



The Report of the
International Committee
for the College of Agriculture

East Lansing, Michigan
March, 1963

March 25, 1963

Dr. T. K. Cowden, Dean
College of Agriculture
104 Agricultural Hall
Campus

Dear Dean Cowden:

At your invitation, we have met and deliberated as an International Committee of the College of Agriculture to recommend long-term policies in areas you have indicated:

1. The training of our own students for work in international areas.
2. The training of foreign students.
3. How AID and other similar contracts with foreign nations should be handled.
4. Anything else that in the judgment of the committee would be beneficial in developing our work in this important area.

The attached report represents our findings and recommendations.

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Agricultural Engineering

Russell G. Mawby, Professor and
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SUMMARY

Nineteen percent of the Ph.D. candidates and 30 percent of the Master's candidates in the College of Agriculture are non-Canadian foreign students. Twelve members of the staff are assigned to overseas projects during the current year; others are engaged in research in international topics. The college is thus already deeply enmeshed in international affairs. Assuming a continuity in U.S. foreign policy along present lines, a still greater involvement is possible in the future. The college has an opportunity not only to contribute greatly to the development of agriculture in other countries, but also to enrich its own experience in the process.

This International Committee for the College of Agriculture recommends a gradual, increased involvement in overseas agriculture. The theme should be the furtherance of broad developmental activities, which, because of the location of underdeveloped countries, should be oriented towards tropical and sub-tropical agriculture.

The committee recommends an integrated program built around the following six principal points:

(1) A limited number of "overseas projects" (college contracts) with foreign educational institutions, preferably distributed on a geographic basis among Latin America, Asia and Africa.

Programs of the past decade in Colombia, Taiwan, Pakistan, Nigeria and the Ryukyus have provided a base for planning future overseas developments. The College of Agriculture should continue

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its overseas projects and intensify its involvement. Priority for new projects should be given to overseas institutions which have as an objective the development of a land-grant type college as adapted to a foreign culture.

(2) An integrated college-wide research program oriented towards agricultural development in its broad aspects and incorporated into specific "research projects."

An integrated research program should combine technical and social sciences. Much overseas research could best be financed through foundations and could be conducted through cooperative relationships with overseas institutions.

The focus of technical research would be placed on tropical agriculture and would be centered geographically around the overseas projects (see (1) above).

Overseas students pursuing advanced degrees at MSU would be encouraged to pursue their thesis research on topics closely related to developmental efforts in the student's home country, where possible, as a part of an MSU research program.

(3) An educational program at MSU mainly at the graduate level for overseas students seeking training and education for careers in agriculture in their own countries and for American students desiring a career in international agriculture.

This program should be further developed largely within the existing course structure, which should be broadened to include aspects of overseas agriculture. Provision should be made for more comprehensive study of practical problems and research geared to

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the needs of the underdeveloped nation. The continuation of a course in American agriculture for overseas students is recommended. The research aspects of the graduate training program should be incorporated as a part of the college research program (see (2) above). An undergraduate curriculum to train U.S. students for overseas careers should be developed with emphasis in the social sciences, humanities and languages.

(4) A faculty development program designed to further the academic experience of the faculty through participation in overseas projects and/or research programs.

Two types of assignments are needed in overseas projects. Long-term assignments are desirable for administrative staff (chief of party) plus those engaged primarily in institution building. Short-term assignments are desirable for specific tasks requiring a particular type of experience and skills.

Staff is also required for the research program designed as a complement to the overseas projects on a general regional basis. These latter would normally be located on-campus except for short-term travel.

A proportion of approximately 10 percent of the College of Agriculture faculty or about 30 persons both abroad and on-campus is suggested as reasonable for involvement in international activities in overseas projects and research projects.

Consideration should be given to the appointment of a proportion of the staff assigned to overseas activities on a semi-permanent basis as "overseas specialists". Such overseas

specialists would be incorporated in the existing departmental structure, where feasible, as a net addition to staff.

Opportunities must be provided for research, salary incentives and suitable living conditions for families to make these overseas positions attractive and competitive. The programs should also be strengthened through faculty and family orientation and education. Particular emphasis should be placed on development of language skills. A period of time for proper orientation of staff and families prior to departure for an overseas project is important.

(5) An extension education program which would ensure the incorporation of the principle of extension in the educational and research aspects.

This would apply to the existing extension operations in Michigan, through the incorporation of an international dimension, and abroad to ensure that adequate attention is given to the role of extension in agricultural development. In staffing overseas projects, consideration should be given to personnel with teaching, research and extension experience.

(6) An appropriate organization for overseas activities formalized through the creation of an "institute" which would be primarily responsible for the administration of a program on the basis of the recommendations made by this committee and for integrating an intensified overseas program within the existing framework of the College of Agriculture.

A more formal organization would enhance the status of foreign programs both within the college and the total university and particularly with other institutions.

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The institute would be the central focus for all foreign students enrolled in the college. It would also serve as the international arm of the Experiment Station and work closely with the Extension Service in program development both at home and abroad. The institute would serve as liaison for the College of Agriculture with International Programs.

