviews was to update projected training completion dates. As presently projected, the training of several will extend into 1986. If these projections are accurate, a request for extension of the PACD will be required. This was obviously a source of serious concern, and the U.S. members of the Consortium Council agreed to work with the trainees and their advisors to accelerate the participants' programs as much as possible without unduly sacrificing the quality of training received.

Support for staff training abroad was also received from a number of other donor agencies, including:

- 1) British Council: 4 PhD scholarships for assistant lecturers (2 in Agricultural Engineering and 1 each in Agricultural Biology and Animal Science);  
4 additional scholarships are expected in 1982.
- 2) Japan: 1 MSc scholarship for an agricultural teaching assistant.
- 3) New Zealand: 1 scholarship for postgraduate diploma followed by MSc for an agricultural teaching assistant.

- 4) Belgium                    1 PhD scholarship for assistant lecturer in Agricultural Biology; nominee has been selected, but is not yet in training.
- 5) France:                    1 PhD scholarship associated with a project for support of energy research.
- 6) East-West Centre        a scholar doing his PhD in agronomy under an in Hawaii (U.S.): East-West Centre scholarship was recruited during the year to fill a vacant position in Crop Science.

2.4.2. Travel extensions.        The PGIA Director authorized five travel extensions during the year, of which four were utilized. The details are given in Table 9. Reimbursement was limited to subsistence and lodging in accordance with the terms of the Contract.

## 2.5. Technical assistance

As shown in Table 10, approximately 42 p.mos. of technical assistance were provided to the PGIA and Faculty during 1981.<sup>9</sup> This represented a drop of about 10 p.mos. from the level of 1980, and was some 21 p.mos. less than projected for 1981 in the Plan of Implementation.

Three major factors contributed to the decrease. First, and of greatest significance, the continuing uncertainty as to whether or not the additional funds required to implement the PI in its entirety (see Section 4.2) would be authorized by USAID made it necessary to restrict technical assistance assignments to those of highest time priority. It was anticipated that other assignments projected for 1981 would be rescheduled later in the Project, depending upon the availability of resources. Second, a few assignments required rescheduling to coincide with the return of participants for dissertation research. Third, due to difficulties encountered in identifying an entomologist who could be available in mid-1981 as projected, the Department of Agricultural Biology requested that the assignment be deferred for one year.

Based on feedback received from USAID in September and October, it appeared unlikely that the entire amount requested through the Plan of Implementation and follow-up documents would be forthcoming. Therefore, a preliminary estimate of the LOP level of effort that would be possible provided approximately half of the requested additional funds should be authorized was developed for discussion. That estimate was reviewed by the PGIA Academic Coordination Committee, and a tentative projected redistribution among departments and areas of specialization was prepared. These revised estimates were considered at length, and approved with some modification, by the CAED Consortium Council during its October 20-21 meeting at Peradeniya. They will, of course, be subject to further modification as the funding situation is clarified.

Current projections, given in Table 11, differ in several important aspects from both the Contract and Plan of Implementation:

- 1) the revised LOP projection has been decreased to approximately 218 p.mos. in contrast to Contract and Plan of Implementation projections of 269 and 284, respectively;
- 2) no new long term assignments are projected;
- 3) virtually all remaining projected technical assistance assignments are linked at least partially to the return to Sri Lanka of participants for dissertation research--most other projected assignments have been eliminated;
- 4) projected timing of some assignments has been altered to coincide with anticipated dates of return of participants for research.

These revised projections represent the considered judgement of the PGIA Director, Dean and Faculty as to how the limited amount of technical assistance still remaining can be used most effectively in contributing to the development of the PGIA and Faculty. The new projections reflect their strong convictions that staff training is of top priority, and that on-site research supervision by the participants' major advisors is a critically important part of that training. The U.S. members of the CAED Consortium Council concur in that assessment.

The consequences of currently projected reductions in technical assistance are difficult to quantify. Although it is deemed possible to achieve Project objectives in large part even at this reduced level of effort, the following specific consequences must be anticipated:

- 1) work on curriculum development and course content preparation will be less than expected;
- 2) assistance in research planning, development and coordination will be reduced significantly;
- 3) outreach program development will suffer substantially;
- 4) some key courses in the PGIA cannot be offered during the next three years;
- 5) it is possible that student enrollment ceilings may have to be lowered.

In short, there will be important identifiable consequences of reducing the technical assistance input to the extent projected in Table 11. It is hoped that at least a portion of what has been deleted at this stage of planning can be restored when the funding situation has been clarified.

Other donor agencies now are expected to provide approximately 15 person years of technical assistance to the Faculty/PGIA during the Project period (1979-85) in addition to that provided under the AED Project. These will be about as projected in the 1980 report with the exception that the earlier anticipated ADC-supported agricultural economist will apparently not materialize. Other donor assistance will be complementary to that provided by the AED Project, and in no way duplicative.

## 2.6. Library development

One thousand two hundred ninety two books and 138 periodicals were added to the PGIA/Faculty of Agriculture library during 1981, bringing the total collection to approximately 13,000 and 2,138, respectively. (Tables 12 and 13). Of these, 750 books and 40 periodicals were provided through the Project, and nearly 1000 additional titles were in the approval and/or procurement process or enroute to Sri Lanka as the year ended.

With the arrival of much-needed equipment in late October, particularly the card catalogs which were made functional almost immediately, it was possible to improve library services noticeably. With a microfiche reader now available and a microfilm reader on order, it is anticipated that acquisition of backfiles on fiche or film will be undertaken in 1982.

Identification of titles to add to the library collection and preparation of orders became more systematized with the availability of Current Contents and other sources of information on new publications. Also, a number of the participants in training at the Consortium universities responded to requests for lists of references relevant to their fields of study that should be in the library. Requests for purchase of additional titles were received from the librarian about every three months, with each request comprised of 300-400 titles.

## 2.7. Commodity procurement

Procurement of equipment authorized under the Project continued to receive major attention during 1981, culminating on 28 October in delivery of the first major consignment to Peradeniya.

The longstanding problem concerning procedures to be followed with respect to duty free entry of such commodities, for which eligibility was specified in the Project Grant Agreement, was resolved in April. Problems associated with increased costs of most equipment items, inadequate specifications, requests received from Departments for items not of U.S. manufacture, and logistics were for the most part resolved during the year with the purchasing and shipping agents. Approval was granted by USAID for purchase of additional items not included in the original equipment request lists, most of which had been purchased by the end of the year.

Permission was received for local purchase of a U.S.-made TRS-80 Model III computer system (this system, equipped for 220v 50 Hz operation, was not available for purchase in the U.S.). The system was delivered to the PGIA in mid-October, and a course in its operation was given to interested PGIA/Faculty staff by the local distributor.

The first major consignment of equipment procured in the U.S. arrived at the Port of Colombo 18 October, and was delivered to Peradeniya on the 28th. The total value of equipment in this shipment, which included items for all

departments, was more than US\$250,000. By the end of the year, all the equipment had been inventorised, checked for damage, distributed under provisional title transfer to the Departments for which procured, and final title transfer documents were being prepared. Second consignment is to be shipped from the U.S. in early January, with arrival in Sri Lanka expected by mid-February.

As of 10 December, expenditures for equipment for the Departments (excluding the ten jeeps purchased earlier) had been as shown in Table 14. Total expenditures as of that date (\$415,702.71) represented about 60% of the total net equipment allocation (\$692,307) authorized in Appendix A of the Contract. The estimated cost of equipment still in the procurement process was expected to bring total expenditures for four departments and the library to near the limits allocated for each. Additional requests for those Departments will be submitted for approval as soon as the actual amount remaining in their allocations can be determined. It is anticipated that larger requests for Agricultural Economics & Extension, Animal Husbandry, and Experiment Farm Development will be submitted in early 1982.

The sharp increase in equipment prices since 1979 was a source of serious concern, due to its impact on the amount of much needed equipment that can be purchased with funds currently authorized for this purpose.

Mobility constraints of the Faculty were further alleviated during the year by acquisition of a nine-passenger van and two motorbikes, funded by the GSL and another donor, respectively. In addition, an order was placed for a twin-cab pickup for the Maha Illuppallama unit, utilizing GSL-provided funds.

A number of smaller equipment items were also obtained with other donor support as part of the research and development grants and studentships reported earlier in Section 2.2.2.

## 2.8. Administration and management

The Project benefited from continuity in key administrative staff during the year in both Sri Lanka and the U.S. (The only major exception was a change in Consortium Coordinators). The Annual Consortium Council meeting, held at Peradeniya in October, was particularly crucial due to the serious resource situation.

2.8.1. Postgraduate Institute of Agriculture staff position. The PGIA cadre and number of filled positions remained relatively stable through 1981 as shown in Table 15, with three notable exceptions. The positions of assistant bursar, office machine operator and driver (2) were inadvertently omitted from approved estimates for 1981. The UGC has since agreed to reinstate the assistant bursar position, and the other positions have already been reinstated.

Two significant personnel changes are anticipated in early 1982. The PGIA Director, Prof. T. Jogaratnam, will be on sabbatical leave for six to twelve

months beginning in January; Dr. Meryyn Thenabadu, Head of Agricultural Chemistry, has been designated to serve as Acting Director during Prof. Jogaratnam's absence. The Senior Assistant Registrar, Mr. R.S. Rajapakse, received notice of transfer out of the PGIA effective 1 January 1982; his replacement has been also named and is expected to assume position as of that date.

2.8.2. Faculty of Agriculture staff position. The Faculty cadre and number of filled positions likewise remained reasonably constant during 1981 (see Table 16). The Assistant Registrar position still remained vacant, but it is hoped that this position may be filled in early to mid 1982. Of a total of 253 positions in the cadre, 212 were occupied as of December 1981.

2.8.3. Project Field Office staff position. The Chief of Party remained in position throughout the year. Several changes in support staff were effected during 1981, however, as the result of the death of the Project Secretary, and resignation of the Administrative Assistant and one driver. Also, after reassessing the workload of the Field Office and consulting with and receiving concurrence from the PGIA and USAID/SL Directors, the Contractor provided a Program Assistant to the Field Office from February onward. The level of national support staff input to date in relation to the LOP projections in the Contract is indicated in Table 17.

2.8.4. CAED Consortium Council Meeting. The fourth meeting of the Council was held at Peradeniya on 20-21 October in the PGIA Board Room. Council representatives attending from the U.S. included the Deans of Agriculture from the three Consortium universities, and the Executive Vice President/International Division Director of the Academy for Educational Development. Sri Lanka representatives included the FA Dean, PGIA Director, Department Heads, senior Faculty members and expatriate Project staff. The USAID Mission was represented by the Chief, RRD, and a member of his staff. In addition to the foregoing, the University Grants Commission Chairman, Acting USAID Mission Director and University of Peradeniya Vice-Chancellor participated in the opening session.

Working sessions of the meeting were directed toward reviewing progress and problems to date, and planning for the future of the Project. Financial implications figured prominently in the discussions. The minutes of the meeting are attached as Appendix A.

The U.S. representatives, PGIA Director and Chief of Party met with the Acting USAID Mission Director and his staff following the Council meeting to report on the meeting and discuss issues of mutual interest and concern. The Council members were pleased to have the opportunity for this far-reaching discussion, and were gratified by the Mission's expression of strong support of the Project.

2.8.5. Campus visits. The Chief of Party visited each of the Consortium University campuses in July while in the U.S. for home leave and associated

Project activities. Nearly all participants and their major advisors were interviewed during these visits (see Section 2.4.1). In addition, various administrative and scheduling questions were discussed with the campus coordinators and other University administrators. Seminars on the Project were presented to interested faculty and participants at Penn State and VPI.

The PGIA Director and FA Dear did not visit the Consortium universities in 1981 due to the tight financial situation.

2.8.6. Key USAID, Contractor and PGIA/Faculty personnel. As indicated earlier, key personnel turnover was minimal during the year. Dr. James Bonner, Chief RRD, served as USAID/SL Project Officer during the entire year, and continuity in the Chief of Party slot was maintained by Dr. Howard E. Ray.

Mr. William Garvey, Consortium Coordinator in the Contractor's home office, was forced to leave that position in mid-year for health reasons (he was also out early in the year for the same reason, during which time Mr. Peter Boynton served as Acting Coordinator). Ms. Barbara O'Grady, long time AED staffer, served as Acting Coordinator after Mr. Garvey's departure until confirmed in that position by the CAED Consortium Council at its October meeting.

All key administrative staff in the PGIA and Faculty of Agriculture remained in position throughout 1981. Significant changes are anticipated during the coming year, however. Prof. T. Jogaratnam, PGIA Director, accepted a visiting professorship at VPI for six (possibly 12) months beginning in early January 1982. Prof. Y.D.A. Senanayake, Dean of Agriculture, expects to accept a similar position at Penn State beginning in mid 1982. Mr. R.S. Rajapakse, PGIA Senior Assistant Registrar, received notice of permanent transfer out of the PGIA, effective 1 January 1982. These potential changes in key personnel, with departure dates coming in such quick succession, were a source of concern as the year ended.

## 2.9. Project Planning

As discussed elsewhere, future planning and scheduling of Project inputs were seriously hampered by continuing uncertainty as to the ultimate level of funding to be made available to the Project as the U.S. contribution. In the interim, the rate of expenditure was held to the minimum consistent with maintaining highest priority assistance at an acceptable level.

Preliminary estimates were developed of input levels that would be possible at different levels of resource availability. It was agreed at the Consortium Council meeting and follow-up sessions with USAID/SL that inputs should be held at a level consistent with currently obligated funds until notification is received as to the quantity of supplemental funds to be authorized.

### 3.0, Project Reports

Nineteen reports of various types were prepared in the Project Field Office during 1981, and are listed in Table 18. In addition, technical assistance staff authored or co-authored a number of research reports and papers in conjunction with their work in the Departments to which assigned, and developed class notes for courses taught.

The Second Annual Field Office Report was prepared jointly by the PGIA Director, Dean and Chief of Party, and quarterly reports by the PGIA Director and Chief of Party. Authors of other reports were as shown in Table 18. Monthly progress reports could not be prepared during the first quarter due to pressure of other Project activities.

The distribution list for Project reports included the PGIA Director, Dean of Agriculture, University of Peradeniya Vice Chancellor, University Grants Commission Chairman, Heads of all FA Departments, PGIA, Library, USAID/S.S., Consortium Coordinator, and the three CAED Consortium universities.

#### 4.0. Project Funding

The extent and nature of currently anticipated GSL and U.S. contributions, and their implications for the Project, are discussed below. It is still anticipated that the total GSL contribution will significantly exceed that committed in the Project Grant Agreement. At the level of supplemental funding recommended by USAID/SL in late December, some reduction in the U.S.-provided inputs below those projected in the Contract appears unavoidable.

