

REPORT
EASTERN REGIONAL CONFERENCE
on
INTERNATIONAL AGRICULTURAL
TRAINING

March 22—24, 1978

Center of Adult Education
University of Maryland University College
College Park, Maryland

U.S. Agency for International Development/Office of International Training (USDA/OIT)
U.S. Department for Agriculture/International Development Staff (USDA/IDS)
Association of U.S. University Directors of International Agricultural Programs (AUSUDIAP)
Resident Instruction Committee on Operation and Policy (RICOP)
International Science and Education Council (ISEC) Standing Committee on Training

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on
INTERNATIONAL AGRICULTURAL TRAINING
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CONFERENCE PROGRAM

Wednesday,
March 22

1:00 P.M. Registration

Session I

Chairman: Wendell McKinsey

NEW DEVELOPMENTS IN INTERNATIONAL TRAINING

3:00 P.M. Organizational Developments Relating
to Training

Panel: AID Reorganization
USDA Reorganization
ISEC Committee Report
UN/FAO Training Directions

John Lippman
Robert Ayling
Wendell McKinsey
Don Kimmel

4:30 P.M. The New Farm Bill: Potentials for
Agriculture Training

Keith Shea

5:30 P.M. Social Hour

6:30 P.M. Dinner - Banquet

7:30 P.M. Title XII Legislation: Implications
for Agricultural Training

Fred Hutchinson

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Thursday,
March 23

Session II

Chairman: Gerald Donovan

TRAINING FOR DEVELOPMENT

9:00 A.M. Training Needs of Developing Countries

Panel: AID Mission Perspective
USDA Report
Country Perspective
Appropriate Training for
Women

John Roberts
Robert Ayling
Kavi Chutikul

Elsa Chaney

11:00 A.M. Our National Commitment to Training

Panel: AID/Washington
USDA
Universities

J. W. Legates

12:00 Noon Lunch

Session III

Chairman: Robert Dyck

TRAINING STRATEGIES

- | | | |
|-----------|--|---|
| 1:15 P.M. | Institution Dimensions
Panel: Cooperative training: the
1890 institutions
Collaboration between U.S.
and Foreign institutions | Burleigh Webb

Russell Stevenson |
| 2:30 P.M. | Innovations and New Directions in
Curricula
Panel: An agricultural administration
program
Professional degree programs
Reports from conferees | Rodger Yaeger
Larry Zuidema |
| 3:45 P.M. | Admissions and Advising
Panel: Professor
Graduate Dean
NAFSA | David MacKenzie
David Sparks
Valerie Woolston |

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Session IV

Chairman: Vernon Armbruster

TRAINING TECHNIQUES

- | | | |
|-----------|---------------------------------|----------------------------------|
| 7:30 P.M. | Enriching our training programs | Robert Ayling
and Janet Poley |
|-----------|---------------------------------|----------------------------------|

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Friday,
March 24Session V

Chairman: William Kelly

THE COOPERATIVE TRAINING EFFORT

- | | | |
|------------|---|----------------------------------|
| 8:30 A.M. | Policies and Procedures for AID
Sponsored Programs | Robert Landry
and Janet Poley |
| 10:00 A.M. | Future Directions of International
Agricultural Training | Kenneth McDermott |
| 11:00 A.M. | Concluding Remarks | |
| 12:00 Noon | Conference Adjournment | |

EASTERN REGIONAL CONFERENCE ON INTERNATIONAL AGRICULTURAL TRAINING

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FOREWORD

This is a summary proceedings of the Eastern Regional Conference on International Agricultural Training held at the Center of Adult Education, University of Maryland University College, College Park, Maryland during March 22-24, 1978. This conference was one of three regional training conferences (Eastern, Central and Western) developed and held primarily for university/college staff with an interest in training for international agricultural development.

These conferences were sponsored by the Agency for International Development, the U.S. Department of Agriculture, and the university community, cooperating through the AID Office of International Training, the USDA International Development Staff (IDS), the International Science and Education Council (ISEC) Standing Committee on Training, the Association of U.S. University Directors of International Agricultural Programs (AUSUDIAP) and the Resident Instruction Committee on Operation and Policy (RICOP).

Invitees to the Eastern Regional Conference included persons from educational institutions in the East, from Maine to Florida, U.S. government agencies, international organizations, foundations and private concerns interested in international training in agriculture. An attempt was made to get representation from several

interested groups at educational institutions in the region. As shown by the listing of conference attendees, the objective was met.

These proceedings consist of brief summaries of most of the papers that were given at the conference. The purpose of this abbreviated proceedings was to make the materials presented available to interested persons in a concise format and at an early date.

The members of the conference committees for the Eastern Regional Conference were as follows:

PROGRAM COMMITTEE

Robert I. Ayling - Deputy Director for International Training, International Development Staff, USDA, Washington, D. C. 20250

Robert Dyck - Director, University International Programs, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061

J. Wendell McKinsey (Ex-Officio) - Director of International Agricultural Programs, University of Missouri, Columbia, Missouri 65201

Janet Poley, Assistant Deputy Director for International Training, International Development Staff, USDA, Washington, D. C. 20250

Winston E. Pullen (Co-Chairman) - Associate Dean of Instruction, College of Life Sciences and Agriculture, University of Maine, Orono, Maine 04473

Burleigh C. Webb - Dean, School of Agriculture, North Carolina Agricultural and Technical State University, Greensboro, North Carolina 27411

Larry W. Zuidema (Co-Chairman) - Assistant Director, International Agriculture, Cornell University, Ithaca, New York 14853

LOCAL ARRANGMENTS

Gordon M. Cairns, Dean, College of Agriculture, College Park, Maryland 20742

Paul R. Poffenberger, Associate Dean, College Park, Maryland 20742

Theme: NEW DEVELOPMENTS IN INTERNATIONAL TRAINING

Summary Papers

Organizational Developments Relating to Training

1. AID REORGANIZATION

John F. Lippman, AID

AID has recently undergone an internally mandated reorganization, primarily in response to the Babb Task Force report. As a result, the Agency is providing a greater degree of decentralization of authority to the field missions. The regional bureaus in Washington are being strengthened and the central AID Washington elements are being streamlined and revamped. An effort is being made to shift more people abroad and to increase the number of professionals in agriculture, health, education, etc. An overall reduction in force is anticipated bringing the total Washington staff to 2100 from its present 2300 persons.

The Office of International Training (OIT) has been moved to the newly organized Development Support Bureau (DSB), formerly called the Technical Assistance Bureau (TAB). This change for OIT gives it more professional standing and also places more emphasis on supporting field missions.