Financing of the institute would be derived from funds for overseas projects and research projects. Support for most overseas projects would come largely from federal and private foundation sources. Costs of training on-campus students would be covered in the same way with the addition of scholarships.

The estimated budget for current international programs administered by the College of Agriculture is approximately \$385,000. To maintain the proposed institute and support a staff of 30 in overseas and on-campus international activities the projected annual budget would be about one million dollars.

I. INTRODUCTION

"I would have higher learning more widely disseminated."

With these words, Senator Justin S. Morrill expressed an educational philosophy which has characterized programs of land-grant universities through their first century of service. In programs of teaching, research, and extension, the College of Agriculture at Michigan State University has contributed to the well-being of those it serves.

At this point in history, one field of endeavor demanding and deserving additional emphasis is the area of international agricultural development. In the past decade MSU's College of Agriculture has trained substantial numbers of foreign students and has participated in several overseas projects. In the early years overseas activities were viewed as temporary in nature and were simply added to the existing administrative structure.

It has since become apparent that, as involvement in international programs has expanded, a reassessment of the role of the college in these programs is necessary. Accordingly, the Dean of the College of Agriculture appointed an International Committee representative of all departments of the college to develop recommendations for a long-term policy and program.

The Committee on the Future of the University in 1959 called attention to two aspects of university participation in international affairs.

"The increasingly pervasive interests in international affairs at Michigan State University should continue to be encouraged. Two aspects of these interests require identification. The first is the necessity of including naturally the international interests as a vital dimension of the various academic disciplines and arranging for this dimension to enrich the scholarly community of students, teachers, and scholars. The second aspect is the imaginative establishment and conduct of programs in other countries and active interplay of such programs with on-campus activities."^{1/}

This committee interprets this charge specifically as incorporating two basic aims of the university in international affairs.

- (1) As a part of a land-grant institution, the College of Agriculture should look upon its overseas activities as another facet of its basic function in the broad field of education. Through such participation, this institution can make significant contributions to world economic and social progress. In the developing countries of the world, agricultural development is an essential element.
- (2) The direction and extent of these activities should be guided in part by the continuing need of the university to develop the experience and competence required to further its domestic interests and responsibilities.

^{1/} A Report to the President of Michigan State University from the Committee on the Future of the University, East Lansing, Michigan 1959, page 34.

The second part of these aims as related to overseas programs has been expanded in another report which states in part:

- (1) "The program should be valuable and productive, not only in its own right, but in terms of the on-going function of the University.
- (2) The program should contribute to the professional growth of the participants. In many cases this will mean that there must be a high correlation between the project and the participant's research interests."^{2/}

The philosophy of sharing knowledge with others has become a recognized function of land-grant institutions. The essential purpose in working with emerging countries in such programs must be the ultimate development of their own institutions and organizations to be self-sustaining and independent. Thus assistance must encompass not only technology but institutional and organizational development as well. On these grounds the College of Agriculture should become increasingly committed to programs of international agricultural development.

While the primary objective must be couched in a philosophy of concern for the best interests of the developing countries, it should be recognized that such efforts are mutually beneficial. The benefits to the faculty and the programs of education and research of the college, and therefore the citizens of Michigan, will be significant.

^{2/} Towards an International Dimension at Michigan State University, East Lansing, Michigan, August 1959, page 131.

With these convictions, the committee submits the following report and recommendations.

II. ASSISTANCE TO OVERSEAS INSTITUTIONS

Scope of Activities

The College of Agriculture has participated in an advisory capacity over the past decade in several overseas projects:^{3/} in Colombia, with two Colleges of Agriculture of the National University located at Palmira and Medellin and, more recently, in Taiwan, with the two Colleges of Agriculture at the National Taiwan University at Taipei and the Chung Hsing University at Taichung. Faculty members have also been associated with other university projects not exclusively agricultural in scope - in the Ryukyus, Pakistan and Nigeria. Also several staff members have participated in agricultural programs throughout the world with other institutions and organizations.

Effect on Recipient Institutions

A prime purpose of overseas projects has been to aid in strengthening the curriculum and the teaching abilities of the staffs of the recipient institutions. In addition, attempts have been made

^{3/} The term "overseas project" as used here means an arrangement between MSU and a foreign university whereby MSU staff are sent abroad as advisors to aid the foreign university to develop academically. Such arrangements are financed by third parties, such as the U.S. government or a foundation. It should be distinguished from a "research project" discussed later.

to introduce some of the principles of extension education and the application of research to practical agricultural problems as an adjunct to the traditional role of education as rigidly conceived.

There has been no comprehensive evaluation of these overseas projects. The experience in Colombia has been of sufficient duration to provide some evidence that MSU association with the two colleges has served: (1) to enhance their prestige in the eyes of the Colombian community; (2) to provide access to financial resources for buildings and equipment; (3) to provide opportunities for the additional training of staff; and (4) to introduce the concepts of research and extension as integral parts of university activities. This participation has also contributed to a significant expansion in student enrollments and in the adoption of new and improved agricultural practices on some farms.