##### 4.1. Government of Sri Lanka contribution

Projected GSL Life of Project contributions to the AED Project, revised in December 1981, are presented in Tables 19, 20 and 21. The revised figures are scaled downward slightly from those of late 1980, reflecting the present and anticipated economic situation in Sri Lanka.

The revised LOP operating budget for the PGIA is now projected at Rs.7,615,000, down from Rs. 7,787,000 in the 1980 projection, but still above the Rs.7,581,000 projected in the Project Grant Agreement. GSL appropriations for the PGIA are decreasing over time as other sources of PGIA operating funds increase (from tuition, fees, overhead on research grants, etc.). As will be noted from Table 19, "other source" income is now projected at Rs. 500,000 annually from 1981 onward. If present trends continue, income from such other sources may well exceed this amount in later years of the Project.

The revised projection of LOP expenditures by the Faculty shows a somewhat greater decrease to Rs.41,593,000 amounting to Rs. 3,151,000 less than anticipated in the 1980 projection. It is still 54 percent greater than anticipated in the Project Grant Agreement, however, and can expect to be further supplemented by support received from other Government Ministries and Departments and donor agencies as discussed in Section 2.2.2. Continuation of present trends with respect to such outside support may possibly result in actual Faculty expenditures at nearly the level projected a year ago.

Capital grants received by the Faculty of Agriculture through 1981 were greater than projected a year earlier and are consistent with those projected through 1982. Due to uncertainties associated with the current overall economic situation, however, approval of appropriations for construction of a new animal science building and an extension to the agricultural economics building, and for expansion of the Maha Illuppallama unit have not yet been received, giving rise to some concern.

In summary, total Sri Lanka support to the Project is now projected at Rs. 86,467,000, 68 percent greater than anticipated in the Project Grant Agreement. This does not include expenditures on services met from other University funds or the present facilities and equipment for which no value has been determined.

#### 4.2. U.S. contribution

An updated analysis was made in mid-1980 of projected LOP costs, based on the detailed Plan of Implementation prepared in early 1980 in conformance with the terms of the Contract. As shown in Table 22, that analysis revealed that supplemental funds amounting to about \$2.39 million would be required in addition to the presently obligated \$6.0 million in order to meet all needs identified in the Plan of Implementation. A number of factors contributed to the projected increases.

Inflationary factors were responsible for more than three quarters of the projected increases. The PP assumed inflation at the rate of 10 percent of the base year per year whereas overall annual inflation rates have been approximately 14 percent with costs of some inputs increasing even more rapidly. The Project was approximately eight months later in getting underway than projected in the PP, adding additional time for inflation to take its toll. The PP assumed that most technical assistance would be provided in 1979-81. This was revised in the PI to provide the major part of the technical assistance later in the Project when participant trainees will be doing their dissertation research in Sri Lanka, and to conform with developmental needs of the PGIA and Faculty. It was assumed in the PP that all participants would enter training in 1979 and 1980 whereas departures were distributed over three years as projected in the PI in order to permit selection of top quality candidates for all training slots.

In short, increased inflation impact has resulted primarily from the combination of annual inflation rates significantly higher than those projected in the PP and redistribution of technical assistance and some training into later Project years.

A modest increase in level of effort was projected in the 1980 Plan of Implementation as the result of an in-depth reassessment of needs carried out jointly by the PGIA, Faculty and Contractor in late 1979. That component, recommended to provide the assistance needed to achieve the Project's original purpose, accounted for slightly less than a quarter of the total increase projected in the P.I.

The CAED Consortium Council unanimously approved the Plan of Implementation at its November 1980 meeting and subsequently recommended to USAID that supplemental funds in the amount described above be approved for the Project. The GSL followed up in early 1981 with a request to USAID/SL for the additional funds.

The USAID/SL Mission studied the Plan of Implementation and updated cost analysis at length during 1981 and, in September, requested the PGIA Director and CAED Chief of Party to make an in-depth presentation of the Project situation and needs. At the time of that presentation, the Acting Mission Director expressed support for the Project, but indicated that lack of available funds would make it extremely difficult to obtain supplemental funding in the amount requested.

In mid-December, the Project received informal notification that a quantum of supplemental funding had been recommended by USAID/SL for which they were awaiting Congressional approval. The amount approved will apparently be substantially less than what had been requested, however.

Although the anticipated increase should enable the training component of the Project to be completed in its entirety, and should alleviate a portion of the expected shortfalls for other components, it will probably not permit the Project to meet all commitments fully. The implications of such a shortfall are discussed earlier in sections dealing with the various Project components.

#### 4.3. Other donor contributions

One of the concepts underlying planning of the AED Project was that development assistance to the PGIA and Faculty would be distributed among several donor agencies, although the AED Project would provide the largest increment. This pattern has been followed successfully. Other donor support has continued to increase, particularly for support in the areas of research, facilities development, studentships for training of postgraduate students in the PGIA, and technical assistance. Significant support for postgraduate training of junior staff has also been received from other donors, although at a somewhat lower level than earlier anticipated.

Support provided by other donor agencies is described more fully in the sections dealing with specific program and Project components.

## 5.0. Recommendations

The Agricultural Education Development Project has now been functioning for two and a half years. Approximately four years have elapsed since the PP was prepared in early 1978, nearly three years since negotiation of the Contract in early 1979, and two years since preparation of the detailed Plan of Implementation. As must be anticipated in every long term plan for assistance in the development of institutions such as the PGIA and Faculty of Agriculture, the evolving situation mandates certain adjustments in programming to continue to meet the development needs of the institution most appropriately within limitations of resources available.

Institutional development is a dynamic process in which many factors, internal and external, may influence the rate of progress and priorities of need at any given point in time. In the case of the PGIA/Faculty and the potential contribution of the AED Project toward their development, such factors have included: the establishment of two new faculties of agriculture in the country; the nature and extent of assistance received from other donors; changes in the nature of demand for postgraduate training in agriculture; changes in senior academic staff; changes in types and extent of facilities required to meet program needs adequately; changes in the time required to complete certain activities; and, of overriding concern, the present critical resource situation resulting from higher than anticipated rates of inflation and the present overall Sri Lankan economic situation.

Projected impacts of factors such as those cited above were assessed during preparation of the detailed Plan of Implementation in early 1980 and adjustments made as appropriate to enable the Project to continue to contribute most effectively toward achievement of Project purposes and objectives. That Plan was followed in October 1980 with a more detailed analysis of the PI in relation to outputs projected in the PP and of the implications for total Project costs associated with full implementation of the PI.

The PGIA/Faculty and Project situation continued to change somewhat during 1981. Pre-eminent among factors contributing to those changes was notification that only a portion of the additional funds identified in the October 1980 analysis as being required to complete the Project in accordance with the PI would likely be forthcoming. The present report consequently projects assistance and accomplishments based on a reduced level of additional funding, and discusses the implications of such reductions.

It is obvious that, with currently projected resource constraints, some modifications in original Project purpose and projected levels of inputs and outputs should now be considered to enable the Project to contribute most effectively to the development of the PGIA and Faculty.

It is recommended that:

5.1, Student enrollments (Sections 2.1.1 and 2.1.2)

- 1) the stated purpose "to double the annual number of indigenously trained BSc graduates, , by 1985" be modified as follows: "to increase the combined annual intake of undergraduate students by all Faculties of Agriculture in Sri Lanka to 250 by 1985, with the expectation that the annual number of BSc graduates will be increased to 225 by 1988."
- 2) the stated purpose "to, . , triple the number of indigenously trained postgraduates by 1985" be modified as follows: "to increase the annual number of postgraduates to 75 by 1985."

5.2 Facilities development (Section 2.3)

- 1) the campus and experiment farm development plans projected in the PI, more comprehensive than PP projections, be accepted as guidelines in lieu of PP input and output projections. (Outputs will be completed with a total investment substantially in excess of projected inputs, although due to the present Sri Lankan economic situation, it is now unlikely that planned development will remain on the original schedule.)
- 2) the time schedule for facilities development be revised to be consistent with present plans and progress.

5.3 Postgraduate training abroad (Section 2.4.1)

- 1) the training component of the Project be awarded highest priority, and adjustments in line item allocations be made as necessary to permit completion of training to the PhD level of all participants maintaining satisfactory academic performance.
- 2) the authorized number of participant trainees remain at 38 instead of being increased to 40 as projected in the PI.
- 3) the PACD (Project Activity Completion Date) be extended to permit all participants to complete their training to the PhD level, with the last participant to complete by December 31, 1986.

5.4 Travel extensions (Section 2.4.2)

- 1) a small increment of support remain in the budget to permit continuation of this important contribution toward professional development of senior staff.

5.5 Technical assistance (Section 2.5)

- 1) a revised LOP input of technical assistance be established with level to be determined by the quantum of funds ultimately made available to the Project. (The revised LOP input will almost certainly be less than the 22 person-years projected in the PP due to overall impact of inflation and the priority given to the training component.)
- 2) the number of long term people be reduced to three from the seven projected in the PP.
- 3) remaining projected technical assistance assignments be linked to the return of participants for dissertation research to the extent necessary to ensure that adequate research supervision is provided.
- 4) scheduling of remaining technical assistance assignments be adjusted as necessary to accomplish recommendation 3) above.
- 5) the Chief of Party position be extended through 1982, with follow-up assignments increased from those projected in the PI to the extent permitted by availability of resources, in recognition of the need for continuity of such support for achieving Project objectives, and to provide continued assistance in the areas of outreach and academic planning.

5.6 Library development (Section 2.6)

- 1) the goals for books, journals and backfiles to be provided under the Project be reduced in accordance with decreased purchasing power caused by inflation.
- 2) additional funds be provided in the library acquisition line item allocation to offset inflationary impact at least partially.

5.7 Commodity procurement (Section 2.7)

- 1) additional funds be provided in the equipment line item allocation to offset inflationary impact at least partially, with flexibility to adjust individual departmental allocations in accordance with priorities of need.
- 2) the GSL be encouraged to seek support elsewhere for acquisition of needed vehicles in the event it cannot meet the full complement called for in the Project Grant Agreement from its own resources.

5.8 PGIA staff (Section 2.8.1)

- 1) the position of assistant bursar be reinstated in the PGIA staff cadre.

- 2) all vacant positions, including the above, be filled soon with qualified people.

5.9 Faculty staffing (Section 2.8.2)

- 1) all vacant positions be filled soon with qualified people, with top priority given to filling the assistant registrar position.

5.10 Consortium Council Meeting (Section 2.8.4)

- 1) the 1982 meeting of the CAED Consortium Council be scheduled at Texas A & M University in November 1982 as agreed at the last meeting of the Council.

5.11 Campus visits (Section 2.8.5)

- 1) sufficient funds be provided to permit the PGIA Director and the Dean of the Faculty of Agriculture (Project Director and Co-Director, respectively) to make an administrative visit to Consortium university campuses and the Contractor's office in Washington annually through at least 1984.
- 2) the above visits be scheduled to coincide with the timing of the CAED Consortium Council meeting in years in which it is held in the U.S.

5.12 Project Funding (Section 4.0)

- 1) the GSL be requested to provide support to the Faculty and PGIA at the levels projected in the Second Annual AED Project Field Office Report.
- 2) the USAID be requested to provide another increment of funds to the Project, in addition to those presently anticipated, to permit its complete implementation as projected in the PI.
- 3) the PGIA and Faculty continue to seek assistance from other donor agencies to supplement that provided through the AED Project in meeting the development needs of the institution.

Concurrence by the GSL and USAID in the above recommendations is respectfully requested.

## Footnotes

- | <u>Text</u> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>page</u> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2           | <sup>1</sup> Agricultural Education Development Project, February 1980, First Annual Field Office Report (April-December 1979) and Plan of Implementation, Parts Two and Three.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2           | <sup>2</sup> Ibid, Part Four.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2           | <sup>3</sup> Agency for International Development. April 1979. Negotiated Contract No. AID/ASIA-C-1397, Appendix A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2           | <sup>4</sup> Agricultural Education Development Project. October 1980, Quarterly Report Q80-3 (July - Sept. 1980).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3           | <sup>5</sup> See Report Q80-3, page 4, for a discussion of how these annual output numbers are determined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 3           | <sup>6</sup> Agricultural Education Development Project. May 1981, Second Annual Field Office Report (January-December 1980).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3           | <sup>7</sup> At the time the PP was prepared, a plan had been developed and funds approved for construction of facilities needed to bring the Maha Illuppallama unit's capacity to 200 students. Therefore, M.I. was not included in the request for assistance. Although advertised for tenders several times, construction could not be undertaken as no qualified contractors could be interested in that relatively small job in a somewhat isolated area. The University then undertook the work using its own maintenance department, but could not complete it. As the consequence, it has been necessary to request new funding for which a more comprehensive plan had been developed. |
| 8           | <sup>8</sup> See H. James Miller. July 1980. Facilities Planning (3), AED Project Report No. EOT80-10.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 11          | <sup>9</sup> Activities of technical assistance staff are described in the Monthly, Quarterly and End of Tour Reports listed in Table 18.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 19          | <sup>10</sup> Informal agreement for this re-distribution was reached by the PGIA, USAID and the Contractor during Contract negotiations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

Table 1. Degrees granted in 1981 by Faculty of Agriculture and under-graduate enrollment for 1981-82 academic year.

BSc degrees granted, 1981	Number of students currently enrolled				
	1st year	2nd year	3rd year	4th year	Total
86 <sup>a</sup>	119 <sup>b</sup>	126	113	114	472

<sup>a</sup> Final examination results still pending for 23 additional potential graduates.

<sup>b</sup> 130 were admitted, but 11 did not register.

Table 2. Admissions, registrations, and postgraduate degrees granted in 1981 and cumulative since establishment of the Postgraduate Institute of Agriculture.

Degree	No. admitted			No. registered			No. degrees granted		
	Prior 1981	Total		Prior 1981	Total		Prior 1981	Total	
MSc	159	32	191	121	29	150	78 <sup>a</sup>	13	91
MPhil	73	40	113	56	27	83	7	9 <sup>b</sup>	16
PhD	28	3	31	20	3	23	6	3 <sup>a</sup>	9
TOTAL	260	75	335	197	59	256	91	25	116

<sup>a</sup> One student had passed oral examination, but had not submitted bound copies of thesis as required for completion of degree.

<sup>b</sup> Five students in same situation as (<sup>a</sup>) above.

Table 3. Postgraduate degrees granted to date by each Postgraduate Institute of Agriculture Board of Study, and 1981-82 registrations.