With this change in organization comes a reduction in force in OIT from 70 to approximately 60 staff. As a consequence, OIT will be making greater use of public and private sector agencies for programming participants. This past year OIT contracted with the Southeast Consortium for International Development to program academic participants in their region in non-agricultural fields. In the future, more reliance will be placed on the USDA for more international training activities relating to agriculture participants.

Another new development relating to training is the Humphrey Bill (S. 2420) which proposes a new International Development Cooperation Administration (IDCA). This organization would have the overall role of coordinating bilateral and multi-lateral programs and would include Peace Corps and other agencies along with what is now AID. Passage of this bill this year is not likely although some elements may be included in the FY-1979 authorization.

2. REORGANIZATION OF USDA

Robert I. Ayling, USDA

By the end of this month, if the Congress passes the bill which changes the name of the Farmers Home Administration, all of the Department of Agriculture's structural reorganization proposed by the Secretary on October 5, 1977 will be completed. This reorganization will have been completed according to plans presented in materials circulated by the Department last Fall. At that time it was hoped that this task would be finished the first week in January. If, in fact, all is done by the end of March, one can say, that it was not too far off schedule. The Congress has been cooperative with the President in his efforts to reorganize.

The purpose and theory behind the reorganization was clearly expressed in the Secretary's Memorandum No. 1927, dated October 5, 1977. Briefly stated, that message indicated management and program efficiencies by combining similar functions of many agencies into a smaller number of units led by fewer administrators. Some examples: Automated Data Services, Office of Operations and Office of Finance will have one Director instead of three. The Office of Audit and the Office of Investigation will be combined and led by a single Director. All rural development programs will be brought into a single agency called the Farm and Rural Development Administration. The Packer and Stockyards Act functions will be carried out as a subunit of the Marketing Services but administered by one head instead of two.

Combining the Economic Research Service, the Statistical Reporting Service, the Farmer Cooperative Service and their management support unit into a single agency will reduce the number of people reporting to the Director of Economics, Policy Analysis and Budget.

The new agency SEA (pronounced SEE - YA), Science and Education Administration, brings together the cooperative State Research Service, the Extension Service and the National Agricultural Library. This consolidation will enable its Administrator to better coordinate and be responsible for research and extension under Title XIV of Food and Agriculture Act of 1977. The Secretary believes the current organization of SEA is the best way to coordinate and plan agricultural research, extension, and teaching as cited in Title XIV.

The above changes and reorganization are intra-departmental changes within USDA. Many rumors have circulated about the inter-Department(s) reorganization within the entire Executive Branch. To date no major decisions have been made on shifting responsibility among Departments.

Within the President's reorganization initiative, there are some 30 on-going study groups. These study groups are seeking advice and response from the private sector. Inevitably, the impression generates that certain changes are forthcoming. In general, President Carter has asked the Study Directors to use the "bottoms up" approach, and people in local communities, are being asked for input. Reports of such input are circulated with the result that premature reports develop.

For the USDA, you may have heard that meat inspection should be transferred to the Food and Drug Administration, that nutrition programs should be sent to the Department of Education, or forestry programs be handled by the Department of Interior. In fact many of these ideas have been espoused for years. The previous administration, you may remember, recommended that the USDA be dissolved and the Executive Branch redesigned into four super departments. Among the many suggestions to date to absolve the USDA of its current programs, the Administration has a high regard for its performance and intends to keep it as a Department. It is hoped that all Study Directors can make their reports in the Fall of this year after which the Administration will formulate its policy and proposal.

Of great interest to us all is the status of the Humphrey AID bill (Senate 2420). This bill, as you recall, would establish the International Development Cooperation Administration (IDCA) as a separate agency. It would become independent of the State Department with the responsibility for directing all major U.S. development aid programs. The IDCA would be a permanent organization with an Administrator reporting directly to the President.

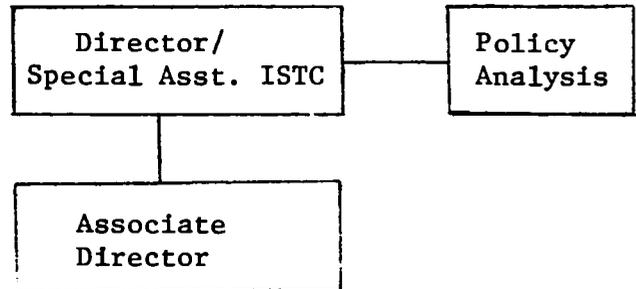
Secretary Vance promised an administration position on S2420 on March 15, but that day has passed, and neither the House nor Senate has proceeded far enough so a "mark-up" can be presented to the White House for a position. This bill is probably low on both the President's and the Congress's priority lists, preceded by the energy bill, and others. It may be three or four months or even longer before each House takes a full vote on a committee bill.

Several departments stand to lose authority and financing if IDCA is established as initially presented--Agriculture, State, Peace Corps, Overseas Private Investment Corporation, and Treasury are concerned. The International Financial

Institutions, State, and Treasury seem to be the agencies most intimately involved. A major concern for them is investment and other programs for which they are currently responsible.

A further matter of reorganization interest to us is a reorganization of the International Development Staff (IDS) which we believe Assistant Secretary Hathaway approved on March 14, 1978 (See attached chart). This reorganization adds minor elements relating to International Organizations and International Cooperation to the existing IDS, and merges the positions of Director, IDS, and Special Assistant for Scientific and Technical Cooperation. The tentative name for the organization is Office of International Cooperation and Development.

Office of International Cooperation and Development



Deputy Dir.
Technical Assistance

Deputy Dir.
International Training

Deputy Dir.
Development Programs

Assistant Dir.
Program Support

Assistant Dir.
International Organizations

Assistant Dir.
Scientific Cooperation

- Africa Programs
- Asia Programs
- Latin Am. Pro.
- Middle East Pro.
- Special Programs

- .Agronomy, Engineering
- .Animal Science, Education & Forestry
- .Economics, Management
- .Course Planning and Development
- .Development Project Mgmt.

- .Sector Analysis
- .Nutrition Studies
- .Special Teams

- .Interagency
- .Program support

- .FAO Coordination
- .NAC
- .Other, Int'l Organizations

- .US/USSR Agreement
- .US/Israel R&D Fund
- .Other S&T Agreements

3. UN/FAO TRAINING DIRECTIONS

Don C. Kimmel, FAO

A brief outline of what FAO does in training seems a necessary starting point for indicating new directions in FAO training activities.

FAO training activities cover the overall and specialized aspects of agricultural development, from planning to implementation, in such broad areas as crop and livestock production and protection, land and water development, forestry, fisheries, nutrition, statistics, some economics, credit, marketing and extension. In the two-year period, 1975-76, an estimated 35,000 people benefited from FAO sponsored training.