Greater progress may have been possible had the Colombian national government supported more effectively the creation of a coordinated program and provided more adequate financial support to the colleges of agriculture. However, it appears to recent MSU participants in the Colombian project that strong pressures for coordination may be emerging within certain government agencies in Colombia and that some type of coordinated program may soon materialize. Other limitations in the Colombian program have been the lack, until recently, of research opportunities for MSU personnel and the predominantly advisory nature of their involvement within the foreign institutions.

Fewer problems have been experienced in Taiwan than in Colombia, probably because the institutions were already well developed academically.

Effect on the MSU Faculty

Opportunities for faculty development have not been fully exploited. The attitude for the college at first was not conducive to a full-scale approach to the opportunities available. Lack of experience with overseas projects resulted in the formation of contractual relations which excluded some facets of faculty development which are now recognized to be of basic importance.

Certain attitudes and shortcomings, partly attributable to the faculty itself, were also inhibiting factors: lack of language ability, lack of cross-cultural acumen, lack of individual initiative in some cases, lack of a well defined objective in others, and lack of supplementary resources for research and appraisal in support of the advisory role.

These weaknesses have been overcome somewhat in the past few years as the college has acquired experience with overseas projects and has been able to obtain supplementary resources and to provide a greater degree of guidance towards its own goals. Yet much remains to be done. If the college is to progress toward an achievement of its goals as seen by this committee.

Recommendations

The committee feels that on the basis of past experience and an appraisal of the potential for further development, the college should continue its involvement through overseas projects.

However, a fuller exploitation of opportunities requires an intensification of existing policies and programs. The committee recommends:

(1) Determine the number and scope of overseas projects in relation to the resources and capabilities of the college to staff them. The exact degree of involvement will vary over time. For the present, a limit of three projects is suggested plus supporting activities in other university projects. With a campus-based, professional staff of 330 (see Appendix A) and a field staff of approximately 300, the college should currently be able to staff this number of projects.

(2) Develop a balanced geographic distribution of the three overseas projects recommended above on the interests of furtherance of academic experience and diverse staff interests. A distribution of one each in Latin America, Asia and Africa, would be preferable to a concentration in one particular region. These relate to overseas projects administered directly by the college or to those where a substantial participation by the college is required.

(3) Give priority in the selection of overseas projects to those recipient institutions which have as their objective a development along land-grant college lines as adapted to the foreign environment.

(4) Select and plan overseas project participation on the basis of long-term involvement. Past experience indicates that the development of overseas institutions in higher education and research in agriculture is a very gradual process, not well adapted

to projects of a few years duration. Furthermore, the nature and extent of the assistance required changes as the institution moves through successive stages of development. In negotiating the contracts, efforts should be made to obtain agreements for long-term relationships with provisions for periodic evaluation, systematic phasing of work, and eventual termination.

Continued informal relationships with overseas institutions should be encouraged after the termination of a formal assistance contract. This would enable individual staff members and graduate students from MSU to carry on productive research and teaching activities abroad. The overseas institution may also continue to send staff members and students to MSU for advanced training.

(5) The college should be positive in determining a course of action. A program of advance planning with an orientation toward specific goals may enable it to exercise a greater choice of alternatives than has been the situation in the past.

(6) Seek flexibility through financial support from foundations for supplementary activities such as research and appraisal programs. Administrative and program limitations in some overseas project contracts sometimes result in a considerable degree of rigidity in the adaptation of programs to needs.

(7) Limit employment of academic staff from other universities to special circumstances. This will provide improved coordination and efficiency.

III. RESEARCH IN OVERSEAS AGRICULTURE

Scope of Activities

Research activities in the College of Agriculture have, in the past, been oriented largely to the United States and to Michigan. An exception is the work undertaken relative to international economic problems. A large proportion of this has been devoted to U.S. policy matters including surplus disposal and related topics. Other exceptions have been sporadic work attempted as a result of visits abroad by the staff, particularly some who participated as advisors in university projects.

In the past two years, research output has been stepped up as a result of the availability of funds from the International Programs-Ford Foundation grant. Currently, work is being undertaken in food science, agricultural engineering, horticulture, agricultural economics and fisheries and wildlife from this grant.

Rationale for Expansion

Apart from the general principle that a major function of a university is to seek out knowledge for the sake of knowledge, there are several reasons for undertaking research in international agriculture on a larger scale than at present:

(1) The need for offering instruction to American and foreign students in overseas agriculture, particularly tropical agriculture, necessitates research in order to develop faculty competence and teaching materials. (see page 19)

(2) Foreign students seeking advanced degrees should be given an opportunity to pursue research on a subject related to their

native environment. This might be related to MSU research projects abroad. (see page 17)

(3) The effective development of overseas projects requires continuing research and appraisal of direction, rate of progress, etc. In addition, overseas institutions do not generally include research as a major function. As research is considered by this committee to be basic for the improvement of course content in such institutions, the inclusion of this function needs to be developed. The encouragement of research through the overseas projects, therefore, is a vital role of the advisory institution.

(4) The U.S. government policy of aiding overseas countries to initiate and expand a program of economic development through induced technical and social change requires an appreciation of effective processes and programs which may be peculiar to each individual country.