	Crop Science	Agric, Chem,	Agric, Bio,	Ag,Econ & Extn,	Animal Husb.	Agric, Engg.	Total
<u>Degrees granted:</u>							
MSc							
Prior	12	9	15	21	15	6	78
1981	3	3	4	3	0	0	13
Total to date	15	12	19	24	15	6	91
MPhil							
Prior	2	1	4	0	0	0	7
1981	1	3	2	0	0	3	9
Total to date	3	4	6	0	0	3	16
PhD							
Prior	4	1	0	1	0	0	6
1981	1	0	1	1	0	0	3
Total to date	5	1	1	2	0	0	9
<u>Total, all degrees granted:</u>							
Prior	18	11	19	22	15	6	91
1981	5	6	7	4	0	3	25
Total to date	23	17	26	26	15	9	116
<u>Number currently registered:</u>							
MSc	3	8	9	15	9	9	53
MPhil	12	3	18	18	5	9	65
PhD	4	0	4	4	1	1	14
Total	19	11	31	37	15	19	132

Table 4. Projected 1985 undergraduate enrollments in Sri Lankan Agricultural Faculties, (Sec. 2.1.1)

Class/degree	Projected for 1985			
	Peradeniya	Ruhunu	Batticaloa	Total
<u>Class</u>				
1st year	200	25 <sup>a</sup>	25	250 <sup>b</sup>
2nd year	130	25 <sup>a</sup>	25	180 <sup>c</sup>
3rd year	130	25	25	180
4th year	<u>130</u>	<u>25</u>	<u>25</u>	<u>180</u>
TOTAL	590	100	100	790 <sup>d</sup>
<u>BSc degrees to be granted</u>	115	22	22	159

<sup>a</sup> Intake may increase to 50 after completion of current building construction.

<sup>b</sup> If Ruhunu intake increases to 50, the total will rise to 275.

<sup>c</sup> If Ruhunu intake for this year has been increased to 50, the total will rise to 205.

<sup>d</sup> If Ruhunu enrollment of 1st and 2nd year students should be increased to 50, the total enrollment of undergraduates at the three campuses will rise to 840.

Table 5. Postgraduate Institute of Agriculture projections for 1985, (Sec. 2.1.2) as updated December 1981.

Degrees	Projected for 1985	
	Registrations	Degrees to be granted
MSc	30	30
MPhil	50	40
PhD	10	5
TOTAL	90	75

Table 6. Research and development grants received by the Faculty of  
(Sec. 2,2,2) Agriculture and Postgraduate Institute of Agriculture in 1981.

Source	Rs.
Ministry of Agricultural Development and Research	50,000 <sup>a</sup>
Ministry of Fisheries	200,000 <sup>b</sup>
Ministry of Lands and Land Development	535,280 <sup>a</sup>
Ministry of Plantation Industries	50,000 <sup>a</sup>
Department of Agriculture	50,000 <sup>a</sup>
Department of Minor Export Crops	73,000 <sup>a</sup>
National Science Council of Sri Lanka	46,000 <sup>a</sup>
University of Peradeniya	25,000 <sup>a</sup>
University Grants Commission (PGIA)	100,000 <sup>b</sup>
International donor agencies	572,520 <sup>c</sup>
<b>TOTAL</b>	<b>1,701,800</b>

<sup>a</sup> Research grant.

<sup>b</sup> Development support.

<sup>c</sup> Rs. 560,000 for research (of which Rs. 240,000 was specifically earmarked for postgraduate research by recipients of four studentships);  
Rs. 12,520 for development support.

Table 7. Assistant lecturers in training under the Agricultural Education Development Project as of December 1981.

Name	Field	Univ.	Starting date	Projected completion date
Mr. L.A. Perera	Weed science	PSU	8/79	12/83
Mr. K. Kailasapathy	Food science	PSU	8/79	12/82
Mr. L.G. Yapa	Soil physics	PSU	5/80	9/83
Mr. S. Ranamukhaarachchi	Cropping systems	PSU	8/80	6/85
Mrs. D. Bandara	Crop physiology	PSU	8/80	6/85
Mr. A. Sriskantha	Virology	PSU	8/80	12/84
Mr. V. Sumanasinghe	Systematic botany	PSU	8/80	3/85
Mr. H. Wickremasuriya	Agric. education	PSU	8/80	3/85
Mr. D.G.A.H. Perera	Agro-forestry	PSU	3/81	3/86
Mr. B.C.N. Peiris	Seed physiology	PSU	3/81	12/85
Mrs. P. Chanmugathas	Soil microbiology	OSU/PSU <sup>a</sup>	3/81	9/86
Mr. P. Pararajasingham	Stress physiology	PSU	8/81	9/86
Miss B. Dayawathie	Entomology	TAMU	8/79	6/83
Mrs. I.P. Wickremasinghe	Plant breeding	TAMU	8/79	12/81 <sup>b</sup>
Mr. S. Rajakulendran	Entomology	TAMU	8/79	6/85
Mr. C. Bogahawatte	Agric. economics	TAMU	8/79	1/82
Mr. K. Jegasothy	Agric. economics	TAMU	1/80	8/83
Mr. C. Sivayoganathan	Communications	TAMU	5/80	12/82
Mr. M. Jayatilake	Rural sociology	TAMU/PSU <sup>c</sup>	5/80	12/85
Mr. P. Puvirajasinghe	Agroclimatology	TAMU	8/80	12/83
Mr. G. Fernandez	Pulse breeding	TAMU	8/80	3/86
Mr. A. Ariyaratne	Farm machinery	TAMU	8/80	12/86
Mr. S. Prathapar	Soil/water conservation	TAMU	8/80	12/85
Mr. A. Piyasena	Agric. economics	TAMU	1/81	12/85
Mr. N.C. Rajapakse	Postharvest physiology	TAMU	8/81	3/86
Mrs. S. Rajapakse	Horticulture	TAMU	8/81	3/86
Miss S. Panditharatne	Agrostology	VPI	9/79	6/84
Mr. V. Ravindran	Animal nutrition	VPI	9/79	6/84
Mr. K. Goonasekera	Hydrology	VPI	9/79	9/84
Mr. S. Jeyanayagam	Waste management	VPI	9/79	3/85
Mrs. G. Ravindran	Food science	VPI	1/80	12/82
Mr. K. Navaratnam	Extension education	VPI	9/80	7/84
Mr. K. Nadarajah	Animal genetics	VPI	9/80	3/85
Mrs. K. Perera	Animal physiology	VPI	9/80	6/85
Mr. R. Mills	Farm power/tillage	VPI	9/80	12/84
Mr. R.O. Thattil	Biometry	VPI <sup>d</sup>	9/81	12/85
Mrs. A. Jayasekera	Water management	VPI <sup>d</sup>	9/81	12/86
Mr. S.M.M. Zuhair	Agric. economics	VPI	9/81	12/86

<sup>a</sup> Will complete MS degree at Ohio State and transfer to PSU for PhD.

<sup>b</sup> Terminated with MS degree.

<sup>c</sup> Completed MS degree at TAMU, and transferred to PSU for PhD.

<sup>d</sup> Expected to transfer to Utah State after first year to take advantage of program more relevant to the needs of her Department.

Table 8, Assistant lecturers in training under the Agricultural Education Development Project who had returned to Sri Lanka for dissertation research by 31 December 1981,

Name	Field	Univ,	Arrival S.L. for Research	Proj. to complete	
				Research	PhD
K. Kailasapathy	Food science	PSU	12/80	7/82	12/82
L.A. Perera	Weed science	PSU	12/80	3/83	9/83
C. Bogahawatte	Agric. economics	TAMU	1/81	7/81	1/82
B. Dayawathie	Entomology	TAMU	1/81	1/83	6/83
C. Sivayoganathan	Communications	TAMU	12/81	7/82	12/82

Table 9. Travel extensions authorized by the PGIA Director during 1981. (Sec. 2.4.2)

Name and position		Utilized
Dr. R. Rajamahendran Lecturer, Animal Science	Up to 7 days in Bangkok to study the radioimmunoassay technique for measuring testosterone and LH hormone levels in buffalo blood.	Yes
Dr. M.R. Thiagarajah Lecturer, Agric. Biology	Up to 3 days at Pennsylvania State University to consult with senior faculty and check on progress of assistant lecturers from the Dept. of Agric. Biology currently in training at Penn. State under the Project.	No
Dr. R. Rajamahendran Lecturer, Animal Science	Up to 3 days at VPI and SU to consult with senior faculty, visit research facilities, check on progress of assistant lecturers from Dept. of Animal Husbandry currently in training at VPI under the Project, and discuss facilities needed for dissertation research of those participants.	Yes
Prof. Y.D.A. Senanayake Dean, Faculty of Agric.	Up to 3 days in Bangkok to meet teachers and researchers; discuss undergraduate & post-graduate academic programs in agriculture, including academic requirements, standards and evaluation systems; examine facilities and research programs, including on winged bean and its products.	Yes
Prof. H.P.M. Gunasena Head, Crop Science	same as above.	Yes

Table 10. Technical assistance provided in Sri Lanka to the Postgraduate (Sec. 2,5) Institute of Agriculture and Faculty of Agriculture during 1981.

Name	Affiliation	Assignment		Date of Arrival	Date of Departure
		Field	p.mos, <sup>a</sup>		
Howard E. Ray	AED	Chief of Party <sup>b</sup>	12	(3 July 79)	-
James L. Deegan	VPI	Rural sociology <sup>b</sup>	12	(7 Jan 80)	-
Nathan L. Hartwig	PSU	Weed Science	2	6 Jan 81	3 Mar 81
John L. Wiersma	VPI <sup>c</sup>	Soil/water mgmt.	3	8 Jan 81	4 Apr 81
Abbas O. Omran	TAMU	Plant breeding	10	27 Feb 81	-
James K. Palmer	VPI	Food Science	3	28 Apr 81	24 July 81
Frank E. Gilstrap	TAMU	Entomology	0.1 <sup>d</sup>	28 Oct 81	1 Nov 81

<sup>a</sup> Net time in Sri Lanka; does not include preparation or travel time.

<sup>b</sup> Also served two months as acting Chief of Party during absence of H. Ray.

<sup>c</sup> On leave from South Dakota State University.

<sup>d</sup> At no cost to the Project.

Table 11. Technical assistance projected through 1981 as compared to that provided, and revised projections through remainder of Project.

		(person-months)							
Department	Assignment	Proj.to 12/81		Provid- ed to 12/81 <sup>c</sup>	Revised projections <sup>d</sup>				
		Op.plan <sup>a</sup>	PI <sup>b</sup>		1982	1983	1984	1985	LOP
Crop Science	Agroclimatology	12	0	0	0	3 <sup>e</sup>	0	0	3
	Cropping systems	4	3	2.8	0	1 <sup>e</sup>	0	0	3.8
	Weed science	4	2	2	0	0	0	0	2
	Horticulture	- <sup>f</sup>	0	0	0	0	3 <sup>e</sup>	0	3
	Seed physiology	-	-	-	0	0	1 <sup>e</sup>	0	1
	Postharvest physiol.	-	-	-	0	0	1 <sup>e</sup>	0	1
	Stress physiology	-	-	-	0	0	1 <sup>e</sup>	0	1
	Agro-forestry	-	-	-	0	0	1 <sup>e</sup>	0	1
	Statistics	-	-	-	0	1 <sup>e</sup>	0	0	1
Agric. Chemistry	Soil physics	9	3	2.5	6 <sup>e</sup>	2	0	0	10.5
	Soil chemistry	3	-	0	-	-	-	-	0
	Soil microbiology	3	0	0	0	0	0	4 <sup>e</sup>	4
	Soil mineralogy	-	0	0	-	-	-	-	0
	Food technology	3	6	3	2 <sup>e</sup>	2	2	0	9
Agric. Biology	Plant breeding	24	9	10	12	5 <sup>e</sup>	0	2 <sup>e</sup>	29
	Entomology	6	9	3	0	1 <sup>e</sup>	0	0	4
	Pl.Path. (virology)	6	6	2.5	0	1 <sup>e</sup>	0	0	3.5
	Systematic botany	-	-	-	0	1 <sup>e</sup>	0	0	1
	Crop physiology	-	-	-	0	1 <sup>e</sup>	0	0	1
Agric. Economics and Extension	Extension	0 <sup>g</sup>	0 <sup>g</sup>	0	-	-	-	-	0
	Rural sociology	21	24	24	0	1 <sup>e</sup>	0	0	25
	Communications	6	3	1	2 <sup>e,h</sup>	0	0	0	3
	Agric. education	-	4	3	0	0	2 <sup>e</sup>	0	5
	Marketing	3	6	2.5	0	0	0	0	2.5
	Agri-business mgmt.	1	-	0	-	-	-	-	0
	Agric. economics	-	-	-	1 <sup>e</sup>	0	1 <sup>e</sup>	0	2
Animal Husbandry	Environ. physiology	3	2	2	0	2 <sup>e</sup>	0	0	4
	Animal breeding	6	1.5	1.5	0	0	2 <sup>e</sup>	0	3.5
	Agrostology	6	1.5	1.5	0	4 <sup>e</sup>	0	0	5.5
	Mono. nutrition	3	1	0.8	0	2 <sup>e</sup>	0	0	2.8
	Rum. nutrition	4	4	1	0	0	0	0	1
Agric. Engineer- ing	Water management	3	3	3	0	0	0	1 <sup>e</sup>	4
	Waste management	5	1.5	1.5	0	3 <sup>e</sup>	0	0	4.5
	Traction/tillage	-	1	1	0	2 <sup>e</sup>	0	0	3
	Soil conserv. engg.	-	0	0	0	0	1 <sup>e</sup>	0	1
	Farm machinery	-	0	0	0	0	0	1 <sup>e</sup>	1
	Hydrology	-	-	0	1 <sup>e</sup>	0	0	0	1

Table 1.1 (cont'd)

Department	Assignment	Proj. to 12/81		Provid- ed to 12/81 <sup>c</sup>	Revised projections <sup>d</sup>				
		Op. plan <sup>a</sup>	PI <sup>b</sup>		1982	1983	1984	1985	LOP total
Admin./	Chief of Party	30	30	30	12	3	3	4	52
Mgmt.	Facilities planning	4	4	3.2	0	0	0	0	3.2
	Expt. farm dev.	24	12	12.5	0	0	0	0	12.5
	Library	-	2	1	0 <sup>i</sup>	0	0	0	1
	Crop sci. admin.	-	1	0.8	0	0	0	0	0.8
	Agric. engg. admin.	-	1	1	0	0	0	0	1
	Biol. sci. admin.	-	1	0	-	-	-	-	0
	An. sci. admin.	-	1	0	-	-	-	-	0
	Food sci. admin.	-	1	1	0	0	0	0	1
	Soc. sci. admin.	-	1	0	-	-	-	-	0
TOTAL		193	144.5	118.1	36	35	18	12	219.1

- <sup>a</sup> Operational plan in Contract No. AID/ASIA-C-1397.
- <sup>b</sup> Plan of Implementation.
- <sup>c</sup> Net time in Sri Lanka; does not include preparation or travel time.
- <sup>d</sup> Preliminary projections approved by CAED Consortium Council (October 20-21, 1981); based on expectation that one half of requested supplemental funding would be approved ultimately.
- <sup>e</sup> Assignment includes supervision of dissertation research of participant currently in training under the Project; timing may require some adjustment depending upon the progress of the participant in completing Masters degree and PhD coursework.
- <sup>f</sup> No technical assistance was/is projected in disciplines for which a dash (-) is shown.
- <sup>g</sup> The Chief of Party is also projected to assist in Extension.
- <sup>h</sup> Includes two assignments: 1 mo. for participant advisor, and 1 p.mo. equivalent for offset press technician and trainer.
- <sup>i</sup> The CAED Consortium Council has recommended that funds projected for a one month assignment in Library Science be utilized for sending a PGIA/Faculty library staff member to the U.S. for short term training.