Training is provided, at national and regional levels, through such means as: ad hoc training centers and seminars; courses in continuing training centers; establishing or improving permanent agricultural, forestry or fisheries education and training institutions; major training components in development projects and, in varying degrees, through the interaction between foreign and local staff in all field projects.

The award of fellowships is the FAO training approach most familiar to many of you. About 23 percent of the 518 FAO fellowships awarded in 1977 were for study in the United States. Developed countries, as a whole, were still the preferred locale of study for 62 percent of FAO fellows. Subject matter areas of greatest interest were crop production, soils/fertilizers, agricultural mechanization/storage, fisheries resources and animal production. One-third of all fellowships were awarded for practical study, one-half for theoretical but non-degree training, 5 percent for first degree and 10 percent for higher degrees.

FAO also offers training opportunities, primarily for persons from the developed countries, through the Associate Expert Scheme. Under this arrangement, 16 donor countries (unfortunately not including U.S.) were providing financing, at the end of 1977, for 352 of their recent university graduates to work with FAO experts in countries throughout the world to gain a year or two of experience in preparation for careers in international work.

FAO also attempts to assist countries in maximizing the impact and efficiency of their total education and training efforts by providing assistance in estimating manpower requirements and in planning national systems of agricultural education and

training. Such assistance was initiated in 1962 with the Special Programme of Agricultural Education and Training in Africa and, more recently, has been provided to Nigeria, Lebanon, Brazil, Indonesia, and Nepal. Through its internal Inter-Departmental Working Group on Training, FAO attempts to establish Organization-wide training policy and to coordinate the use of its training resources in support of comprehensive national approaches to identifying and meeting training needs efficiently and effectively.

Some new developments and some trends in FAO training activities may be of interest. The Technical Cooperation Programme (TCP) initiated in 1977 makes it possible for FAO, for the first time in its history, to use its own (as compared with only extra budgetary resources previously) quota budget to finance small scale, quick action field projects, including training. The emphasis is on very practical training in the field at, or just above the producers' level -- farmer, forester, fisherman. Twenty-six of the first 160 TCP projects approved were for training. Another new departure in training is the award of fellowships for study within a fellow's own country.

Trends of interest are the movement away from regional toward national level training, from training (including fellowships) within developed countries toward training within developing regions and a tapering off in requests for institution building-type training projects.

In conclusion, I would like to bring to your attention the World Conference on Agrarian Reform and Rural Development which will be organized by FAO in Rome in July 1979. Training for rural development and agrarian reform will be one of the items considered.

4. TRAINING OPPORTUNITIES UNDER TITLE XII

F. E. Hutchinson, University of Maine

I assume all of you in the audience are familiar with Title XII of the Foreign Assistance Act of 1975. This section of the Act creates a Board for International Food and Agricultural Development (BIFAD) which is mandated to assist the Administrator in planning and implementing the Food and Nutrition Program of AID. The BIFAD has created two committees to assist it in program responsibilities - The Joint Research Committee (JRC) and the Joint Committee on Agricultural Development (JCAD). The JRC is primarily responsible for recommending research programs of global significance,

while the JCAD has responsibility for all country-specific programs related to training, research or extension.

The Title XII legislation provides for three types of program activity in the food and nutrition: collaborative research, centrally funded research, and country-specific training, research or extension projects. It is important to recognize that all of these will have training components, even though they may not be designed for that single purpose.

Collaborative Research Support Programs (CRSP) are the new initiative under Title XII and they provide an opportunity for U.S. universities with competence in agricultural training, research and extension to be linked with LDC institutions in long term research programs. Under this rubric there will be an opportunity for training foreign and U.S. students to work on agricultural problems relevant to the developing countries. The experiences of the international agricultural research centers indicate that successful implementation of new agricultural technology in these areas of the world requires an effective continuing training program, especially for foreign nationals.

It is envisioned this training will range all the way from short courses and seminars to formal graduate programs. It will also necessitate participation by qualified U.S. faculty in training programs abroad, whether on short-term seminars or on sabbatic leave assignments. The long term nature of CRSP activities will facilitate the establishment of training programs in collaboration with specific LDC's, especially in comparison to the past history of such relationships under short term projects.

I personally am concerned about the ability of U.S. universities to design programs, especially at the graduate level, to meet this new type of training responsibility. Hopefully there are universities who are busy at this point designing such programs and getting them cleared through their graduate schools. This is essential to the successful implementation of Title XII.

Theme: TRAINING FOR DEVELOPMENTTraining Needs of Developing Countries

1. AID MISSION PERSPECTIVE

John Roberts, AID

More than one-half of AID mission project funding goes for Agriculture and Rural Development activities. Foreign exchange is used for commodities, technicians, and training. While AID, in concert with Host Country (HC) officials, determine the magnitude and extent of training, AID is not the ultimate interventionist in determining who receives training. AID only reviews previous schooling, assurance of HC support, and English language capabilities.

Grant assistance covers training, but not travel. All training must be project related. Due to travel costs, HC focus on country training, in-country training, or seek cooperative assistance (travel costs) from foundations (Rockefeller, Ford, ADC, etc.). Training per diem & stipends are determined by AID from information provided by training sites (U.S. universities).

Loan assistance may all be offered for training - by sector or general manpower development. Such funds pay for training and travel and all costs.

Training Focuses: There is a shift toward generalists, and mid-level managers ...all in tandem with Congressional mandate for foreign assistance to be directed at rural poor, landless, women in development, minority and human rights, etc. This may mean less total participants for long-term training, but more for short-term and observational training. Title XII will probably strengthen direct role of U.S. universities in providing specialized, action-directed academic training.

Continuing Debates: Should nations be sending participants abroad (given increasing costs) or should there be more in-country training and focus on training trainers? Is the prestige and academic value of U.S. degrees (MA, MS, & Ph.D.) still valued over local and third country degrees? Are U.S. degrees necessary? What role should AID and U.S. universities have in selection of participants? There is continuing problem of "ringers" ...participants selected in their own countries on who

they are (or to whom they are related) rather than what they are. Continuing problem of training provided by HC as "reward" to various civil servants.

Problems of Training: Rates of return of participants to HC range from 40% to 99%. Relevance and adaptability of training always being questioned. Increase in requests to continue for additional degrees or change majors, etc. More recent problems of processing and documenting participants since AID missions are turning this over to HC officials.