(5) The need exists for research opportunities for staff stationed abroad to further their professional careers without interruption due to acceptance of an overseas assignment.

(6) The existence of a strong group of professions and of laboratory facilities at MSU cannot be duplicated in many parts of the world. These resources could be used in research on overseas problems on such functions as the generation of ideas, the application of basic principles through small-scale, experimental work and model building, as well as a source of short term advisory personnel. Large-scale testing, modification, adaptation and application need to be undertaken at the special project centers and in the field.

All of these reasons point to a needed expansion of research. Just as the Hatch Act served as a complementary measure to the Morrill Act, so would a research arm added to the existing overseas projects serve to round out the instructional and advisory activities of the college in its overseas role.

Recommendations

(1) Continue to support individual staff member research by means of funds available from the International Programs-Ford Foundation Grant and other sources where such projects are not in conflict with over-all departmental research programs.

(2) Plan departmental, inter-departmental and/or college-wide projects with long-term objectives as an integrated research program combining technology with the social and political processes.

(3) Orient such integrated research programs towards specific geographic areas^{4/} where the college participates in overseas projects. The overseas project area should be used as a center for such research in that particular region.

(4) Form a cooperative relationship with other institutions, such as an experiment station currently existing within the region, where overseas project centers are inadequate for some regional research activities.

(5) Emphasize the development of improved systems of agricultural training, production, supply of materials and equipment,

^{4/} The proposal for "research projects" is not exclusively directed to those countries in which "overseas projects" exist but to that general region in each particular case.

processing and marketing. Techniques would include borrowing from the stock of technological and scientific knowledge as modified by on-the-spot research for applicability plus the development of new processes. Within this broad framework selectivity should be stressed to include the more important agricultural products, regions and types of farming. The theme of an integrated research program should be the furtherance of technical and economic development.

(6) Focus research on tropical and sub-tropical agriculture. Most countries with which MSU is likely to be associated through overseas projects lie in these climatic regions of the world.

(7) Coordinate research training for overseas advanced degree candidates with projects at or near the student's home country. The student should obtain his course work on-campus and, wherever possible, perform research in the field (see page 17). This would provide a means whereby the overseas graduate may work on problems pertaining to his area. In the case of American graduates who desire to pursue research in overseas agriculture, opportunities need to be provided through traveling fellowships so that they may be able to undertake work in a foreign environment.

IV. UNDERGRADUATE AND GRADUATE TRAINING

Scope of Activities

The College of Agriculture provides academic training for overseas students in the short course program and at both the undergraduate and the graduate academic level. In addition, special short-term programs are offered to meet specific needs of individual

visitors. The number of overseas students enrolled in each of these categories by department and in relation to the total is given in Appendix B for the Fall Term 1962. Only seven percent of the total enrollment was represented by non-Canadian, foreign students, as the number of overseas undergraduates was small. However, 19 percent enrollment in Ph.D. programs and 30 percent of the Master's were foreign students!

The overseas student who is enrolled in the general college curriculum and graduate programs pursues courses of study which are designed for the American student. Little in the way of special academic arrangements for foreign students exists in the college. Moreover, it does not have a program of study to train American students for overseas careers in agriculture.

Graduate training

The committee sent out a questionnaire to 144 post-World War II students from Asia, Africa and Latin America as a method of obtaining information which might be helpful in improving the training of foreign graduate students. The material obtained from the 50 questionnaires returned is summarized in Appendix C.

Our present system of education should be examined and revised so that the overseas student can be trained not only technically but can obtain a familiarity with the operation of the land-grant system of education particularly in agriculture and then be in a position to apply the principles involved to the improvement of agriculture in his home country within the framework of existing institutions.

An attempt should be made to keep graduates from being trained to conduct only sophisticated and highly specialized types of research which often demand equipment not available in their home country. American agriculturalists visiting in under-developed foreign countries have observed too often that such specially trained graduates contribute less to the welfare of their country, than if they were more broadly trained in conducting research of a more practical nature.

Overseas students who enter at the graduate level specialize from the start in their chosen field. Accordingly, they may spend a year or more in the United States without learning much about American agriculture and how it developed, the role of the land-grant system, the nature of the extension service, etc. Such students return home having little knowledge of the agricultural system of the United States.

An attempt to remedy this situation was undertaken on a trial basis through a 3-credit course at the 400 level in "American Agriculture for Overseas Students" during the Fall Term of 1962. This course included lectures on American agricultural history and development, modern technology in agriculture, the land-grant college as an institution, types of farming, marketing, processing, the political structure of agriculture and government agricultural policy. In addition to the lectures the students were required to survey the experiment station literature in a specific field of their choice and were taken on conducted visits to the MSU experiment station, several farms, a processing plant, a market and a farm cooperative. The results as indicated by student reaction were satisfactory.