Table 12. Books and journals acquired by agricultural library<sup>a</sup> in 1981.  
(Sec. 2.6)

(approximate number)

Source of funds	Books	Periodicals
Faculty of Agriculture budget	203	60
PGIA budget	19	38
AED Project	750	40
British Council	20	-
Others	300	-
<b>TOTAL</b>	<b>1,292</b>	<b>138</b>

<sup>a</sup> The integrated PGIA/Faculty of Agriculture library. Does not include titles consigned to Maha Illuppallama.

Table 13. Approximate number of books and periodicals (from all sources)  
(Sec. 2.6) in the agricultural library<sup>a</sup> as of December 1981.

	Books	Periodicals
Total no. in library as of 12/81	13,000	2,138

<sup>a</sup> The integrated PGIA/Faculty of Agriculture library.

Table 14. Expenditures for equipment procured under the Agricultural (Sec. 2.7) Education Development Project, as of 10 December 1981.<sup>a</sup>

Department	U.S.\$
Crop Science	57,554.12
Agricultural Chemistry	88,286.79
Agricultural Biology	81,969.13
Agricultural Economics and Extension	33,144.58
Animal Husbandry	71,685.63
Agricultural Engineering	67,011.96
Library	8,560.50
Experiment Farm Development	7,490.00
<b>TOTAL</b>	<b>415,702.71</b>

<sup>a</sup> Preliminary, subject to some readjustments among departments.

Table 15, Postgraduate Institute of Agriculture staff position in (Sec. 2.8.1) December 1981 compared to one year earlier.

Position	Cadre		Filled		Vacant	
	12/80	12/81	12/80	12/81	12/80	12/81
Director	1	1	1	1	0	0
Assistant Registrar	1	1	1	1	0	0
Assistant Bursar	1	0 <sup>a</sup>	1	0	0	0
Senior Lecturer	1	1	1	0	0	1
Assistant Librarian	1	1	1	1	0	0
Visiting Professor (parttime)	1	1	1	0	0	1
Clerk, Gr. II	1	1	1	1 <sup>b</sup>	0	0
Steno typist	1	1	0	0	1	1
Typist/Clerk (Clerk Gr. III)	1	1	1	1	0	0
Library Assistant, Gr. III	3	3	1	1	2	2
Library Attendant	2	2	1	1	1	1
Receptionist/tele. operator	1	1	0	1	1	0
Office machine operator	1	0 <sup>c</sup>	1	1	0	0
Labourers	4	4	2	2	2	2
Drivers	2	0 <sup>c</sup>	0	0	2	2
<b>TOTAL</b>	<b>22</b>	<b>18</b>	<b>13</b>	<b>11</b>	<b>9</b>	<b>10</b>

<sup>a</sup> UGC has agreed to re-establish this position.

<sup>b</sup> Grade III Clerk continues to occupy this position.

<sup>c</sup> Inadvertantly omitted from approved estimates, but UGC has since re-established these positions.

Table 16. Faculty of Agriculture staff position as of December 1981  
(Sec. 2,8,2) compared to one year earlier,

Position	Cadre		Filled		Vacant	
	12/80	12/81	12/80	12/81	12/80	12/81
<u>Executive</u>						
Assistant registrar	1	1	0	0	1	1
Assistant librarian	1	1	1	1	0	0
<u>Academic and allied grades</u>						
Professor	5	5	5	5	0	0
Associate professor	1	2	1	2	0	0
Senior lecturer	6	6	2	1	4	5
Lecturer	18	11	9	7	9	4
Assistant lecturer	64	68	49	60	15	8
Research assistant	4	4	1	1	3	3
Demonstrator	13	13	13	13	0	0
Tutor	2	2	2	0	0	2
Instructor	2	2	2	2	0	0
Teaching assistant	13	13	8	11	5	2
Farm manager	1	1	1	1	0	0
<u>Clerical and allied grades</u>						
Dairy manager	1	1	0	0	1	1
Lab technician	24	24	23	24	1	0
Draughtsman	1	1	0	0	1	1
Clerk	8	8	7	8	1	0
Technical assistant	2	2	1	1	1	1
Statistical assistant	1	1	0	1	1	0
Library assistant, Gr. III	3	3	1	0	2	3
Telephone operator	1	1	1	1	0	0
Farm assistant	1	1	0	0	1	1
Farm mechanical instructor	1	1	0	0	1	1
Field supervisor	2	2	0	2	2	0
Dairy assistant	1	1	1	1	0	0
<u>Skilled Grades</u>						
Specimen collector	2	2	1	1	1	1
Tractor operator	5	6	5	5	0	1
Lab attendant (higher grade)	4	5	4	5	0	0
Library attendant	1	1	0	0	1	1
Salesman	2	2	2	2	0	0
Carpenter	1	1	1	1	0	0
Mechanic	1	1	0	0	1	1
Nurseryman	1	1	0	1	1	0
Storeman	2	2	2	2	0	0

Table 16 (cont'd)

Position	Cadre		Filled		Vacant	
	12/80	12/81	12/80	12/81	12/80	12/81
<u>Semi-skilled grades</u>						
Lab attendant (lower grade)	9	10	9	8	0	2
<u>Unskilled grades</u>						
Labourer (library)	1	1	1	0	0	1
Labourer	41 <sup>a</sup>	41 <sup>a</sup>	41 <sup>a</sup>	41 <sup>a</sup>	0	0
Carter/attendant	1	1	1	1	0	0
Caretaker	2	1	2	1	0	0
Milker	3	3	3	2	0	1
TOTAL	253	253	200	212	53	41

<sup>a</sup> Does not include approximately 45 casual labourers at the Dodangolla Experiment Station.

Table 17. Project Field Office staff position as of December 1981.<sup>a</sup>  
(Sec. 2.8.3)

Job category	LOP projection in Contract	Utilized through 12/81	Remaining as per Contract
	p.mos.	p.mos.	p.mos.
Administrative assistant	60	28.5	31.5
Secretary/typist	75	32.4	42.6
Clerk	36	26.0	10.0
Driver	144	35.2	108.8
Logistics agent	36	-	36.0
Casual (temporary)	-	5.9	(5.9)
TOTAL	351	128.0	223.0

<sup>a</sup> Includes national local hire staff only. Does not include 11.0 p.mos. of program assistant employed through Washington office.

Table 18. Reports prepared in Agricultural Education Development Project (Sec. 3.0) Field Office during 1981,<sup>a</sup>

Report No.	Date	Title	Author(s)
-	5/81	Agricultural Education Development Project Second Annual Field Office Report (January-December 1980)	T. Jogaratnam, Y.D.A. Senanayake, H.E. Ray
PR81-1	5/81	Monthly Progress Report (4/81)	H.E. Ray
PR81-2	6/81	Monthly Progress Report (5/81)	H.E. Ray
PR81-3	6/81	Monthly Progress Report (6/81)	H.E. Ray
PR81-4	8/81	Monthly Progress Report (7/81)	J.L. Deegan
PR81-5	9/81	Monthly Progress Report (8/81)	J.L. Deegan
PR81-6	10/81	Monthly Progress Report (9/81)	H.E. Ray
PR81-7	11/81	Monthly Progress Report (10/81)	H.E. Ray
PR81-8	12/81	Monthly Progress Report (11/81)	H.E. Ray
PR81-9	12/81	Monthly Progress Report (12/81)	H.E. Ray
Q80-4	3/81	AEDP Quarterly Report (10-12/80)	T. Jogaratnam, H.E. Ray
Q81-1	4/81	AEDP Quarterly Report (1-3/81)	T. Jogaratnam, H.E. Ray
Q81-2	6/81	AEDP Quarterly Report (4-6/81)	T. Jogaratnam, H.E. Ray
Q81-3	10/81	AEDP Quarterly Report (7-9/81)	T. Jogaratnam, H.E. Ray
Q81-4	12/81	AEDP Quarterly Report (10-12/81)	T. Jogaratnam, H.E. Ray
EOT81-1	3/81	Weed Science	N.L. Hartwig
EOT81-2	4/81	Agricultural Engineering - Water Management	J.L. Wiersma
EOT81-3	7/81	Food Science & Technology	J.K. Palmer
SR81-1	6/81	Support and guidance of dissertation research by Assistant Lecturers pursuing postgraduate study under the Agricultural Education Development Project	H.E. Ray

<sup>a</sup> Does not include research reports and papers prepared by technical assistance staff resulting from their work with the academic departments.

Table 19. Projected LOP (1979-1985) Postgraduate Institute of Agriculture (Sec. 4.1) and Faculty of Agriculture operating budgets as revised in December 1981.

(Rs.000)

Year	PGIA <sup>a</sup>	Faculty <sup>a</sup>	Total
1979	555	3,342	3,897
1980	658	4,276	4,934
1981	1,117 <sup>b,c</sup>	5,121 <sup>c</sup>	6,238 <sup>c</sup>
1982	1,180 <sup>b,c</sup>	5,675 <sup>c</sup>	6,855 <sup>c</sup>
1983	1,265 <sup>b,c</sup>	6,959 <sup>c</sup>	8,224 <sup>c</sup>
1984	1,365 <sup>b,c</sup>	7,636 <sup>c</sup>	9,001 <sup>c</sup>
1985	1,475 <sup>b,c</sup>	8,584 <sup>c</sup>	10,059 <sup>c</sup>
	7,615	41,593	49,208

<sup>a</sup> Does not include expenditures on security services, repairs/maintenance of buildings and roadways, landscape services, and sanitary services for the PGIA and Faculty which are met from other University funds.

<sup>b</sup> Includes an estimated Rs. 500,000 per year of income from sources other than UGC allocations.

<sup>c</sup> Estimates which are under annual review. The extent to which these estimates are valid will be determined by the resources available for higher education in the years after 1981.

Table 20. Anticipated capital grants for construction and development, (Sec. 4.1) Faculty of Agriculture.

(Rs.000)

	Released through 1981	Released for 1982	Anticipated releases 1983-85	Total
Faculty departments	5,500	3,000	20,804	29,304
Experimental station	2,000	2,000	1,300	5,300
Other	2,396 <sup>a</sup>	-	-	2,396
<b>TOTAL</b>	<b>9,896</b>	<b>5,000</b>	<b>22,104</b>	<b>37,000</b>

<sup>a</sup> Does not include unused balance of about Rs.600,000 available for capital works at Maha Illuppallama.

Table 21. Projected total LOP Government of Sri Lanka contribution to (Sec. 4,1) Agricultural Education Development Project as revised in December 1981 compared to Project Grant Agreement.

(Rs.000)

Category	Project Grant Agreement	Current projection
PGIA operating budget	7,581	7,615
Faculty operating budget	27,006	41,593
Buildings and improvements	15,229	37,000 <sup>a</sup>
Vehicles	1,550 <sup>b</sup>	259
<b>TOTAL</b>	<b>51,366</b>	<b>86,467</b>

<sup>a</sup> This estimate anticipates GSL approval by 1984/85 of funds for construction of Animal Science building, expansion at Maha Illuppallama, and extension to Agricultural Economics building.

<sup>b</sup> Rupee equivalent of U.S.\$100,000 calculated at Rs. 15.5 = US\$1.00, the approximate exchange rate in 1979.

Table 22. Summary of LOP estimates for U.S. contribution to Agricultural (Sec. 4.2) Education Development Project.

(000,000 dollars)

	Project Paper	Contract	PI <sup>a</sup>	Authorised by USAID 12/81
I. Technical assistance and support	2.56	2.92	4.06	?
II. Participant training	1.87	1.56	2.12	?
III. Equipment	0.97	0.97	1.37	?
IV. Library acquisition	0.38	0.38	0.54	?
V. Vehicles	0.20	0.20	0.11	?
VI. Staff travel extensions	0.01	- <sup>b</sup>	0.03	?
VII. Director/Dean U.S. trips	0.01	0.02	0.06	?
VIII. Research supervisor	-	-	0.10	?
<b>TOTAL</b>	<b>6.00</b>	<b>6.05</b>	<b>8.39</b>	<b>?</b>

<sup>a</sup> Plan of Implementation.

<sup>b</sup> Although not specifically identified in the Project budget, an expenditure of approximately \$10,000 was anticipated for this purpose in the Contract Operational Plan.

A P P E N D I C E S

APPENDIX A



CONSORTIUM FOR INTERNATIONAL  
AGRICULTURAL EDUCATION  
DEVELOPMENT

Academy for Educational Development, Inc.  
The Pennsylvania State University  
Texas A&M University  
Virginia Polytechnic Institute and State University

M I N U T E S  
CONSORTIUM COUNCIL MEETING  
CONSORTIUM FOR AGRICULTURAL EDUCATION DEVELOPMENT  
OCTOBER 20-21, 1981

Postgraduate Institute of Agriculture  
University of Peradeniya  
Peradeniya, Sri Lanka

The meeting was called to order at 8.34 a.m. by the CAED Council Chairman, Dr. James Nichols, Dean of the College of Agriculture at Virginia Polytechnic Institute & State University. Participants in the opening ceremonies included the Secretary to the Ministry of Higher Education, the Acting USAID Mission Director, the Vice Chancellor, one representative from each of the four Consortium members, Dean of the Faculty of Agriculture, Director of the PGIA, Chief of the Research & Re-Forestation Division of USAID/SL and his assistant, CAED Chief of Party, Department Heads and senior members of the Faculty of Agriculture, and expatriate Project staff.

A welcome to Peradeniya and the meeting was extended by the Vice Chancellor of the University of Peradeniya. The Vice Chancellor reaffirmed his support of the Project and expressed satisfaction with its progress to date. In addition, he reviewed briefly the history and present stage of development of the University of Peradeniya and described the campus and its facilities.

In his response, the CAED Council Chairman, Dean Nichols, expressed pleasure to be back in Sri Lanka and appreciation to the host Sri Lankans for their hospitality and cooperation. He stressed the great progress which the project had made and the value of joint planning and participation by PGIA, by USAID, by the Faculty of Agriculture, and by the Consortium. The project has been well managed and progress has been impressive.