Keys to Success from Developing Country Point of View and Training Institution:

1. Recognize that no one individual or organization relative to training is self-less----everyone has special interests.
2. Best to determine a manpower assessment of planning and direction relative to trained manpower needs, whether by Central government, sector (ministry), or regional needs. Ascertain the most crucial planning needs and slots then focus on required training to fulfill those needs.
3. Concentrate on most critical and specific requirements and the potential applicabilities of the training. Analyze potential for sharing of skills and conducting in-service training after return.
4. Ensure that training is relevant--to nation, department, region, environment, etc. Ensure that those trained are creative and innovative. Questions that might be asked of participants going to and returning from training: Why are you, as an individual, being trained? What will you do with your training? How will you being trained (and your training) affect the nation, sector, or region?

Training must be relevant and adaptable. Questions asked of newly returned participants about what was the most valuable aspect of your training revealed following answers: Provided an opportunity to travel; allowed for a wonderful international living experience; assisted in developing professional linkages relative to contacts, acquaintances, journals, associations, etc. None of these "answers" are wrong, nor are they an "indictment" of training----however, none of them really demonstrate the relevance or the adaptability or the possible application of training to development.

Suggestions for Training, especially pertaining to training institutions:

1. Expand open communications and information sharing between institutions and AID missions/HC ministries and departments. Institutions can provide ideas, information, suggestions, recommendations to those selecting participants so as to improve training opportunities and quality/quantity of participants.

(OIT may be used as facilitator in developing linkages between institutions and AID missions. Personal contacts and follow-up should also be stressed).

2. Institutions could provide synopsis to AID missions relative to: What makes good students? What subjects, majors, and fields of study "appear" to be most relevant?
3. Institutions, in counselling foreign students could provide a pre-study and post-study questionnaire (with annual review with student) as to what training is relevant to the individual student and what is relevant for development in his/her nation.

Technology transfers may be viewed as "intermediate" or "appropriate" or in any number of ways. The most important viewpoint, however, is "relevant." Relevancy relates to people---the most critical resource in any developmental undertaking---and people are not relevant unless they possess knowledge, skills, and abilities. That's the relevancy of training.

2. COUNTRY PERSPECTIVE

Kavi Chutikul, Khon Kaen University, Thailand

International training in agriculture for developing countries usually is for the "trainers". In the past it was often assumed that advance training was not available within the country or even in the region. The participants were sent to advanced Western countries to be trained. There were language and adjustment problems to be overcome, especially for long-term training for an advanced degree. Quite often the participants were over-trained and returned to the country when the (expatriate) advisor or expert for the project was leaving or had already left. Unless the participant was "practical" oriented or experienced the transfer of modern agricultural technology from an advanced and mechanized farming system to a subsistence type turned out to be inefficient. Advanced training with a degree from the West, however, is very prestigious and desired by every participant and project director.

After much international agricultural training from many development projects, Thailand now has an adequate trained manpower in agriculture, at least in terms of quantity. Complaints on quality usually do not relate to theoretical aspects but to practical aspects. Irrelevant training of the "trainers" is probably the main cause. Another is the inexperience of the trainers who are usually young, have not

adjusted to or understood the local problems of agriculture. In-country observation tour therefore needs to be arranged.

The future trend in agriculture training in developing countries probably will be more within the country and third country, and less in the West. The need for Western training will be more at the Ph.D. level for advance researchers and university staff. This group will also benefit from mid-career training at international research centers. At all levels "practical" aspects must be emphasized.

Theme: TRAINING STRATEGIES

Summary Papers

A. Institutional Dimensions

1. COLLABORATION BETWEEN U.S. AND FOREIGN INSTITUTIONS

Russell Stevenson, Agricultural Development Council

The Council's interest in graduate education in Asia in the rural social sciences dates to 1954. During this 24-year period over 400 individuals from Asia have been supported in graduate level programs of study, primarily for M.S. and Ph.D. degree study, and primarily at U.S. universities. The aim has been to help individual social scientists increase their competence to deal with the human and economic problems of agricultural and rural development.

This strategy of adding to the supply of trained social scientists in the countries of Asia where the Council is active is a corollary of the training programs directed by numerous other agencies active not only in Asia but in Latin America, Africa and the Middle East. Equally important have been the training programs of U.S. universities themselves. It is assumed we share a common interest and a common objective: an interest in providing advanced social science knowledge for teachers, researchers, and administrators within the developing world. A major objective is to assist in building within those same countries a local capacity to train their own professional social scientists. That objective has now been realized in a few Asian countries: Japan, Korea, Taiwan and India. In these countries, there are numerous universities that offer graduate training at the Ph.D. level in such fields as economics, agricultural economics, rural sociology, agricultural extension, and business and public administration.

Others such as the Philippines and Thailand are rapidly moving in this direction and possess a moderate capacity to train at advanced levels in these fields.

Thirdly, other countries in Asia, poorer in resources, at present lack the capacity to train their own social scientists beyond the baccalaureate or the M.S. level or such graduate programs as they have developed are by most measures deficient. In this latter group we include Bangladesh, Nepal, Pakistan, Sri Lanka, Indonesia.

The Council through its fellowship program supports graduate level training by means of a country-differentiated strategy. Among the poorer countries we continue to offer fellowships for graduate degree study at universities in Asia (including Australia) and in the U.S. The majority of Fellows receive M.S. degree awards for study in Asia, primarily in a country other than their own. More recently, the Asia Fellowship program is offering a few Ph.D. awards tenable at Asian universities. Fellowships awarded through the U.S. program are primarily for Ph.D. degree study at U.S. universities.

Thus, the Council seeks to build up a corps of trained social scientists who upon the completion of their training will return home to fill critical teaching, research, and administrative positions.

We all recognize, I am sure, that training programs per se are only a first step in creating indigenous capacity within Asia or within other regional areas. There are related questions of equal importance but time does not permit us to develop them in the context of these remarks. Such as whether the students, once trained abroad, return home; whether students having returned fill the positions anticipated for them; whether their training abroad or at home is relevant and sufficient for the work they are expected to undertake; whether pay and work incentives are sufficient to keep trained people in important university and research positions rather than being drawn to private commercial jobs or to positions in the West or in international agencies that deprive the country of a scarce human resource.

In regard to the group of Asian countries which have developed or are rapidly developing quality centers of graduate training in the rural social sciences, the Council is experimenting with a different training approach. We are trying to strengthen and reinforce local Ph.D. programs by several means appropriate to our size and limited resources.