Undergraduate training

The four-year degree courses now offered by the college represent a training in the major sciences and the basic principles associated with each of the various fields of agriculture. These principles are of universal validity. Hence a student wishing to obtain a fundamental education in a given field must undergo a course of study within the framework of courses now offered by the college, irrespective of the area of the world from which he comes. The adjustment in courses to accommodate foreign and/or domestic students with interests in overseas careers can best be made by introducing an international dimension into selected courses and by the careful selection of elective courses rather than by creating new courses. Special competence in foreign agriculture can also be furthered through seminars and directed independent study.

The committee believes that a broad program of training is the best way that the College of Agriculture can prepare American undergraduate students for the kind of overseas careers now available with government, private American businesses, or in international agencies. In tailoring programs for undergraduate students preparing for overseas careers a significant portion of their electives should be in the social sciences to enhance understanding of the environment within which agriculture functions in foreign countries. These students should also be advised to study a foreign language. The more capable students that choose to make foreign agriculture a career should be strongly urged to take graduate training.

Short Course Training

The short course program is designed primarily for Michigan students who wish to pursue careers in farming or agribusiness. Since it is designed specifically to meet Michigan needs, it is not uniquely appropriate for overseas students. A few foreign students are admitted annually to the program. It is appropriate to continue this practice. However, there would seem little need or opportunity to orient the short course curriculum to the needs of such students.

Farm leadership in Michigan, to a large extent, has emanated from and for the foreseeable future will come from the ranks of the short course graduates. Therefore, the short course curriculum should have as one specific purpose the development in these students an understanding of and concern for the international community and the international programs of the college.

Non-degree training

Other programs of training are available for overseas students on an informal basis whose preparatory background and character of work is in practical rather than in academic fields.

The existing graduate programs leading to academic degrees are unsuitable as a means of study or recognition for this type of student. Moreover, numerous students who are pursuing academic programs do not have sufficient time to meet degree requirements, although the quality of their work may be satisfactory. Such students return home without any recognition of their attainment beyond that recorded in their transcript.

Recommendations - graduate training

(1) Develop a program by which graduate students could satisfy the research requirement for a degree in their own country or a country in the same general area through association of their research with a general MSU research program as conducted through a regional center^{5/} or with individual faculty members of MSU currently in the student's country.

Foreign graduate students who have completed their course work on campus could be given their preliminary examinations on course work and then sent home to do their research work under the general guidance of MSU overseas staff located abroad in cooperation with staff members of a local foreign university where competent faculty existed. These students might register their thesis problem research jointly in their university and MSU. Upon completion and acceptance of the thesis by the MSU department concerned, final examinations could be held at an overseas project center or at a foreign university and the degree subsequently granted from MSU.

(2) Efforts should be made to make up the deficiencies in the practical training of the overseas students, many of whom do not have an agricultural background, through extra work which may not necessarily provide credit toward a degree.

^{5/} i.e., a "special project" center overseas.

(3) Give the course in "American Agriculture for Overseas Students" in the Fall Term along the lines described on page 14 in order to provide students with little or no previous training in American agriculture with an opportunity to become acquainted with the way agriculture developed in this country and to appreciate its salient characteristics. The decision whether or not to enroll students for such a course would be made by the departments on the basis of need. However, it is strongly recommended that all overseas students with no previous experience in U.S. agriculture should be enrolled for credit in this course.

(4) Organize a seminar course whereby students could study administrative principles and methods as to how a college, experiment station, or extension service should efficiently be organized and operated. This could be taught in a seminar-discussion manner with representatives from resident instruction, research and extension. Further presentations by selected department chairmen, district extension leaders, extension project leaders, county agricultural agents and 4-H club agents would complete the offering.

Opportunity should be given for student participation to bring out essential differences in the organization and structure of these fields, or their absence, in foreign countries. Effort should be made to explore ways and means whereby the principles ^{beyond} ~~believe~~ the theories of teaching research and extension may be applied under institutional conditions differing from those found in the United States.

Recommendations - Undergraduate training

(5) Restructure selected undergraduate courses in the College of Agriculture to permit the introduction of material on foreign agriculture in the form of lectures, reading assignments or term papers. The increasing competence of our faculty through participation in overseas projects, foreign travel, and in a comprehensive research program in foreign agriculture (see page ²³~~24~~) provide a means to support this recommendation.

(6) Develop a curriculum for the training of American undergraduates which would serve as a means of preparation for an overseas career in government, international agencies and private business. This would involve largely a selection of general courses in other colleges, especially in the social science and humanities fields, combined with basic agricultural courses. The opportunities for such specialization in the purely technical fields in agriculture are slight, except at the graduate level where a specialization may be made in research. Some opportunities present themselves in certain technical fields through such courses as economic botany or geography and by means of the inclusion of international aspects in the present curriculum as previously suggested.

(7) Require a thorough training in one foreign language with emphasis on conversational ability for any such special curriculum. Upon graduation a student planning to enter the overseas field should be able to speak one foreign language reasonably well.

Recommendation - Short course training

(8) Broaden the content of some courses given by Short Course somewhat so as to introduce material leading towards an understanding of and concern for international problems and issues.