He then stressed the tremendous resource which will accrue to PGIA, to the Faculty of Agriculture, to University of Peradeniya and to Sri Lanka as a result of the participants training in the U.S. and the Technical Assistance in Sri Lanka. He emphasized, however, that this valuable resource must be used to its fullest potential in the years ahead if PGIA, the Faculty and Agriculture in Sri Lanka are to reap the full benefits from the project.

He stressed four concerns which might impair the results of the project if not properly addressed.

1. Current staff at PGIA and the Faculty at Peradeniya have had to assume an increased workload because of the large number of participants in

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training. This could be a serious problem if the technical assistance portion of the project is reduced because of budget cuts in AID. Anything which further increases Faculty responsibilities and workload will be harmful.

2. He commented on the problem associated with proliferation of institutions of higher learning in Agriculture in the United States and expressed concern that some of the same problems may be faced in Sri Lanka if this country follows the same course. Depletion of limited resources through multiplication of institutions will have an effect on programs.
3. He emphasized the importance of the junior staff training that is being conducted through the project, but cautioned that the value to the PGIA/Faculty of such advanced training would be realized only if the staff members return to Sri Lanka and the PGIA/Faculty upon completion of their training. He was particularly concerned that they return to facilities and an environment which will enable them to be productive in their fields and to achieve professional satisfaction from their work. In short, they must have adequate incentives to remain and to be productive.
4. A great investment has already been made and many competent young men and women will have the benefit of advanced training in Agriculture. There is a great potential here and a great resource. He expressed hope that the progress which has already been made be sustained and that every effort be made to complete the objective of the project.

The meeting was then inaugurated by the Secretary to the Ministry of Higher Education and Chairman of the University Grants Commission, Dr. Stanley Kalpage. The Secretary also expressed strong support for the Project indicating that the Government of Sri Lanka was meeting its commitments to this Project in full. In speaking to the question of proliferation of Faculties of Agriculture, the Secretary clarified the rationale for the establishment of such Faculties at the Ruhunu and Batticaloa University Colleges and plans for another Faculty of Agriculture at the University of Jaffna. In this regard, he reviewed the demand that exists for university training, and the steps being taken by Government to meet that demand through both traditional universities and the recently established Open University. The Secretary then discussed the present situation with respect to support of higher education in Sri Lanka, placing the Project and development of the Peradeniya Faculty of Agriculture and PGIA within the context of the Government's total programme for higher education. The Secretary indicated that in 1980, of the 100,000 secondary school graduates, 30,000 students were eligible for university entrance, and only 5,000 could be accommodated. He further stated that while the resources available for university development are limited by the general economic situation, university development will remain a necessary and important priority of the Government. The PGIA will remain the only Postgraduate Agricultural Training Institution, while the development of undergraduate programs at Peradeniya together with the other 3 university Faculties of Agriculture will provide for programs relevant to each geographic region of the country. He anticipated that each of the new Faculties of Agriculture would have an annual intake of 25 students.

The Acting USAID Mission Director spoke about education in more general terms, as well as the Agricultural Education Development Project in particular. He stated that, although USAID supports this project strongly, he considered it highly

unlikely that it will be possible to provide the full amount of supplemental funding requested for the Project due to financial constraints of AID. Dr. Brady indicated that AID's ability to support the program must be viewed in the overall context of AID's resources. AID's program has increased in Sri Lanka from \$ 7 million seven years ago to \$ 46 million in 1981, but there is now expected to be a downward trend in the amount of aid that can be provided. He, as well, encouraged the institutions participating in the Project to continuously consider the objectives of the program in relation to changing requirements in the nation's development.

The PGIA Director used a series of visuals to highlight his presentation on current Project status. (Visuals used in his presentation were selected from the Quarterly Report No. Q81-3 for the period July/September 1981.) In commenting upon the present and projected situation with respect to enrolments, the Director called attention to the fact that the outturn of the Faculties of Agriculture at Ruhuna and Batticaloa, institutions not established at the time the Project was written, should be added to the outturn of the Peradeniya Faculty of Agriculture in assessing progress toward reaching the goal of doubling the number of graduates by 1985.

In the case of the PGIA, the Director stated that the number of postgraduate degrees granted is expected to reach a level of 90 to 100 annually after staff presently in training return to duty. He called attention to the fact, however, that a major shift in demand from the MSc to the MPhil (Masters with research) degree will restrict the number of students that can be accommodated at present due to lack of sufficient facilities and staff for research supervision.

The Director also noted that the Government and PGIA's commitment for adding staff appointments has now exceeded the original target and that, while somewhat delayed, the building program commitments also exceed Project targets. With respect to procurement of equipment for the PGIA and Faculty, the Director announced that the first major shipment of equipment has arrived at the Port of Colombo and delivery to Peradeniya is expected within a week or so.

The meeting was then adjourned for a 15 minute tea break and reconvened at approximately 11.00 a.m. for the first of the series of working sessions that characterized most of the remainder of the two-day Council meeting. Due to prior urgent commitments, the Secretary to the Ministry of Higher Education, Vice Chancellor and USAID Mission Director were unable to participate in these working sessions. The Chief, RRD, USAID/SL left following Session V on the following morning. He indicated, however, that he and his assistant should be regarded as observers and not as participants in any decisions taken by the Council. Otherwise, participants in the working sessions were those identified above as attending in the opening ceremonies.

#### PARTICIPANT TRAINING

The second session of the meeting, on participant training, was opened with brief reports from the Consortium University Deans. All expressed satisfaction with the superior quality and performance of junior faculty members who are presently in training under the Project. They were unanimous in stating that, although difficulties were experienced initially in evaluating transcripts of University of Peradeniya graduates, performance to date indicates that their undergraduate training has been excellent. Dean Smith called attention to three areas of

weakness--mathematics, statistics and bio-chemistry--that have made it necessary for a number of the participants to enroll in pre-requisite courses before proceeding fully into the graduate course programs. This same problem was confirmed by Deans Kunkel and Nichols. It was pointed out by Dean Nichols, however, that the deficiencies that have had to be made up by the Sri Lankan participants by and large have been no greater than those experienced with U.S. students transferring from other universities.

The Deans identified as areas of concern: a) conducting dissertation research in Sri Lanka, b) research supervision of the candidates while in Sri Lanka, and c) the possibility that candidates may be given excessive departmental responsibilities upon their return due to the present extreme shortage of staff in the departments. Questions asked by the Faculty and discussion subsequent to these presentations indicate that these same issues are of equal concern in the PGIA and Faculty of Agriculture.

As the discussion appeared to be centering upon questions related to the return of the participants for dissertation research, research supervision and related matters, Prof. Jogaratnam, Chairman of the session, requested that the CAED Chief of Party give his presentation on support and guidance of dissertation research in Sri Lanka before calling upon the Department Heads for their reports.

In that presentation, the Chief of Party briefly reviewed projected training completion schedules of the participants obtained during his visits to the campuses in July, pointing out the financial implications of the slightly longer than budgeted period presently estimated for completion of PhD coursework. He also indicated that, according to present projections, the major period for having participants back in Sri Lanka for their research would be from mid 1983 through 1984. The final participants will complete their training by the end of 1986. At this point, Dr. Bonner, Chief, RRD, USAID/SL, commented that we should keep in mind that it may not be possible to extend the Project past 1985, the current termination date for Project activity. Although the Mission will be supportive, there is no assurance that an extension through 1986 can be obtained.

The Chief of Party then addressed the questions of communications, support and supervision more directly, using a series of visuals to illustrate the key points. Copies of these visuals are attached as a part of the minutes to this Consortium Council meeting.

The need for more effective and frequent communications between the participants and Peradeniya was expressed by both visiting Council representatives and Faculty and PGIA administrators and staff. The Dean pointed out that University regulations require frequent progress reports from participants while they are on study leave. Until recently, however, very little specific feedback has been obtained other than academic performance reports. Faculty members expressed frustration with the lack of prior information about course programs, Masters thesis problems and planned dissertation research for participants from their departments. There was general agreement that the procedures suggested in the Chief of Party's presentation for systematically providing information on Masters and PhD coursework programs and on Masters and PhD research problems (summary attached) would be most helpful.

The relative merits of having participants return to Sri Lanka for dissertation research in contrast to staying in the United States for this purpose were discussed in depth. The Department Heads, Dean and Director were unanimous in

stating that participants from their departments should return to Sri Lanka for dissertation research except under exceptional circumstances where this may not be feasible or if financial constraints are such that it is not possible to bring them back and if such training could be completed more economically in the U.S. This latter justification appears problematic at this point. Among the reasons cited for wanting the participants to return were -

1. the dissertation problems should be relevant to Sri Lanka and the candidates should have experience in working in this environment;
2. if the participants stay in the United States for the entire training, there is greater risk that they will lose "contact" with Sri Lanka, and not return to the Faculty;
3. Returning to Sri Lanka to conduct their dissertation research will enable the participants to be in country during the formative stage of program development in their areas of responsibility--they will be actually involved in the program development process. If they stay in the United States for their entire training, many program directions will have been determined by the time they return, thus depriving them of the opportunity to become involved in program building in a manner that will motivate them fully to return and commit themselves to the Faculty upon completion of their training;
4. For field-oriented research, it is nearly essential that they return to gain experience in working under Sri Lankan agro-climatic and socio-economic (re Agric. Economics and Extension) conditions.

It was the consensus of the meeting that, although each participant's case should be examined individually and exceptions made where fully justified, the current plan for return of participants to Sri Lanka for their dissertation research should be maintained.

Another critical area for discussion was that of supervision of participant research while they are in Sri Lanka. The discussion focussed around two major problems; the need for US major advisors to come to Sri Lanka for research supervision; and the availability, role and responsibilities of local advisors.

With respect to availability of qualified local advisors, the situation varies greatly depending upon discipline. For example, the Head of Crop Science indicated that qualified local advisors could be obtained without difficulty. In the case of soil physics in Agricultural Chemistry and the various fields in Agricultural Engineering it was indicated that it would be very difficult to obtain qualified local advisors. The need to provide local advisors with some incentive for accepting responsibility for supervision of participants was recognized. Prof. Jogaratnam indicated that some kind of monetary incentive could possibly be provided through the PGIA. The Chief of Party suggested that formal recognition of the local advisor and the opportunity to become co-author on papers written as a result of work done under their supervision would provide a professional incentive. The need for local advisors to become involved in the review of the draft research proposals was agreed to by all.

There was general agreement that the responsibility of an advisor should be

described to ensure that local advisors understand and fully accept the significant responsibility they will undertake.

It was the consensus of the meeting that local advisors should be identified well in advance, that they should be involved in the review of the research proposal when it is received in Peradeniya, that their responsibilities should be clearly defined, and that they should be provided suitable incentives for accepting the responsibility of supervision.

The question of having US advisors coming to Sri Lanka on short term technical assignments to provide direct assistance supervision to the candidates was also discussed at length. It was the consensus of the meeting that this is highly desirable and, insofar as possible, should be planned. The Head of Crop Science indicated that the US advisor should plan his trip to Sri Lanka to coincide with the return of his advisee.

The necessity for participants to submit their draft PhD dissertation research proposals together with other information called for in Special Report 81-1 was recognized by all. In this regard, the PGIA Director and Dean suggested that the Faculty here should now take steps to identify local advisors for participants for whom synopses of the dissertation research proposals are already available.

The Chief of Party suggested that the steps called for in Special Report 81-1 be modified to the extent that research proposals are sent prior to final approval of the committee at the U.S. university, and that comments from here be returned to the university promptly so that they might be considered in formulation of the final research proposal. It was emphasized that there is no intention on the part of the PGIA and Faculty of Agriculture to usurp or impinge upon the prerogatives of the US university in academic matters. However, it is believed that the system that has been adopted will benefit the US university and the candidate in developing proposals that are relevant and feasible for carrying out in Sri Lanka.

Each Department Head reviewed the progress of participants from his department, and offered comments concerning the issues previously discussed. The comments were based in part on the Chief of Party's progress reports on the participants resulting from his visits to the three Consortium University campuses last July.

The Head of Crop Science indicated that he is reasonably well satisfied with the course programs being followed. He wants all of the participants from his department to come back to Sri Lanka for dissertation research, pointing out that for field-oriented research this is nearly essential. He also emphasized that he wants each participant's major advisor to come to Sri Lanka for the purpose of research supervision at the time the candidate returns.

The Head of Agricultural Chemistry asked why it was necessary for Mrs. Chammugathas to enroll in a course in Agronomy's teaching experience. This course is shown as a required course for all Masters students, and the Deans commented that this is not uncommon. They further commented that the experience gained in teaching through this course is highly valuable to the graduate students. The Head of Agricultural Chemistry also indicated that he would prefer for the participants from his department to return to Sri Lanka for dissertation research provided suitable local advisors can be identified.

The Head of Agricultural Biology said that Mr. Sumanasinghe should continue to concentrate on systematic botany and ecology, and requested Dean Smith to follow-up with Sumanasinghe and his advisor on this question. He also made a strong request that Mrs. Wickramasinghe be permitted to continue in training at Texas A & M through her PhD degree. All participants from the Agricultural Biology department should return to Sri Lanka for their dissertation research.

The Head of Agricultural Economics & Extension likewise indicated that all participants from his department should return to Sri Lanka for dissertation research. (Later, Dr. Pinnaduwaage discussed with Dean Nichols the need for Zuhair to concentrate in the area of Business Administration & Management even though he is a graduate student in the department of Agricultural Economics.)

The Head of Animal Husbandry expressed satisfaction with the progress being made by the participants from his department.

The Head of Agricultural Engineering raised a question about the PhD program of Jeyanayagam. He asked whether it might be possible for Mr. Jeyanayagam to shift to another university for his doctoral program as VPI does not offer a PhD in Agricultural Engineering. It was pointed out to him that the degree offered by VPI is Environmental Sciences and Engineering, an Engineering degree. Dean Nichols explained that even though all work is taken in the department of Agricultural Engineering, postgraduate degrees are given by the College of Engineering, a practice that is being followed in a number of universities. Dr. Illangantilaka said that he would prefer for participants from his department to return to Sri Lanka for their dissertation research, but that research supervision by expatriate advisors would be essential as local advisors in these fields are not available.

During the discussion on participant training, the necessity for the participants to have assurance that appropriate equipment and other facilities will be available for their use upon their return to Sri Lanka for research was emphasized. It was suggested that efforts should be continued to get the participants to make the departments here aware of their needs well in advance of return so that such equipment and facilities can be available insofar as resources will permit.

Another concern expressed by the Deans in particular was the danger that participants returning for dissertation research might be given excessive departmental responsibilities that would make it difficult if not impossible for them to complete their research on schedule.

With respect to time required to complete the total training program, the Chief of Party said that participants should initiate their dissertation research while completing their coursework to the extent possible, depending upon the nature of the research. He also reiterated what had been expressed by several others during the meeting that the research proposals should be adjusted to assure that the planned research can be conducted successfully in Sri Lanka.