One means is to appoint as Council Associates individuals who possess strong teaching and research credentials, and to place them at Asian universities where they can contribute to quality programs of graduate education. Another means is to appoint short-term visiting professors, both Western and Asian, to strengthen a particular teaching or research area (theory, quantitative fields, research methods, etc.). A third means is the use of small research grants awarded to Asian graduate students for thesis research. By such grants we are able to ensure thesis research of a higher quality. A fourth means would be to bring selected Asians who are enrolled in local Ph.D. programs to the United States

for a period of twelve months for specially designed coursework and/or research training. Such students would be enrolled in non-degree programs. There are several alternatives that might bear on this option:

1. non-degree program prior to the Asian Ph.D. prelims
2. non-degree program immediately following successful Asian Ph.D. prelims
3. non-degree program to reinforce a local Asian Ph.D. that has no course or prelim requirements
4. non-degree program soon after completion of an Asian Ph.D.
5. non-degree program some years after the Asian Ph.D., on the order of a mid-career, upgrading program.

In our view a program of one-year non-degree fellowships would accomplish some of the following objectives:

1. It would strengthen local Ph.D. programs which in many cases require only a thesis and are lacking in course components
2. Even in those institutions where the local Ph.D. has a defined course content, it is felt that the U.S. universities could offer more rigorous instruction in such critical areas as math, statistics and economic theory
3. Both directly and indirectly we would encourage local Ph.D. programs by using our facilities to reinforce them rather than taking individuals outside the country to do the entire Ph.D. program
4. By means of a course-only or course-cum-research option, we would be able to support considerably more Fellows for the same amount of money as we now spend for the fewer number who enroll in a conventional four-year program
5. Even a short period in the U.S. provides for the student a cross-cultural experience and a useful exposure to U.S. teaching methods, the wide range of professional literature, and to current thinking in the profession.

The Council has had some experience in supporting individuals in non-degree pre-Ph.D. programs designed to provide this complementary service. It is proposed that we offer more such fellowships and try to identify the most suitable U.S. institutions for such training.

In considering this option, the Council would expect applicants to meet certain minimal requirements; namely, that the candidate be enrolled in a local Ph.D. program, that the applicant present sound credentials similar to those that apply for a regular Ph.D. candidate, that the individual program be designed so far as possible through collaboration among the Fellow, the Council, and the U.S. university, that non-degree Fellows be treated as graduate students similar to other ADC Fellows with the same levels of support and supervision, and that the student not be permitted to transfer to a degree program once admitted under the non-degree option.

The support of graduate students in non-degree programs is not new. The Council has made such awards in the past but they have been rare. A number of universities already have in place special programs of a non-degree character. Nevertheless, there is evidence from other quarters (AID, Ford Foundation) as well as from the Council of the intention to exercise this option more frequently in the future. It is our hope, in arranging this workshop, to look at this option in somewhat greater depth and to solicit from U.S. university teaching and administration staff their best thoughts on the matter. Some of the questions that come to mind include:

1. The readiness of the U.S. university to collaborate with agencies like the Council and directly and indirectly with sister universities in Asia (or elsewhere)
2. The admission requirements that would prevail such as previous academic record, TOEFL scores, GRE scores, university status, etc.
3. The content of training including a course-only option, a research-only option, or a mix of the two
4. Possible collaboration between the student and the U.S. advisor during the subsequent thesis research in the student's home country
5. The desirable period of time for the student in the U.S.--one year? one and a half years?

B. Innovations and New Directions in Curricula

1. AN AGRICULTURAL ADMINISTRATION PROGRAM

Rodger Yeager, West Virginia University

The purpose of this discussion was to present and elicit comment on three new graduate degree options at West Virginia University, which are intended to help overcome a chronic problem of manpower development for the Third World. These degree options are designed to provide graduates who are trained both in one or more of the agricultural sciences and in the fields of mid-level public management and administration.

The problems which the degree options seek to attack are not new. Ensminger has stated: "I believe two of the most complex constraints inhibiting agricultural development in Third World countries are political and administrative." Until now the graduate education of both American and foreign participant students has tended to focus either on technical-agricultural concerns or social science-administrative

subjects, but not to include both. This has produced degree holders in one sphere who must subsequently solve problems in both, but who are often ill-equipped to do so. In particular, participants returning home to their countries must frequently function simultaneously as managers of technology and people, but have systematically prepared to work only one of these universes - as administrators without clear understandings of what they are administering, or as agriculturalists without the skills required to help create and implement the policy products of their scientific training.

Recently, the problem has received academic attention in both the Land Grant universities and such public agencies as the U. S. Agency for International Development and Department of Agriculture. Some of these approaches, which tend to focus on single courses in agricultural and rural development administration, were entered into the discussion. The West Virginia University approach is somewhat different, and involves the partial merging of its entire educational programs in public administration and agricultural sciences at the graduate level.

In brief, the program includes three degree options: the Master of Public Administration, which comprises 26 credit-hours of public administration and 13 credit-hours of relevant agricultural sciences courses; the Master of Agriculture, which requires 27 credit-hours of general agricultural courses and 15 credit-hours of developmentally relevant public administration work; and the Master of Science, which involves 30 credit-hours in one of the basic agricultural sciences and 15 credit-hours in public administration.

The program is attempting to avoid a purely American bias in both its agricultural and administrative curricula by introducing courses and field work opportunities which are appropriate to the conditions of the poorest developing countries. Program staff have also recognized the problem of encouraging large numbers of scientifically talented participants to leave their agricultural professions and enter purely administrative pursuits. The program seeks to overcome this problem by strictly limiting the number of participating students and by closely coordinating its participant selection process with West Virginia University's technical assistance projects which have participant training components. By proceeding in this manner, the program is able to identify and select mid-career participants who have been designated by their governments to fill pre-determined positions, upon the completion of their graduate training, in the administration of agricultural and rural development.

2. PROFESSIONAL DEGREE PROGRAMS

Larry W. Zuidema, Cornell University

To meet the continuing training needs of agriculturalists already engaged in professional careers abroad, whether from the U.S. or from abroad, we may need degree programs with a different emphasis than the traditionally research-oriented Master's and Doctoral degrees. Already trained scientists and young professionals working in the developing world need to up-date their technical knowledge, test their professional experience against new ideas, and place their expertise in development perspective. In meeting this need, we must help them to focus on their problems, not ours.

Recognizing this, we at Cornell University established a Master of Professional Studies (M.P.S.) degree study program in International Agricultural and Rural Development in 1975. The program is designed for practitioners of agricultural and rural development abroad. It is flexible enough to provide students with some up-to-date training in a traditional discipline along with exposure to new perspectives on development and an opportunity to focus their attention on a special problem associated with their professional responsibilities. The program is particularly relevant to those involved in the administration or management of public-supported agricultural and rural development activities. It also affords students an opportunity to interact with others involved in similar positions from other parts of the developing world.