Recommendations - Non-degree training

(9) Create a special certificate program for overseas students who do not fit into the graduate academic programs, either because of shortage of time or the practical nature of the work required. Such a certificate should be awarded only when satisfactory levels of attainment are achieved. As a minimum this should include a residence of three terms, completion of 36 credit hours of work which could include English courses and a "B" average grade.

(See page 16)

V. EXTENSION EDUCATION

In the developing countries of the world, a trend toward increasing productivity in agriculture is generally recognized as essential to economic and social development. Closely related is the need for improved health conditions and rising standards of living. Practical education and training in domestic processes in self-help and self-government are also essential to sound economic, social and political development.

To assist developing countries in their efforts, the experience and resources of extension personnel can be invaluable. The cooperative extension system is recognized as the most comprehensive program of adult education in agriculture in the world. Its

competencies relate not only to technical subject matter but to the processes of educational programming, group involvement and organizational leadership as well.

Thus, extension resources, both campus-based and state-wide, can make invaluable contributions through assistance to developing countries in their programs of agricultural development and, beyond this, total development. Also, the programs of the Cooperative Extension Service can make valuable contributions through a well-informed Michigan citizenry, and through fostering a recognition of the need for a more comprehensive understanding on the part of Michigan citizens of the international dimensions of life today.

Recommendations - Overseas Programs

(1) Staff overseas projects wherever possible with personnel having extension as well as teaching and research experience. In contracts where extension education is emphasized, this will be especially important.

(2) Incorporate an extension orientation in overseas project contracts. In most countries an extension program of off-campus education can make an important contribution in research development objectives and can complement academic and research programs.

Recommendations - Michigan programs:

(3) Include subject matter relating to international situations and policies which have a bearing on the State's agriculture and its citizens in extension programs in the international area with Michigan audiences. This would include such topics as: the common market, commodity agreements, international trade and tariffs,

economic development programs and the interpretation of MSU College of Agriculture international programs.

(4) Expand the international aspects of the extension program in public affairs education. Aggressive programs of education for both adults and youth should be developed.

(5) Establish a speakers' bureau to make available faculty members with overseas experience for speaking engagements.

(6) Establish a long-term depth training program in agricultural statesmanship, emphasizing an appreciation for and understanding of international aspects. This program should be designed for young farm couples who have a potential for future leadership responsibilities.

VI. FACULTY DEVELOPMENT

An important means for faculty members to gain experience with foreign agriculture has been through assignment to overseas projects. These usually provide residence abroad in long-term (two years) and short-term (three months) assignments.

Long-term Assignments

Two kinds of staff are required for long-term assignments. The first is the chief-of-party who represents the college and the university abroad. This is largely an administrative position requiring, among other things, a considerable knowledge of the organization and operation of a land-grant institution. The second type of person is the subject-matter specialist who is broadly familiar with operations at the departmental level.

The long-term staff member serves abroad in an advisory role with the recipient institution. He is usually assigned to a department of his own specialization but has broad functions relative to the institution. His formal duties consist largely in counseling with faculty and students and in advising on curricula. His teaching duties normally are restricted to the presentation of new course materials with an understudy present and such teaching assignments as may be practicable, considering the language involved. In practice, however, he is usually involved in a wide range of activities involving developmental activities of the recipient institution.

The informal duties of the long-term staff member are most important. His role is essentially that of an institution builder through his efforts to introduce new concepts in education and research and to influence the recipient institution in its view of the relationship of the university to the community. Such a task is difficult to perform and usually can be accomplished only over a period of time longer than the normal two-year assignment.

The extent that the advisor can be effective depends partially on his own personality and initiative, partially on the degree to which he is accepted and consulted by the recipient institution and partially on the institutional arrangements within which the recipient organization performs its role.

This committee is of the opinion that overseas assignments provide opportunities to the faculty member to enrich his experience through close contact with new cultures. He becomes acquainted

with aspects of his chosen field as related to a different environment and is able to recognize and appreciate opportunities for development and research in new problems. As a result of this experience, he is better prepared to develop his role at his own institution, particularly in the advisory and instructional field.

On the other hand, there are at present some important limitations to a long-term overseas assignment. A period of residence abroad could represent a career interruption, particularly for those primarily engaged in technical research. This often also has adverse consequences to his departmental research and/or extension program. The staff member enters into an entirely different environment, where he is called upon to play a variety of general roles not necessarily related to his specialized talents and experiences and which do not always tend to further his specialized career. This is more true in the physical and natural sciences than the social sciences.

As a result, many faculty members, especially those in a specialized field, are somewhat apprehensive of undertaking an overseas assignment as they fear it may represent a retrogression rather than a progression in their careers. The committee's recommendations for the development of research programs ^{are} ~~is~~ designed specifically to overcome this situation through opportunities to continue research activities abroad.

Short-term Assignments

The staff member going abroad on a short-term assignment does so under quite different circumstances than the long-term assignee. His terms of reference quite specifically define his function usually to a relatively narrow field in teaching and/or research and extension. Moreover, this usually relates substantially to his normal work. The assignment is not of sufficiently long duration to handicap seriously his on-campus teaching and research programs. There is also a minimum of family disruption.