Dr. Bonner noted that the present Project Agreement and Contract funding obligations terminate at the end of 1985 (the contracted actual estimated termination date is March 31, 1986). Without formal authority to continue beyond this date, expenditures for those participants to complete their training in 1986 could not be supported by USAID. It was agreed that early attention should be given to the matter of program extension as such extension would require U.S. Congressional action.

The Deans agreed to review the status of each participant with his/her major advisor and department upon their return to the United States from two perspectives--the relevance of coursework programs to major fields of specialization and possibilities for accelerating their programs to permit earlier completion of PhD coursework and degrees.

#### TECHNICAL ASSISTANCE

The Session Chairman called upon the Chief of Party to give an overview of the technical assistance situation to open this session. As a preface to his presentation, the Chief of Party made reference to Contract No. AID/ASIA-C-1397 which projects a total of 269 person months of "direct labor" allocated among different categories, nine of which would be classified as technical assistance. He called particular attention to Article IV, Section D, which states that "it is understood and agreed that the number of person months of effort for any classification of personnel may be used by the contractor in any other direct labor classification as may reasonably be necessary in the performance of the work required herein."

The present situation as it appears from the results of the meeting with the USAID Mission on 24 September was then reviewed briefly. Preliminary analyses would indicate that, if no additional funds are received, it will probably be necessary to restrict future technical assistance assignments to short visits of participant's major advisors for the purpose of dissertation research supervision. Otherwise, there would be insufficient funds to permit completion of PhD training of the 38 participants already sent out. Tables showing technical assistance assignments deferred from 1981 and scheduled in the Plan of Implementation for 1982, and suggested re-distribution of technical assistance assignments through the remainder of the Project (based on the assumption that one half of the requested additional funds are received) were distributed to meeting participants and served as the basis for subsequent discussion and decision. The decisions taken were based on recognition of the fact that proceeding with the full completion of planned technical assistance at this time would exceed available resources.

Table 1 shows the technical assistance deferred from 1981 and scheduled for 1982 according to the Plan of Implementation, and Table 2 indicates technical assistance assignments now to be scheduled for 1982 as agreed by participants in the session. (It will be noted that the projection of 62 person months of technical assistance given in the Plan of Implementation has now been reduced to 36 person months.) Major decisions with regard to technical assistance earlier projected for 1982 included the following:

- \* The Agroclimatology position: was deferred until a later date when the participant in this field is ready to return to Sri Lanka for dissertation research. (See the revised distribution of technical assistance for the Crop Science department below for additional comments on this position.)
- \* The Food Technology assignment is decreased to 2 months, and will be filled by Dr. McNeil from Penn State.
- \* The Soil Microbiology assignment is to be deferred until the return of the participant in that field.

- \* The Soil Physics assignment will remain as is with the proviso that it may be necessary to reduce the duration of the assignment to 3 months depending upon the availability of funds.
- \* The Plant Breeding assignment will remain as is.
- \* The Entomology assignment is tentatively cancelled.
- \* The Agricultural Communications assignment for late 1982 is tentatively cancelled.
- \* A one month assignment by Dr. Seaman, the advisor of Sivayoganathan, is requested for early 1982.
- \* The services of Mr. Engman are requested for 3 months in early 1982 to install the offset and associated equipment, train operators, and to get the press into full operation. (The total cost of this assignment is estimated to be equivalent to one person month based on average costs projected for technical assistance.)
- \* A one month assignment for Dr. Pope, advisor of Jegasothy, is requested for the 3rd quarter of 1982 after the return of Jegasothy to Sri Lanka for his dissertation research.
- \* The Agricultural Education assignment is deferred until the return of Wickramasuriya for his dissertation research.
- \* The Ruminant Nutrition assignment deferred from 1981 is tentatively cancelled.
- \* The Agrostology assignment is deferred until the return of Miss Panditharatne to Sri Lanka for her dissertation research.
- \* The Monogastric Nutrition assignment is deferred to coincide with the return of V. Ravindran for dissertation research.
- \* The Waste Management assignment is deferred until the return of Jeyanayagam for dissertation research.
- \* A one month assignment during the 3rd Quarter of 1982 for the major advisor of Gunasekera is requested.
- \* The Chief of Party position remains as scheduled.
- \* All other assignments deferred from 1981 or scheduled for 1982 are tentatively cancelled. However, it was recommended that the funds projected for a one month assignment in Library Science be utilized for sending someone from the PGIA/Faculty Library to the United States for short term training.

During the course of the discussion in which the above revised schedule was determined, the Department Heads indicated their recommendations for redistribution of technical assistance assignments for their departments if approximately one half of the requested additional funding is approved. These projections are shown in Tables 3 through 8.

The need for maintaining technical assistance levels as nearly as possible at those previously projected was repeatedly stressed. With the exception of the assignments scheduled for the very near future, a reassessment of technical assistance to be provided must be made as soon as the ultimate level of funding becomes known.

Table 1

Technical assistance assignments deferred from 1981 and scheduled in PI for 1982

	Deferred from 1981	1982				Remarks
		1-3	4-6	7-9	10-12	
<b>CROP SCIENCE</b>						
Agriclimatology						
<b>AGRIC. CHEMISTRY</b>						
Food technology	3					
Soil microbiology					Kailasapathy in S.L.	
Soil physics					Yapa in S.L.	
<b>AGRIC. BIOLOGY</b>						
Plant breeding						
Entomology	6					
Virology	3				Dayawathie in S.L.	
<b>AGRIC. ECON. &amp; EXT.</b>						
Communications	2					
Agric. economics	4				Sivayoganathan in S.L.	
Agric. education					Jegasothy in S.L.	
<b>ANIMAL HUSBANDRY</b>						
Ruminant Nutrition	3					
Agrostology						
Monogastric nutrition						
<b>AGRIC. ENGINEERING</b>						
Waste Management						
Hydrology					Goonsekera in S.L.	
<b>ADMIN/MGMT</b>						
Chief of Party						
Facilities planning	1					
Expt. farm development						
Library	1					
Biol. Sci. Admin.	1					
Animal Sci. Admin	1					
Social Sci. Admin	1					

Table 2

Technical assistance assignments scheduled for 1982  
(As revised by the Consortium Council on 20 October 1981)

	Deferred from 1981	1982				Remarks
		1-3	4-6	7-9	10-12	
<u>CROP SCIENCE</u>						
Agriclimatology						
<u>AGRIC. CHEMISTRY</u>						
Food technology			2			
Soil microbiology					Dr. MacNeil Kailasapathy in S.L.	
Soil physics				6	May be necessary to reduce to 3 mos., depending upon funds available	
<u>AGRIC. BIOLOGY</u>						
Plant breeding			12		Dr. Omran	
Entomology					Dayawathie in S.L.	
Virology						
<u>AGRIC. ECON. &amp; EXT.</u>						
Communications		1 (equiv.)			Mr. Engman Dr. Seaman Sivayoganathan in S.L.	
Agric. economics	4			1	Dr. Pope Jegasothy in S.L.	
Agric. education						
<u>ANIMAL HUSBANDRY</u>						
Ruminant Nutrition						
Agrostology						
Monogastric nutrition						
<u>AGRIC. ENGINEERING</u>						
Waste Management						
Hydrology				1	Research supervision (Goonasekera's advisor) Goonasekera in S.L.	
<u>ADMIN/MGMT</u>						
Chief of Party			12			
Facilities planning						
Expt. farm development						
Library						
Biol. Sci. Admin.						
Animal Sci. Admin						
Social Sci. Admin						

Table 3

Redistribution of technical assistance assignments for CROP SCIENCE recommended by the Department Head, in the event that approximately half of the requested supplemental funding request is granted.

	<u>person-months</u>			<u>Approximate*</u> <u>Timing</u>
	<u>Research supervision</u>	<u>Addi- tional</u>	<u>Total</u>	
Agroclimatology	1	2**	3	early 1983
Cropping systems	1	0	1	3rd quarter, 1983
Weed science	0	0	0	--
Horticulture	1	2**	3	2nd half, 1984
Plant Physiology				
Seed	1	0	1	2nd half, 1984
Postharvest	1	0	1	2nd half, 1984
Stress	1	0	1	2nd Half, 1984
Agroforestry	1	0	1	2nd half, 1984
Statistics	1	0	1	2nd half, 1983
	<u>8</u>	<u>4</u>	<u>12</u>	

\* Timing of research supervision assignments is based on estimated dates of return to Sri Lanka for dissertation research provided to Chief of Party by participants; will need adjustment when actual return dates are known.

\*\* First priority is given to research supervision. If further reductions in total T.A. are required for this department, these assignments would be deleted.

Table 4

Redistribution of technical assistance assignments for AGRICULTURAL CHEMISTRY recommended by the Department Head, in the event that approximately half of the requested supplemental funding request is granted.

	person-months			Approximate* Timing
	<u>Research supervision</u>	<u>Addi- tional</u>	<u>Total</u>	
Soil physics	1	7	8	2nd half, 1982
Soil microbiology	1	3	4	1st half, 1985
Food science	2	4	6	Apr-June 1982, others to be determined
	<u>4</u>	<u>14</u>	<u>18</u>	

\* Timing of research supervision assignments is based on estimated dates of return to Sri Lanka for dissertation research provided to Chief of Party by participants; will need adjustment when actual return dates are known.

Table No.5

Redistribution of technical assistance assignments for AGRICULTURAL BIOLOGY recommended by the Department Head, in the event that approximately half of the requested supplemental funding request is granted.

	person-months			Approximate* Timing
	<u>Research supervision</u>	<u>Addi- tional</u>	<u>Total</u>	
Plant breeding	2	17	19	1982, early 1983, late 1984
Entomology	1	0	1	2nd half, 1983
Virology	1	0	1	2nd half, 1983
Systematic botany	1	0	1	2nd half, 1983
Crop physiology	1	0	1	2nd half, 1983
	<u>6</u>	<u>17</u>	<u>23</u>	

\* Timing of research supervision assignments is based on estimated dates of return to Sri Lanka for dissertation research provided to Chief of Party by participants: will need adjustment when actual return dates are known.

Table 6

Redistribution of technical assistance assignments for AGRICULTURAL ECONOMICS AND EXTENSION recommended by the Department Head, in the event that approximately half of the requested supplemental funding request is granted.

	person-months			Approximate* timing
	<u>Research supervision</u>	<u>Addi- tional</u>	<u>Total</u>	
Communications	1	1	2	Engman:1st qtr, 1982 Seaman:3rd qtr, 1982
Agric. education	1	1	2	early 1984
Agric. economics	2	0	2	3rd qtr,1982; 4th qtr,1984
Rural sociology/ext.	1	0	1	2nd half, 1983
	<u>5</u>	<u>2</u>	<u>7</u>	

\* Timing of research supervision assignments is based on estimated dates of return to Sri Lanka for dissertation research provided to Chief of Party by participants; will need adjustment when actual return dates are known.

Table 7

Redistribution of technical assistance assignments for ANIMAL HUSBANDRY recommended by the Department Head, in the event that approximately half of the requested supplemental funding request is granted.

	person-months			Approximate* timing
	<u>Research supervision</u>	<u>Addi- tional</u>	<u>Total</u>	
Environmental physiology	1	1	2	2nd half, 1983
Animal breeding	1	1	2	1st half, 1984
Agrostology	1	3	4	1st half, 1983
Monogastric nutrition	1	1	2	1st half, 1983
	<u>4</u>	<u>6</u>	<u>10</u>	

\* Timing of research supervision assignments is based on estimated dates of return to Sri Lanka for dissertation research provided to Chief of Party by participants; will need adjustment when actual return dates are known.

Table 8

Redistribution of technical assistance assignments for AGRICULTURAL ENGINEERING recommended by the Department Head, in the event that approximately half of the requested supplemental funding request is granted.

	person-months			<u>Approximate timing</u>
	<u>Research supervision</u>	<u>Addi- tional</u>	<u>Total</u>	
Waste management	1	2	3	2nd half, 1983
Traction/tillage	1	1	2	1st half, 1983
Soil conservation engineering	1	0	1	1st half, 1984
Farm machinery	1	0	1	1st half, 1985
Hydrology	1	0	1	3rd qtr, 1982
Water management	1	0	1	2nd half, 1985
	<u>6</u>	<u>3</u>	<u>9</u>	

### COMMODITY AND LIBRARY PROCUREMENT

The Chief of Party gave a brief status report on equipment procurement. Approximately \$ 250,000 worth of equipment are in the shipment that arrived at the Port of Colombo on 18 October, with delivery to Peradeniya expected within the next week. Approximately \$ 260,000 worth of equipment are awaiting shipment or are in the procurement process. Therefore, approximately \$ 140,000 worth of equipment still remains to be procured to reach the amount allocated in the present Contract.

The list of equipment requested for Experimental Farm Development is being checked by Dr. Perumpral of VPI to obtain specifications and estimated costs. Notice has been received from Dr. Perumpral that this information should reach Sri Lanka within the next two or three weeks. Supplemental equipment requests have been submitted by several departments, and procurement will proceed as soon as the total value of equipment already purchased for those departments becomes known. The TRS-80 Model 3 Radio Shack Computer System has been installed at the PGIA, and arrangements are being made for instruction in its use by a Radio Shack representative during the week of November 2nd.

The PGIA/Faculty Librarian, Mr. J.V.Fernando, gave a status report on acquisition of books and journals under the Project. He reported that subscriptions had been purchased for approximately 60 journals, most of which are now being received. Including the books in the shipment now in the Port of Colombo, orders have been placed for almost 1,300 books. He indicated that the objective is to purchase 2,000 books each year during the life of the Project. He expressed concern that by late 1983 the present library will be bursting at the seams and additional space will be needed.

A question was raised about the possibility of receiving journal donations from Consortium University Faculty Members. The Deans responded that they were confident this could be arranged. However, it was suggested that consideration be given to the relative advantages of obtaining back issues on micro film or fiche rather than the actual journals. It was agreed that the Peradeniya Department Heads should identify journals for which back issues are needed, and that a list of the specific issues missing from the present PGIA/Faculty Library collection should be forwarded to the Consortium Universities through the Chief of Party.

The Librarian expressed concern about the ability of the PGIA and Faculty to continue subscriptions of all journals beyond the 3 years presently projected, and requested that consideration be given to extending those subscriptions through 1985. This request was approved.

The Consortium Deans were also requested to followup on the earlier request to each participant that they submit lists of books and periodicals which they think will be useful to their departments.

### THE FUTURE OF THE PROJECT

The Chairman of the Session, Dean of Agriculture Senanayake, opened with a report on the future of the Project insofar as the Faculty of Agriculture is concerned. He organized his report into Undergraduate Enrolment, Academic Planning, Buildings and Other Facilities, Recurrent Expenditures, Library & Equipment and Research.