Most students take 16 - 18 months to complete the degree program (3 semesters). During this period, they are expected to complete 30 hours of course work, six of which may be assigned for a special project paper required for the degree. This action-oriented paper provides students with an opportunity to focus on a problem area related to development activities with which they are associated in their employment.

The M.P.S. degree program in International Agricultural and Rural Development takes advantage of the approximately 40 courses in the College of Agriculture and Life Sciences which deal with various aspects of international agricultural development. Some of these courses are interdisciplinary and designed specifically for the M.P.S. degree program such as a course on Agricultural and Rural Development Administration. Other important resources available are a faculty with considerable international experience, a large international student body, an excellent

library with considerable internationally oriented materials, and an active program of seminars and special lectures dealing with development activities.

From 1975 to date, 27 students have been involved in this special degree program with approximately half being from the U.S. Interest has been very high (32 applications for 8 positions) and our experience with the program to date has been positive.

As more and more agricultural projects are funded by outside agencies in the developing world, the demand for skilled managers with agricultural education and experience continues to grow. We feel that this program helps meet the training needs of individuals who will fill these and other public positions in agriculture in the years to come.

C. Admissions and Advising

1. THE PROFESSOR

David R. MacKenzie, Pennsylvania State University

My years of international experience with the Rockefeller Foundation have given me cause to reflect deeply on the philosophies associated with our current graduate training programs at the Pennsylvania State University. Out of that reflection came the realization that certain and substantial changes were necessary to develop a useful and meaningful program for international scientists who must face the second generation problems of the Green Revolution. Scientists currently associated with the international agricultural centers are cognizant of the urgent need to build a fresh cadre of agricultural scientists trained and prepared to conduct innovative agricultural research in the developing world.

Too often have I heard that a faculty's charge is to train students and not to educate them. That philosophy is more than suspect. Training students in the use of techniques and research methods without developing their scientific intellect through a variety of educational experiences guarantees the training of a technician, but not a scientist. Accordingly, we at the Pennsylvania State University believe that a proper and complete education should include intellectual development on a formal and informal basis, as well as a sound training in research techniques through association with research programs designed to meet their needs. Small, informal discussions on science and philosophy of science are used to build

scientific intellect. Training, on the other hand, is essential in developing research skills, proper design of research, and professional work habits.

The Department of Plant Pathology at the Pennsylvania State University has responded to the challenge of educating international agricultural scientists in two general ways. A new graduate curriculum has been designed to speak directly to their needs. Courses that would offer little value to them by virtue of the nature of their research commitments are not required, but have been replaced by new courses designed particularly for them to establish the necessary factual and intellectual credentials to function as international agricultural scientists. Secondly, the international student is permitted to conduct his Ph.D. research at an international center on a problem of importance to that area of the world. Regular on-site visits by the major advisors assures the students of the necessary advice and counsel during the course of his research.

Finally, we recognize the importance of instilling motivation in graduate students. Motivation is that essential ingredient for the productive research scientist. The reality is that international students differ from traditional American agricultural graduate students. Techniques used to motivate young male American graduate students may not work well with foreign students. Differences in cultural backgrounds and philosophies contributed to magnifying the task of motivating graduate students.

As more graduate education programs branch into training foreign students, advisors must be made more fully aware of the differences and needs between individuals by sex and background and to the needs of the developing country.

2. THE NATIONAL ASSOCIATION FOR FOREIGN STUDENT AFFAIRS

Valerie Woolston, University of Maryland

I am struck at how far beyond agriculture the impact of agriculture training goes. I refer particularly to the teaching and management aspects that participants become involved in upon their return home.

We begin with the philosophy that good evaluation and sensible placement is the best preventive counseling that we can provide students. The demand that participants meet our regular admission standards for foreign students which are quite selective. In the past, loose admission standards on the part of U.S. institutions have caused a devaluation of academic training or degrees from the U.S.

It is most helpful for the participant, too, to have made a careful assessment of how the training he is about to undertake will fit into his overall career. It is often difficult for university foreign credential analysts to evaluate past agriculture training. The AACRAO World Education Series of education systems has recently been including information on agricultural training.

Academic training does not occur in a vacuum. At first, cultural shock takes over. The U-Curve Syndrome is well known to us all. Language will almost always be a problem for the non-native speaker upon arrival. Alternatives for language training must be provided.

The participants are normally mature, independent and responsible people. What most frequently gives the students problems are academic concerns and pressures. There are a few academic advising concerns which consistently reoccur with agricultural training students: (1. They want academic degrees, and often their program plans do not provide for them. (2. The prestige of a degree in many parts of the world relates to upward mobility. Though this may be a false perception it may arouse false expectations of high-level appointments upon the students return home. (3. Agriculture technical subject matter in the U.S. may not relate to agriculture technology in their home country. (4. The scale of agriculture in the U.S. often does not relate to the scale of agriculture in their home country. (5. The final academic concern often heard is that of thesis writing.

The students' training in the U.S. should include skills which will enable them to fit their expertise into the local situation when they return home. We advisers, should suggest alternatives which will make them learn comparative education and the global relationships of their home country to the rest of the world. An awareness of what the exposure to this U.S. culture is doing to them is essential.

A cycle including orientation (mentioning the return home), travel opportunities, interdisciplinary course work, training seminars (i.e. AID Management Seminar in Michigan), special events, and, finally re-entry transition and pre-departure workshops should be encouraged.

My approach to advising agricultural participants is quite holistic. The student is always a person first. He is not only an academic being, nor an agriculturist but upon returning home he will also be a teacher and a global person, no longer a person of his culture alone.

The cycle should include not only the student, but his adviser and professors, the foreign student adviser, community resources, and other students. The more people in touch with each other in the process, the better the education for us and the participant.

Session IV

Theme: TRAINING TECHNIQUES

No Summary Papers

Session V

Theme: THE COOPERATIVE TRAINING EFFORT

Summary Papers

1. FUTURE DIRECTIONS OF INTERNATIONAL AGRICULTURAL TRAINING

J. Kenneth McDermott, AID

Personnel training may be the most relevant issue in agricultural development in the LDC's--if not the most serious problem.

The terminology "Investment in the Human Resource," introduces some important dimensions into the problem, such as substitution--or substitutability--use of scarce resources (men and facilities perhaps more than dollars), costs and returns, and efficiency. It is more useful than the term, "Training."

A disclaimer is needed. My views are individual views, and in no way are views of the Agency.

One of my favorite folk sayings is that, "One can eat an elephant, but he has to do it a bite at a time." If we look at the human resource investment task in its entirety, we are not eating an elephant; we're only nibbling at it. It's not even clear that hearts are set on eating the elephant, but rather that we are content to have something to nibble on.