Recommendations

(1) Develop a long-term policy for overseas participation which would include a re-appraisal of the prerequisites for assignments and the conditions under which faculty is invited to serve. This relates to assignment both to "overseas projects" and to "research projects."^{6/} A modified approach to the present one for faculty development for overseas service is required, particularly as regards the long-term advisor.

(2) Recruit a proportion of overseas personnel for long-term assignments on a semi-permanent basis.^{7/} A cadre of staff with such interests should be employed with the understanding that they would alternate between overseas and campus assignments. They would be appointed as full members of their respective departments.

Not all staff should be employed in this way. There is a need to involve on-campus and extension staff in projects on a one-term basis to provide a wider variety of specialization and,

^{6/} See footnotes pages 4 and 11.

^{7/} This category is referred to here as an "overseas specialist" as distinct from the on-campus staff member who accepts a one-term assignment.

above all, to leave open the channel for enrichment of staff members who choose a foreign assignment as a unique and discrete part of their professional career.

The committee does not wish to designate the proportion between the two categories. This will depend, in part, upon future experience with hiring staff for overseas specialist appointments and the willingness of on-campus staff to accept one-term assignments. In the case of small departments, highly specialized departments or those in which the demand for advisors is limited, there may be little scope for an overseas specialist. On the other hand, in large departments, particularly those heavily involved in overseas activities, such specialists would have a significant role to play.

(3) Fill these overseas specialist positions with candidates having a definite desire to make careers out of overseas activities. Opportunities for advancement in a chosen profession must be available as well as certain financial and other perquisites which are a recognized feature of service overseas, both in business and government. These should include:

- (a) Opportunity to participate in research programs.
- (b) A salary range within each academic rank at a level above on-campus based salaries that would reflect a definite financial incentive.
- (c) Suitable arrangements for housing, transportation, education, insurance, etc.

(4) Plan for a larger proportion of the staff in international activities. The committee is of the opinion that, with a staff of 330 above the rank of instructor (see Appendix C), about 30 or almost 10 percent of the staff could reasonably be assigned to international work both abroad and on-campus. The participation of 30 would include work both on overseas programs and research projects.

(5) Provide facilities where interested on-campus staff who have returned from overseas assignments may find opportunities for indirect participation in overseas affairs. The need for advisory services to foreign students on academic problems represents one opportunity. Short-term advisory posts also become available from time to time. Opportunities for participation should be made available through a speakers' bureau (see page ²²25) and seminars.

(6) Improve the preparation of faculty for participation in overseas projects. Opportunities exist through continuing faculty contacts and improved orientation procedures. Long-term preparation for foreign assignments can best be accomplished through formal courses, seminars, travel, and independent study by faculty. The development of special library collections and reading lists relative to particular assignment stations is suggested. Prior faculty training opportunities in language need special attention since there is usually inadequate time to acquire language skill after a definite overseas assignment has been arranged.

The logistics of overseas projects make an organized orientation program for groups of faculty members difficult, if not

impossible. The committee recommends that where possible, faculty assigned to overseas projects for the longer assignments will have at least six months to complete work currently underway and to make final preparations for departure.

VII. ORGANIZATION, FUNCTIONS AND FINANCE

The prior recommendations made by this committee imply an increased emphasis on overseas activities in the field of education, research and extension. This would involve a more intensive participation in overseas projects as well as integrated research projects and an increase in the number of staff directly involved. If these recommendations are implemented, the committee envisages that the administrative effort should be expanded, the degree of interdepartmental coordination enhanced and financial support increased.

The present organization of international programs in the college consists of a coordinator reporting directly to the Dean of Agriculture with liaison responsibilities between the college and the Office of International Programs.

Recommendation for Organization

The committee foresees that the increased responsibilities and added functions implied in its recommendations require a more formal organization. This is also important to give the program an enhanced status within the college and university and especially

in relation to external institutions. The committee recommends an institute be formed within the College of Agriculture, headed by a director-administrator. The institute could be named, "The Institute for International Agriculture."

Functions

This institute would have the following duties and responsibilities:

(1) Education - It would serve as the focal point for overseas students in the College of Agriculture, apart from their academic work. This latter would remain the exclusive responsibility of individual departments. The institute would be responsible for the conduct of the recommended new courses, such as, "American Agriculture for Overseas Students." It would also be responsible to the Director of Resident Instruction for drawing up and periodically revising a curriculum for American students desiring a program for preparation for an overseas career in agriculture.

(2) Research - The institute would serve as the focal point for the development of international research projects. In this capacity it would serve as an overseas arm of the Agricultural Experiment Station. It would be responsible to the Director of the Experiment Station for the administration of such projects and for negotiations involved in securing financial support.

(3) Extension - The institute would work with the Director of the Cooperative Extension Service to implement special extension education programs. The relationship in overseas projects would be the same as with all other phases of college activities. In state programs, the institute would work closely with program leaders and departmental specialists in developing specific programs.