The Dean explained the undergraduate enrollment target which has to increase from 100 to 200 and the current status of the three faculties at Peradeniya, Matara and Batticaloa. The Planning Ministry has pointed out the current need for 200 students and this demand can be satisfied. By 1985 the output of students by the three faculties will be 275 students.

With regard to academic planning, Mathematics will be included to the curriculum and it will also include Biometry and Statistics, and these will be introduced in all three years. In addition, the curriculum provides more time for use of library facilities. Peradeniya staff will continue to respond to help the two new faculties of agriculture in the other two universities. By 1985 the Matara faculty is expected to be able to operate on its own, and by 1988 the Batticaloa faculty too should be self supporting.

The Dean then summarized the building and facility development program. The renovations and support facilities in the agriculture building will continue. Tenders have been received and the construction will proceed immediately on the Agricultural Biology and Chemistry building to be completed by the end of 1983. The renovation of the existing biology building is underway to include construction of greenhouses and plant houses and larger classrooms. For Agricultural Economics, the building is being renovated for the Print Unit, and plans are under consideration to extend the building as there is a need for more space for extra staff. For Agricultural Engineering, the construction of a workshop and an extension to the existing building and the possibility of building upwards is to be considered. The new Animal Science building is the next priority and should be completed by the end of 1984. At Maha Illuppallama an extension is already started and it should be ready by the end of 1981. It will have a new dormitory and classrooms and laboratory by 1984 with funding expected in 1983. Steps to improve the livestock units will be undertaken immediately. At the Dodangolla farm, construction of plant and potting sheds will be commenced. Tenders have been called for the construction of a dormitory for students and this should be underway by the end of 1981. A seed laboratory has been constructed and equipped and staff trained for it. The improvement of the irrigation system also needs to be looked into. At Mawella, funds will be available at the end of this year for the extension to dairy and completion of other animal units. An Administration/classroom complex, new library, and an outreach centre will not get underway till 1985, for which money would be sought. The Government has committed 5 million for experiment station development and is expected to commit 35 million for buildings under the Corporate Plan which is being prepared. The Dean expressed his great appreciation for the commitment by the Government and the UGC so far towards the capital development of the project.

With respect to the status of acquisitions for the library, inflation has made it possible to order only half of what we expected. University funds cannot be expended to meet the short-fall in this respect. The Dean expressed hopes that it may be possible for USAID to help meet the gap by allocating funds required to purchase the shortfall. The Dean stated that subscriptions to journals must continue. Local funding will be required to replace old equipment. If this need is not met the output of teaching and research could suffer.

The Dean then summarized the current research undertaken by the Faculty and PGIA and talked about the future of research for staff returning for their PhD. Additional staff will be available for PGIA research supervision when teachers who are being trained outside the Project return. Adequate funding is anticipated. The physical facilities for research have to be improved. The Dean presented a summary table of research and publications by department and said on the whole there is no problem of funds for research and in the future expenses for research. He hoped that some further outside help could be obtained for the laboratory equipment.

The Dean then spoke regarding the recurrent expenditure budget and explained that there is a 10 million rupee difference in the projected estimates and the revised support estimates for the period 1982-85, and the reason for this is that actual expenditures could be higher due to changes in salaries, prices etc. A statistical summary of his report is attached as a part of these Minutes.

In the discussion following the Dean's presentation, a question was raised concerning the dropout rate of students during the four-year undergraduate program. The Dean responded that the dropout rate is negligible, certainly no more than 3 percent.

With respect to buildings and other facilities, a question was raised about development of the Meewatura Farm. The Dean responded that it was not in his report as no formal proposal for development of that farm has yet been received.

The Dean was asked to comment on progress and plans relating to outreach activities. Both the Dean's response and the ensuing discussion revealed that outreach activities of the Faculty are already significant--perhaps the staff are already over-committed in this regard--but that it is still largely on an individual basis and had not been institutionalized. In summary, the Faculty's commitment to and involvement in outreach-type activities is significant and will continue. However, it will not be possible to institutionalize this effort until the return of Faculty members presently out for training under the Project.

It was suggested that the reports emanating from the Project should include more substantive information about outreach activities of the Faculty and PGIA.

In his report on the future of the Project with respect to the PGIA, Director Jogaratnam stated that there should be no difficulty in reaching the enrolment levels projected for 1985 in the Project documents. He stated that the demand for postgraduate study has been greater than expected, but that enrolments are currently limited due to lack of adequate staff and facilities. He informed the Council that there is now a definite trend away from the MSc degree toward the research degrees which require more staff for research supervision. Thus, the rate of growth of the PGIA must be somewhat slower than originally anticipated, awaiting the return of junior staff now in training.

In this regard, the Director emphasized that programmed technical assistance had been expected to fill in at least partially while present staff are away for training. He expressed serious concern that what appears to be an inevitable reduction in technical assistance provided to the PGIA and Faculty will have serious consequences in terms of the PGIA's rate of development over the near future.

The Director also emphasized the role of technical assistance staff who have already come to Peradeniya in improving the quality of the program. As specific examples, he mentioned that the minimum requirement for an MSc degree has now been increased to 45 credits, and that a number of courses have been reorganized, deleted or added to the postgraduate curriculum as a result of counsel received from visiting staff brought here under the Project.

Both the Dean and Director expressed concern that what appear to be future limitations on resources will result in a shortfall in both equipment for the laboratories and books and journals for the Library.

In his comments on the future of the Project from the standpoint of the Consortium Council, the Chief of Party indicated that the Consortium's major priorities will be to complete the training as scheduled, to maintain the necessary coordination and support for all components of the Project, and to seek the funding required for completion of the program in a manner that will enable it to fully achieve its objectives. He cited two urgent needs; 1) an agreement in principle among USAID, University of Peradeniya and the Contractor for activities to be carried out during the interim period until the Project Grant Agreement and Contract have been modified; 2) early notification from USAID of the level of supplemental funding that will likely be granted and re-negotiation of the Project Grant Agreement and Contract as soon as possible to permit planning and future activities of the Project to move forward in the best manner to achieve Project objectives. He also suggested that it would be desirable to consult with USAID on the possibility of providing some additional support during the later years of the Project in the event that the full request cannot be granted at this time.

In the discussion following the Chief of Party's report, the Deans and Academy Representative supported the needs stated above, and added that this is not a "run of the mill" Project--it is better managed and operated than most, and merits the greatest possible support of all parties concerned.

The future of the Project from the standpoint of USAID was presented by Dr. Bonner, Chief, RRD, USAID/SL. He opened by stating that USAID appreciates the support received from the Ministry of Higher Education, PGIA, Faculty of Agriculture and the Contractor in moving the Project forward so well. He then raised three specific points that are of concern to the Mission:

- 1) Why was the original budget so far from reality?
- 2) Will the presently requested funds be adequate to complete the Project, or will another request be coming in the future?
- 3) Not all of the increases in the Plan of Implementation are due to inflation. Some are due to an increased scope of work which poses legal problems for the Mission.

With respect to the Contract extension that will be required to permit all participants to complete their training, Dr. Bonner informed that the maximum length of Project permitted by U.S. law is 7 years. An extension beyond that time will require Congressional approval which will probably be very slow in forthcoming. He added that the PGIA, Faculty and Contractor should therefore study the alternatives for completion of training earlier in case an extension of time through 1986 is not approved. He also emphasized that if such an extension is granted it will be a one-time extension only, that no further extensions will be considered.

Dr. Bonner next informed the Council that some difficulties had arisen as a result of the fact that the AED Project is a direct AID Contract whereas all other Projects in the country are host country contracts. Due to this, there is a split responsibility between the local USAID Mission and the Contracting Office in AID/W, with the Sri Lanka USAID Mission having technical responsibility for the Project. This split in responsibility has resulted in some problems in

communication and consequent delays in arriving at decisions.

Dr. Bonner then turned to the question of actions taken and anticipated by USAID concerning the request for additional funding. USAID/SL started to process this request in early 1981. They tentatively earmarked the third quarter of FY 1982 (April-June 1982) as the critical decision period. Specific actions taken by the Mission to date include provision for additional support of the Project in the Country Development Strategy Statement, the Congressional Presentation, and the Annual Budget Submission. He indicated that he was not at liberty to state the amount recommended in those documents.

With respect to the availability of funds Dr. Bonner reported that USAID had been operating for 2½ years under continuing resolutions at 1979 dollar levels. At present, the funding situation is highly uncertain, but it appears that slightly less will be available than in 1981. He further reported that the Grant funds are extremely hard to get, as they usually constitute less than 10% of the total funds available to AID. The present outlook is that total Grant funds for the Asia region during the present fiscal year will be less than the total cost of this one Project. The Mission has no clear indication of the outcome so far as AED Project is concerned, but it is clear that the full request cannot be met.

Dr. Bonner informed the group that the Project Paper Supplement will be completed and submitted to Washington on or about November 15 with a recommendation for a specific funding level for the Project. Its fate from that point onward is not known.

In conclusion, Dr. Bonner stated that the Mission is supportive of the Project, is trying to do as much as possible, but must remain aloof at this time.

In the discussion which ensued, Moseley pointed out that one of the unusual and important features of this Project is the flexibility provided in recognition of the fact that changes would be inevitable during the course of the seven years in which the Project will be operative. Moseley also stressed the need for agreement in principle among USAID, the PGIA and the Contractor as to activities to be undertaken during the interim period until firm funding levels have been established. It was agreed that a summary of the interim plans would be presented orally in the scheduled October 23rd meeting with the USAID Project Committee. A written summary would be submitted as soon as possible thereafter.

BUSINESS MEETING OF THE COUNCIL

CAED Council Chairman Nichols, Dean of Agriculture and Life Sciences at VPI, called the meeting to order at approximately 11.00 a.m. on 21 October. The following were present in addition to the Chairman: PGIA Director, Dr. Jogaratnam; Faculty of Agriculture Dean, Dr. Senanayake; Penn State Dean of Agriculture, Dr. Smith; Texas A & M Dean of Agriculture, Dr. Kunkel; Miss Malini Ponnadurai of USAID; the CAED Chief of Party, Dr. Ray; and, Executive Vice President of the Academy, Mr. Moseley.

The first item of business was discussion of the current status of the Consortium Coordinator position. As Mr. William Garvey, formerly Consortium Coordinator, was forced to go on leave of absence for health reasons, Ms. Barbara O'Grady, AED Director of International Program Operations, is presently acting in that capacity. Although she is not an agricultural specialist, Mr. Moseley indicated that her 3 years in all phases of the Academy and prior experience in the academic world, together with her current involvement in the Project, were appropriate qualifications for the Coordinator position at this point in the Project.

Moseley made a motion that Ms. O'Grady be appointed as Consortium Coordinator through at least 1982. The motion was seconded by Kunkel. During discussion concerning the motion, the question was raised concerning the level of position at which she will be appointed under the Project. Moseley responded that it will be at the Program Officer level, at a consequently somewhat lower salary than Garvey who is a Senior Program Officer. Moseley pointed out that, after 1982, it is expected that H. Ray will return to Washington to assume responsibility for Project Coordination at the US end in addition to his continuing responsibility in Sri Lanka for which short term visits have been projected. After the discussion, the motion passed unanimously to appoint Ms. O'Grady as Consortium Coordinator through 1982.

The second item of business was election of Chairman of the Council for the coming year. According to the terms of the Consortium Agreement, the Chairman must be the Dean of Agriculture of one of the three participating universities in the Consortium. Dean Smith nominated Dean Harry Kunkel of Texas A & M to serve as Chairman of the Council for the coming year, and the motion was seconded by Moseley. As there were no other nominations, Dean Kunkel was declared elected by unanimous consent.

The third item of business was to determine the site of the next Consortium Council meeting. As the practice is to alternate between US and Sri Lanka for the annual Consortium Council meetings, the next meeting will be held in the United States. Dean Kunkel invited the Council to meet at College Station, and that invitation was accepted.

The fourth item on the agenda was to determine an approximate date for the next Consortium Council meeting. After considerable discussion, it was decided that the next meeting should be held in November 1982 just prior to or following the 1982 meetings of the National Association of U.S. Land Grant Colleges and Universities. It is hoped that the Sri Lankan representatives of the Council may be able to participate in at least a portion of the Land Grant meetings to enable them to meet with Agricultural University Administrator throughout the United States.

Dean Kunkel moved that the Minutes of the last Consortium Council meeting (at Penn State in November 1980) be approved as written. The motion was seconded by Dean Smith and passed unanimously.

The Chairman indicated that it should be possible for the Council to approve the Minutes of this meeting in draft form prior to departure of the U.S. representatives from Sri Lanka.

The Chief of Party was instructed by the Chairman to issue letters of thanks for participation in the meeting and their support of the Project to those who participated in the opening session of the Council Meeting.

The meeting adjourned at approximately 11.40 a.m.

SUMMARY OF COUNCIL DELIBERATIONS

Mr. Moseley summarized the particular matters discussed and decided upon during the prior sessions in the order of the meeting agenda as follows:

A. Participant training

1. to maintain the original concept for training of participants by including field research in Sri Lanka, subject to funding availability and the requirements of each participant's progress. In the event funding constraints require formal consideration of alternative training modes, a detailed cost analysis of alternatives will be made.
2. to fully implement the research supervision plan described and agreed upon in the earlier sessions (Document No. SR 81-1).
3. to review the status and time needed by each student for in-U.S. course work and in-Sri Lanka field research. The U.S. university Deans will review the status with the principal advisors for each student to compare the plans now outlined in participants' progress summaries prepared by Dr. Ray during his last visit to the U.S.
4. to improve the extent of reporting from the U.S. campuses to the PGIA on the substantive progress of the students and their particular courses.
5. to ensure that the thesis research project plans for every student are submitted to the PGIA department heads sufficiently in advance of final preparation to allow comments from the PGIA for consideration by the students and their advisors.
6. to ensure that the equipment procurement schedule provides for receipt at the PGIA of equipment needed by every returning participant during his or her field research.
7. to proceed to identify potential candidates in Sri Lanka to serve as field research supervisors and to submit such candidates to the respective universities for review.
8. to ensure that PGIA or Faculty requirements on the time of the returning participants will not impede completion of their thesis field research.
9. to ensure the authorized completion of some of the students scheduled completion of their PhD progress, the Consortium will discuss with USAID and the Contracting Officer, the need for contract extension for approximately 9 months.

B. Technical Assistance

Recognizing that proceeding with the full level of effort for technical assistance previously scheduled for 1982 would lead to financial commitments which exceed the current obligation of funds under the Contract, the following plan for 1982 technical assistance was agreed upon, within current funds, to meet the Project's priority needs:

1. Provide short term technical assistance as shown in the attached chart which allows the maximum co-ordination of field research supervision with other technical assistance functions.
2. Continue to completion the current appointments of the long term advisors now in Sri Lanka, namely, the advisor in Plant Breeding (scheduled to end early 1983) and the advisor in Rural Sociology (scheduled to end in December 1981).
3. Extend to December 1982, the appointment of Dr. Howard Ray as Chief of Party and advisor for outreach activities.