If we are serious about development, it is my contention that we need to set our sights on the elephant. We must set our sights on what it is going to take to develop the human resource so that it is at least minimally prepared for the responsibility it must assume in development.

It is going to take something more and different from what we have been doing. We are not going to solve it by some variation on the current M.S. - Ph.D. syndrome.

Let us set up the task. While we can treat the human resource as a resource, it is not parallel to the other resources with which we deal, simply because

the human resource manages all of the others.

It is useful to think of the human resource in at least four different aspects --energy, skills, understanding, and creativity.

Energy: In many LDC's the human resource is used to a very great extent as a source of energy. No man is ever going to improve his family's welfare greatly by selling energy in competition with the mule, ox, or even with the kilowatt.

Skills: Much energy supply, of course, is associated with skills, even decision making. The man with the hoe, set to thinning cotton, has to make decisions all day long on which plants to leave and which to take out. One can have a highly valued skill--without much of understanding of the phenomena involved. Many plant breeders can do an acceptable job without understanding all of the genetics and physiology involved.

Understanding and Creativity: It is difficult to characterize these last two points on the scale--but it is important to attempt it. Understanding can require the highest intellectual ability, when associated with complex phenomena. Creativity in one sense develops understanding for the first time that can be taught to others. In this sense it requires a very high intellectual capacity. Creativity is also associated with inventions and other innovations and is likely associated with aptitude more than with intellectual capacity.

After the conceptualization--we need to look at the task in terms of human beings, of persons. Development in almost all LDC's involves adoption of improved practices from almost everyone in the various channels which links the Minister of Agriculture to the man with the hoe. Think of that chain.

We have two individuals, literally poles apart. They are linked with a number of channels which vary with country. Each channel represents an institution, an organization of persons of variable talents to provide a variety of functions. These channels--these functions--and these talents become the important variables in human resource investment. We need to think of training as a function of these variables.

Let us look at the technology innovation organization--one of the links which the Minister has with his farmer:

1. We have science and the production of new knowledge.
2. We have technology and the production of new materials and methods.
3. We have communication and the diffusion of practices.
4. We have management of the organization that accomplishes all of these purposes and keeps them coordinated.
5. We have an outside policy that decides what this channel gets in competition with all of the others.

Each of these categories can be broken down into its own function and processes, each of which requires its own skills, understanding, and creativity. The aggregate may show some very pronounced patterns probably heavily skewed to skills.

We face this array of manpower development needs with M.S. and Ph.D. programs designed for our own U.S. set of problems. These programs are costly--in dollars, in facilities, and in manpower (both the teacher and the taught) and they leave much undone.

Let's look at the technology innovation system--the one most of us are most familiar with. It's a mixture of science, technology, diffusion, and management, much of it routine.

As closely related as they are, there is a fundamental difference between science and technology. It's the distinction between analysis and synthesis. Our LDC problems are overwhelmingly technological. In almost no cases can we describe a serious problem as scientific. Yet our training is in scientific bundles. We expect people highly skilled in analysis to be competent in everything else.

We need alternatives. We need to train far more people and probably for far less time for each--to economize on manpower and facilities, not necessarily money.

We need to submit to the academic discipline, so the alternative to degrees may still involve university education. We need a careful definition of the skills to impart--or the end objective of the training.

We need repeats, students sent for training several times, as they need it, not all at once to the degree. I'm not sure of a heavy need for special courses. Our university selection is rich. If special courses are needed, they could be fitted to need and demand. We need to be creative and to understand, even if to simplify.

BIFAD (Board for International Food and Agricultural Development) now has a sub-group on training, which may offer a means to address the problem.

We can eat the elephant but we must put our skills, understanding, and creativity to the task and not be content merely to have something to nibble on.

2. SUMMARY COMMENTS

William H. Kelly, University of Vermont

The Eastern Regional Conference on International Agricultural Training was possibly as important for the things that were not said as for the specific information imparted. While there was general consensus on the need for training, and confidence in the ability of the U.S. agricultural community to deliver, there were several different viewpoints on the best way to proceed. A significant outcome of the conference, and perhaps by itself adequate justification for the meeting, was the opportunity for university and agency people to get acquainted both personally and with what each group has to offer.

One of the main points that was articulated by several people in different ways was that training should be an "upfront" activity written into any Title XII or other proposal, even if primarily research, right at the outset rather than inserted later as an after-thought. Since this has been recognized as an important aspect, an ad hoc committee has been formed to develop more definitive guidelines regarding the training component in any proposals submitted under Title XII.

The prospects of adequate funding for Title XII and related factors came in for a lot of discussion. There still seems to be a cloud of uncertainty hanging over Title XII and this, plus the USDA and AID reorganizing, created an aura of confusion for at least some of the university representatives.

Another point that was made repeatedly could be expressed as the need for a "sophisticated contemplation of our navel," the navel in this instance being the training programs available to international students. It appears that the main benefit, for many individuals, of a degree from an American institution of higher learning is often its prestige value rather than the specific knowledge. The dilemma is how to retain the prestige, which is a real value, and at the same time improve the subject-matter content and still "sell" the program to the graduate colleges. This seems to represent a major challenge for American universities.

The group was also reminded of the very important role of women in less developed countries and how we had failed to recognize this in many previous projects. To truly recognize the complex social, family and individual relationships involved might mean that the spouse should be meaningfully involved in any training program.

It is my opinion, speaking now in the area of things not said, that the conference did not recognize the possible changes that might be taking place in the United States and the possibility for a need for reorientation in this country. This requires all educators to consider where we - as a country - are headed and to become future-oriented. To quote Harold Shane:¹

"One of the prominent characteristics of the present period of rapid transition is the increasing interdependence of our species. Persuasive rhetoric is unnecessary to make the point that any country's problems anywhere are now every country's problems everywhere. Interdependence on a global scale already is a reality, whether or not we are quite ready to accept it. The task thus becomes one of adapting to this new reality and the need for what Barbara Ward has labeled "dynamic reciprocity" between nations as they become more and more aware of their mutual need for one another's goods and services."

A specific application of this more complete concept of development would be for future training proposals to be truly university proposals and not just emanate from agriculture. Since, to quote the ecologist, "we can never do merely one thing," we need to consider more than ever the social impact of technological changes.

We will need to work more as teams which means the agriculturist will have to attempt to put Schumacher's human face on his technology and the anthropologist will have to attempt to effect solutions and move beyond pondering, pontificating and pursuing. The sociologist will have to move beyond statistics, stratification and symbols and attempt to use their understandings to help apply integrated, humanistic technology and become part of the development team.

As we move into what will perhaps be the most significant 25-year period in history, we must not become complacent about our own situation, thinking that the problems are only in the third world; but rather we should approach development not only as a significant partner but also as a participant who may also have to make significant adjustments in education, life styles, values and other areas.