The Dean for each university will consult and review with the short term advisors the schedules for their requested visits.

USAID will be informed of this further interim plan for technical assistance, pending the actions on the request for increase in USAID funding submitted in June 1980. No further technical assistance commitment will be made beyond those planned for 1982, to ensure that the Project fund commitments are within the Contract terms and current funding obligations.

Until the funding picture can be clarified, technical assistance commitments will need to be curtailed.

C. Commodities Procurement

The first full shipment of approximately \$250,000 in value of equipment and library materials arrived in Colombo port on October 20. In addition to the additional equipment purchased already on order (approximately \$200,000), the following steps will be taken, within the existing current funds for additional orders:

1. the balance of equipment will be ordered as soon as possible as follows:
  - a. materials based upon the requirements for support of returning graduate students;
  - b. Farm equipment based upon final departmental review of lists being prepared this week by the advisor in each area;
  - c. other equipment of highest departmental priority which is still within the departmental budget allocations and within the overall contracted budget line items for equipment (The Project coordinator will notify the Chief of Party of the fund balance as soon as the final costs are known for the total value of purchasing orders and shipping costs to date);

- d. Library books will continue to be ordered at a rate of approximately 2000 per year ;
- e. Based on lists of priorities developed by the Faculty Department Heads at Peradeniya, the U.S. universities will seek to donate back issues of required periodicals;
- f. Plans for additional library space will be needed by early 1983 to accommodate the library expansion pending the completion of a new library facility for the PGIA and Faculty of Agriculture.

D. Travel extensions for PGIA staff

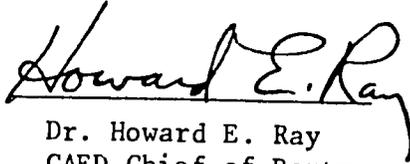
Pending resolution of the funding situation, additional travel extensions will be suspended. Further review will be made of the use of additional funds for such extensions, when the funding level is known.

E. Future of the Project and Objectives

1. The basic project goals for enrollment, graduate output and training capacity by 1985 will be met at the PGIA and Faculty of Agriculture as planned, given the projected additional output of graduates at the new university campuses at Ruhuna and Batticaloa.
2. Continuing deferral and/or deferring anticipated technical assistance personnel due to the funding requirements will delay full implementation of institutional activities in research and teaching until more of the new faculty (participants) complete degrees and return to Peradeniya. It is recognized that the T.A. deferral will cause some significant deficits in the institutional development of research programs, and new curricula and outreach programs.
3. The basic building progress targets for the PGIA and Faculty of Agriculture will be met due to the continuing (and increased) commitments of the Government of Sri Lanka and University to the Project.
4. The curriculum review for the Faculty of Agriculture just completed and approved will proceed to be implemented.
5. The shortfall in Library acquisitions now projected will receive priority attention by the PGIA from funds which may be made available from its own budget.
6. Outreach activities will continue to be encouraged and will be an objective of the PGIA programs, recognising, however, that such activities will primarily be on an individual faculty member basis until the new faculty are established after their training. Current faculty will continue to develop outreach activity plans and seek required support for such activities outside the project funds.
7. The training program will be accomplished as originally planned and will be given the priority under existing project funds, although early attention to contract extension is required to enable a few students to complete their degrees after March 31, 1981 the current estimated completion date of the contract.
8. The Consortium's priorities will be continue to be as follows:
  - a. to complete the training and integration of the new faculty (participants) ;

- b. to maintain the necessary coordination and management to continue the smooth operation of the project;
- c. to seek the funding required to, at a minimum, meet the original project objectives. In this regard, as presented by the USAID project monitor, it is understood by the Consortium and Project Director, that USAID will be moving as rapidly as possible to decide upon project budget requirements and to resolve the funding, including the target date of November 15, 1981 for submission of a project plan amendment.

Recorded by:

  
Dr. Howard E. Ray  
CAED Chief of Party

## APPENDIX 3

### PGIA Director's 1981 Annual Report to Board of Management

#### General

This is the sixth annual report of the Postgraduate Institute of Agriculture, covering the Calendar year 1981. The Institute continued to make progress and consolidate its position as the sole institution empowered to grant post-graduate degrees in Agriculture in the country. There were no major organizational changes, but the Institute drew strength and inspiration from the many institutional linkages established with other institutions, both at home and abroad. Amongst these the most important was the USAID funded AED Project. Other links were established with sponsorship by the British Council, ODA of the United Kingdom, NORAD from Norway and DANIDA from Denmark. The coming years are likely to see even more linkages established with foreign institutions such as ICRISAT, IRRI and IITA. At home, the institutions drew strength from its association with various Government Ministries, Departments and Corporations.

Early in the year, the Institute was formally inaugurated by the Chancellor, University of Peradeniya, who also unveiled a photograph of the late Professor R.R. Appadurai the first Director of the Institute.

#### Student Admissions

Student admissions for the various courses offered by the Institute remained stable. A total of 135 students applied for admission of whom 75 were admitted but only 59 finally registered themselves to follow courses. As remarked in earlier reports, the mechanism of securing release for candidates selected from Government Departments is still not operating smoothly. The shift from the taught MSc courses to research degrees continued. The proportion of private candidates seeking admission also has increased. The appendix tables present details of admission by Boards of Study, programmes and nominating institutions.

#### Examinations

A total of 25 students completed requirements for the award of degrees. These included 13 MSc, 9 MPhil, and 3 PhD candidates. Details are given in the appendix (4).

#### Research in Progress

With the increase in the numbers following research degrees, the burden on the faculty staff for research supervision has also increased. The Institute will be forced to limit numbers registering for research degree programmes till such time as staff undergoing training abroad return. Some relief has been provided by arrangements such as those with ODA whereby staff is

provided for research supervision. It is also envisaged that about 6 to 8 Department of Agriculture staff currently registered with the Institute will undertake research at IRRI, Philippines and will be supervised by IRRI staff. In all cases, however, the candidates will be working towards University of Peradeniya degrees.

### Links with Foreign Universities and Institutions

#### (a) USAID Assistance

Assistance under the USAID funded AED Project continued. During the year under review, a further 10 junior staff members of the Faculty of Agriculture were placed in the Consortium Universities for advanced studies. This brought the total of trainees under the project to 38, the total projected for training. Visiting Faculty under the project provided 117 man months of technical assistance. Equipment and books which were originally expected in early 1981 were finally received in October 1981. In total, equipment and books to the value of US\$ 256,708 have already been received while another shipment to the value of US\$ 161,592 is expected shortly, totalling in all, US\$ 418,300. A breakdown of the assistance received by Departments is given in the appendix (6).

The Fourth Consortium Council Meeting was held at Peradeniya from October 21 - 22, 1981. It was attended by the Deans of Agriculture from the Consortium Universities and the Vice-President of the Academy for Educational Development, Washington, U.S.A. In addition, the Director of the Institute, the Team Leader, AED Project, the Dean, Faculty of Agriculture and Senior Faculty members participated in the discussions. The Secretary of Higher Education and the Vice Chancellor, University of Peradeniya participated in the inaugural sessions.

Since at the time of the meeting, no firm word had been received from USAID about the request for additional assistance, the meeting concerned itself primarily with the problems in implementing the project within the limitations imposed by funding constraints.

#### (b) ODA Assistance

ODA continued to support studentship programmes under the NW Development Project. In addition, four members of the Faculty staff left for the U.K. for post-graduate training. Dr. Adam Pain, Research Co-ordinator under the ODA project completed a two year assignment and returned to the U.K. Dr. Frank Bolton continued to be attached to the Postgraduate Institute of Agriculture in the same capacity. The British Council also assisted the PGIA Library in a limited way.

#### (c) Other Assistance

DANIDA supported a studentship for research on the IRD programme in the Nuwara Eliya district while NORAD supported three studentships for research on the IRD programme in the Hambantota district.

IDRC supported a student from India and Uganda respectively for postgraduate studies at the Institute.

Financial assistance from the Ministry of Plantation Industry and the Ministry of Agricultural Development and Research and the Department of Minor Export Crops continued and the funds were utilised to support student research.

#### Library Development

With the integration of the PGIA and the Faculty Libraries, the total stock of books stood at 13,000 with another 2,450 books on order. The library also receives 138 journals. The library benefits from the AED project and is also supported by the British Council, in addition to the support from the UGC and the University of Peradeniya. Details of sources of support are given in the appendix (7).

#### The Postgraduate Institute of Agriculture Fund

A full statement of Income and Expenditure will be submitted separately. A separate account was opened during the course of the year to take care of funds granted solely for research purposes.

#### Appreciation

Grateful acknowledgement is due to all those who assisted the Institute in various ways. Apart from the various institutions indicated earlier, special mention must be made of the assistance received from Dr. H.E. Ray, AED Team Leader, Dr. Adam Pain and Dr. Frank Bolton of ODA, Dean, Faculty of Agriculture and the Panel of Teachers. Appreciation is also due to the students who put up with various inconveniences gracefully. The support and assistance of the staff led by Mr. R.S. Rajapakse, Senior Assistant Registrar, Mr. H.A. Jayasinghe, Asst. Bursar and Mr. J.V. Fernando, Assistant Librarian, is gratefully acknowledged.

T. Jogaratnam  
Director.

Appendix 1

Admissions for 1981 by Course of Study

Board of Study	<u>M.Sc.</u>	<u>M.Phil</u>		<u>Ph.D</u>		Total
	Full Time	Full Time	Part Time	Full Time	Part. Time	
Agric. Biology	6	8	-	2	-	16
Agric. Chemistry	2	2	1	-	-	5
Agric. Economics & Ext.	5	7	3	-	-	15
Agric. Engineering	9	10	1	-	-	20
Animal Science	9	3	-	-	-	12
Crop Science	1	5	-	1	-	7
<b>TOTAL</b>	<b>32</b>	<b>35</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>75</b>

Appendix 2

Admissions by Nominating Institutions

<u>Institutions</u>	<u>Number Admitted</u>
Department of Agriculture	11
Department of Education	4
Sri Lanka Tea Board	1
Co-op Development Department	2
University of Peradeniya	5
Department of Animal Production and Health	5
National Milk Board	2
C.W.E.	1
Planning Ministry	1
Mahaveli Development Board	8
Sri Lanka Sugar Corporation	1
Ministry of Lands & Land Development	1
Ruhuna University College	2
Private	31
<b>TOTAL</b>	<b>75</b>

Appendix 3

Students Registered by Boards of Study

Board of Study	<u>M.Sc.</u>	<u>M.Phil.</u>		<u>Ph.D.</u>		Total
	Full Time	Full Time	Part Time	Full Time	Part Time	
Agric. Biology	5	6	-	2	-	13
Agric. Chemistry	2	1	1	-	-	4
Agric. Economics & Ext.	5	6	3	-	-	14
Agric. Engineering	8	6	-	-	-	14
Animal Husbandry	8	-	-	-	-	8
Crop Science	1	4	-	1	-	6
TOTAL	29	23	4	3	0	59

Appendix 4

Programmes Completed

MSc

Mr. K. Jamaludeen  
Miss P. Masilamany  
Mr. J.T.M.C. Corera  
Mr. H.P. Samaraweera  
Mr. A.S. Vidanapathirana  
Mr. T.K.A. Samarasinghe  
Mr. K. Jeganathan  
Miss M.M. Nugaliyadda  
Mr. S.M. Ismail  
Miss B.L.C. Perera  
Mrs. S.F. Hussain  
Mrs. S.M. Gajameragedera  
Miss I. Ratnayake

MPhil

Miss S. Chandrasegaram  
Miss G.M. Anthonypillai  
Mrs. S.S. Maraikar  
Mr. D.S.P. Kuruppuarachchi  
Miss M. Sivasanganathan  
Mr. B.W.M.D. Bandara  
Miss P.I. Devendra  
Mr. N. Jeganathan  
Miss N. Kethusigamany

PhD

Mr. E.R. Nkrunziza  
Mr. H.M.E. Herath  
Mrs. J.D. Ranmuthugala

Appendix 5

Award of Studentships

<u>Name</u>	<u>Basic Degree</u>	<u>Field of Study</u>
<u>O.D.A.</u>		
Mr. K. Mohanakanthan	B.Sc.(Agric.)	Agric. Engineering
<u>NORAD</u>		
Mr. P.M. Amarasena	B.Sc.(Agric.)	Agric. Economics & Ext.
Mr. P.D.J. Wijewardene	B.A.(Special)	- do -
Mr. D.M. Muthubanda	B.Sc.(Agric.)	- do -
<u>NETHERLANDS</u>		
Mr. M.A.L.B. Herath	B.Sc.(Agric.)	Agric. Economics & Ext.

Appendix 6

Expenditure by Department for Equipment Procured  
under the Agricultural Education Development Pro-  
ject as of 27 October 1981

<u>Department</u>	<u>U.S. \$</u>
Crop Science	61,054.12
Agricultural Chemistry	78,286.79
Agricultural Biology	84,469.13
Agricultural Economics & Extension	33,144.58
Animal Husbandry	77,311.66
Agricultural Engineering	67,137.81
Library	9,405.50
Experiment Farm Development	7,490.00
<b>TOTAL</b>	<b>418,299.50</b>

Books and Journals acquired by the Agricultural Library in 1981

<u>Source of Funds</u>	<u>Books</u>	<u>Periodicals</u>
Faculty of Agriculture budget	203	60
PGIA Budget	19	38
AED Project	750	40
British Council	20	Nil
Others	300	-
<b>TOTAL</b>	<b>1292</b>	<b>138</b>

The integrated PGIA/Faculty of Agriculture does not include those assigned to Maha Illuppallama.

Research in Progress

<u>Name of Student</u>	<u>Title of Research Project (MPhil Programme)</u>
Mr. M.P.J. Weerasinghe	Present and Potential use of Irrigation Water in Vanathavillu Settlement Area.
Mr. H.D. Sumanaratne	Present and Potential use of Irrigation Water in Vanathavillu Area.
Mrs. J. Balasuriya	A Comparison of Propagation Methods for Citrus.
Mr. S. Gunarajasingham	Normal Reproductive Physiology of Local Swamp Buffaloes.
Mr. H.P.B.S. Jayawickrema	Conservation of Common Pastures and Fodder Varieties in the Dry Zone.
Mr. K. Thevamanoharan	Genetics of Meat and Milk in Buffaloes. Genetics in Rabbits.
Mr. Gunaratne de Silva	The effect of salvinia auriculata on the growth and yield of rice.
Miss C.M. Mudannayake	Evaluation of the nitrogen fixing ability of locally isolated strains of Rhizobia and comparison of these against known productive strains.
Mr. P. Thirukumaran	Evaluation of the possible carriers to be used for innoculent production in the soya bean project.