¹Curriculum Change Toward the 21st Century, by Harold G. Shane, p. 15.

LIST OF PARTICIPANTS

M. P. Vernon Armbruster
Assoc. Dean, Coll. of Agr. & Forestry
1002 Ag. Sciences Building
West Virginia University
Morgantown, WV 26506

Robert Ayling, Deputy Director
International Training
IDS/USDA
Washington, D.C. 20250

Ralph P. Barwick
Assoc. Dean of Instruction
College of Agricultural Services
University of Delaware
Newark, Delaware 19711

Russell H. Brannon
University of Kentucky
Lexington, Kentucky 40506

Danny G. Brett
Eastern Kentucky University
Richmond, Kentucky 40478

Earl Brown, Program Leader
Human Resource Devl. Board for Int'l
Food & Agricultural Devl.
AID, Dept. of State
Washington, D.C. 20523

Robert G. Burnwright
Director of Training
S. E. Consortium of Int'l Devl.
400 Eastowne Drive
Chapel Hill, North Carolina 27514

Gordon Cairns
Dean, College of Agriculture
University of Maryland
College Park, Maryland 20742

Elsa Chaney
Deputy Coordinator
Women in Development
AID
Washington, D.C.

Kavi Chutikul
Dean, Faculty of Agriculture
Khon Kaen University
Thailand

Johannes Delphendahl
Chairman, Dept. of Agr. & Resource Econ.
College of Life Sciences & Agriculture
University of Maine
Orono, Maine 04473

Lewis H. Dickson
College of Agriculture
University of Tennessee
Knoxville, Tennessee 37901

Gerald A. Donovan
Dean, College of Resource Devel.
University of Rhode Island
Kingston, Rhode Island 02881

Robert Dyck
Director, Univ. Int'l Programs
Virginia Polytechnic Inst. &
State University
Blacksburg, Virginia 24061

Sydney H. Evans
North Carolina State Agr. & Tech.
State University
Greensboro, North Carolina 27411

J. E. Foil
University Contact Officer
North Carolina State Univ.
Raleigh, North Carolina 37607

Sylvia Gretzl
Nat. Assoc. for Foreign Student Affairs
Washington, D.C. 20009

Frederick E. Hutchinson
Vice President, Research & Publ. Serv.
University of Maine at Orono
Orono, Maine 04473

William Kelly
Assoc. Dean, Coll. of Agriculture
University of Vermont
Burlington, Vermont 05401

Don C. Kimmel
North American Representative
FAO, 1776 F Street, N.W.
Washington, D.C. 20437

Robert Landry
International Training
DSB/AID
Washington, D.C.

J. E. Legates
 Dean, School of Agr. & Life Sci.
 North Carolina State University
 112 Patterson Hall
 Raleigh, North Carolina 27607

John Lippman
 International Training
 DSB/AID
 Washington, D.C. 20523

David MacKenzie
 Associate Professor,
 Plant Pathology
 Penn. State University
 University Park, PA 16802

Robert H. McAlexander
 Coord. of Int'l Agriculture
 College of Agriculture
 Pennsylvania State University
 University Park, PA 16802

Donald McCreight
 Coll. of Resource Development
 University of Rhode Island
 Kingston, Rhode Island 02881

J. Kenneth McDermott
 Assoc. Director,
 Office of Agriculture
 Devel. Support Bureau/AID
 Rm. 409D, Rosslyn Plaza
 Arlington, VA 22209

Dr. J. Wendall McKinsey
 Director, Int'l Agr. Programs
 2-69 Agricultural Programs
 University of Missouri
 Columbia, Missouri 65201

Joseph Metz, Jr.
 Director, International Agr.
 Cornell University
 Ithaca, NY 14853

William F. Moore
 Head, Dept. of Agriculture
 Morehead State University
 Morehead, Kentucky 40351

Gilberte E. Mottle
 Director, Center for Int'l Devel.
 Agricultural Studies
 University of Massachusetts
 Amherst, Mass. 01003

R. M. Myers
 North Carolina State University
 College of Agriculture
 Raleigh, North Carolina 27607

Jerome Pasto
 Assoc. Dean for Resident Instr.
 Pennsylvania State University
 University Park, Pennsylvania 16802

Paul Poffenberger
 Assoc. Dean, Coll. of Agriculture
 University of Maryland
 College Park, MD 20742

Janet Poley
 Assistant Deputy Director
 International Training Office
 USDA
 Washington, D.C. 20259

Bernard L. Pollack
 Extension Specialist, Veg. Crops
 Cook College
 Rutgers, The State University
 New Brunswick, NJ 08903

Winston E. Pullen
 Assoc. Dean for Resident Instr.
 Coll. of Life Sci. & Agriculture
 University of Maine at Orono
 Orono, ME 04473

Anuroj Ratanapool
 Thailand Embassy
 2300 Kalorama Road, N.W.
 Washington, D.C. 20008

William E. Reed
 No. Carolina Agr. & Tech.
 State University
 Greensboro, NC 27411

John Roberts
 Deputy for Rural Development
 USAID/Indonesia
 Washington, D.C.

Harry T. Searl
 DSB/ IT
 AID, Dept. of State
 Washington, D.C.

Keith Shea
 Acting Assist. Director
 Program Management
 SEA/USDA
 Washington, D.C. 20250

David Sparks
Acting Vice President
Research & Graduate Studies
Center of Adult Education
University of Maryland
College Park, Maryland 20742

Russell Stevenson
Administrative Officer
Agricultural Development Council, Inc.
1290 Avenue of the Americas
New York, NY 10019

Dr. Roland Struchtemeyer
Dept. of Plant & Soil Science
Coll. of Life Sci. & Agriculture
Univ. of Maine at Orono
Orono, ME 04473

James E. Tavares
National Research Council
2101 Constitution Avenue, N.W.
Washington, D.C. 20418

Tien Tanmatip
Thailand Embassy
2300 Kalorama Road., N.W.
Washington, D.C. 20008

Earl B. Terwilliger
International Training Staff
USDA, Rm. 3552 South Bldg.
Washington, D.C. 20250

Burleigh C. Webb
Dean, School of Agriculture
North Carolina Agr. & Tech.
State University
Greensboro, NC 27411

Valerie Woolston
Director, Int'l Educational Serv.
University of Maryland
College Park, Maryland 20742

Rodger Yaeger
Director, International Programs
West Virginia University
Morgantown, WV 26506

Larry W. Zuidema
Assistant Director,
International Agriculture
252 Roberts Hall
Cornell University
Ithaca, NY 14853