(4) Faculty development - In recommending the creation of new positions to staff overseas projects, the committee has assumed that the persons engaged would be regular members of the respective departments rather than of the institute. However, all such personnel, including on-campus staff assigned abroad, would be transferred from the departments to the institute staff for the period involved. This involves no change from the current procedure. Financial support for overseas specialists would be derived from the institute rather than from the department. The institute would have the responsibility for orientation, information and other functions associated with faculty development.

(5) Overseas projects - Overseas projects undertaken by the University of a predominantly agricultural nature are normally assigned to the College of Agriculture for administration. Such projects should continue to be administered by the college through the institute.

(6) Liaison - Responsibility for the development of university policy on overseas activities and for coordination with the several colleges and other university institutions rests with the Dean of International Programs. The Institute should be the channel for coordination between the College of Agriculture and International Programs. This includes the relation of the college to projects administered by other colleges of the university.

Finance

The entry of MSU into overseas activities represents an involvement which is only partially related to the basic functions

of the university conceived as a state-created, state-supported public institution. To the extent that such involvement strengthens and expands basic functions, these activities merit support from normal university sources of finance. The committee recognizes, however, that, by and large, financial support for overseas activities must come from other than state sources. This point of view is the same as that taken for existing domestically oriented research and extension activities of the university which are partially supported by federal and private funds.

The committee sees the following as the main sources of financial support:

(1) Overseas Projects and Participant Training - Present arrangements on special projects provide for costs to be borne by the sponsoring institution, usually the U.S. Government, including an allowance for overhead. Costs of training of overseas students on-campus are covered by the Federal Government or private foundations.

(2) The Institute - Administrative costs would be covered from the special projects and administrative charges for research projects.

(3) Overseas specialist staff - Costs of overseas specialist staff while on assignment overseas would be covered by existing methods of overseas project financing. There remains the question of support during the period when the specialist staff member would be on-campus on a rotational basis. This cost could be borne entirely or in part by the college as a net addition to its staff

on the basis that the personnel concerned could be used as a means of enrichment of instruction through lectures, seminars and student conferences. An alternative is that part of the cost would be covered by the inclusion in special project contracts of charges for sabbatical leave to which a faculty member is eligible after six years of service. In the case of permanent overseas staff members, this normally would be taken on campus. The remaining portion of such costs could be borne by inclusion of time under a research project.

(4) Research - Financial support for research would normally be expected to be derived from foundations. It would be a function of the institute to seek such financial aid for specific projects or a combination of projects.

(5) Graduate Student Assistance - Such funds would be incorporated into relevant research projects where graduate students would be employed. In the case of overseas graduate students who were granted such assistantships, special scholarships may have to be obtained to cover costs of transportation.

(6) Budget requirements - A model budget to support a staff of 30 in overseas projects and research programs both abroad and on-campus plus graduate assistant and other support is presented in Appendix D. Finances required to cover one year's expense is estimated at approximately one million dollars. Such an amount need not be considered excessive when it is considered, a) that the recommended program is expected to expand gradually as financial support is acquired and, b) the financing now received by the

university for the support of the activities of staff of the college abroad and in research amounted to approximately \$385,000 in 1961-62.

(7) Emergency Support - An obstacle to the implementation of the program recommended here is the problem of financing such an organization in the event that outside support would be withdrawn on a substantial scale in a short period of time. Under such circumstances the problem of absorbing or maintaining a redundant overseas staff would arise. The committee believes that this problem can be minimized by certain programing policies and financial measures. These are discussed in Appendix E.

APPENDIX A

Academic Staff College of Agriculture
and Related Departments^{1/}

<u>Department Group</u>	<u>Professor</u>	<u>Assoc. Prof.</u>	<u>Asst. Prof.</u>	<u>Instructor</u>	<u>Total</u>
Plant Science ^{2/}	45	34	25	5	109
Animal Science	14	17	8	-	39
Social Science	17	12	16	2	47
Technology ^{3/}	17	11	13	2	43
Forests and Wildlife	11	12	8	2	33
Other ^{4/}	<u>24</u>	<u>19</u>	<u>14</u>	<u>2</u>	<u>59</u>
TOTAL	<u>128</u>	<u>105</u>	<u>84</u>	<u>13</u>	<u>330</u>

1/ As of December, 1962

2/ Includes Botany and Plant Pathology

3/ Engineering, Food Science

4/ Biochemistry, Short Course, Entomology, Extension, Administration

APPENDIX B

Fall Term 1962
Foreign Student Enrollment

Department	Ph.D.	M.S.	Under-graduate	Total
Agricultural Economics	9	16	-	25
Agricultural Engineering	7	10	4	21
Animal Husbandry	1	6	-	7
Biochemistry	4	2	-	6
Dairy	2	1	-	3
Extension Personnel Development	-	2	-	2
Farm Crops	-	7	-	7
Fisheries & Wildlife	-	1	2	3
Food Science	7	13	-	20
Forestry	1	4	4	9
Forest Products	2	2	3	7
General Agriculture	-	-	17	17
Horticulture	11	3	-	14
Poultry	1	2	-	3
Resource Development	-	2	-	2
Short Course	-	-	2	2
Soils	6	6	-	12
Total	<u>51</u>	<u>77</u>	<u>32</u>	<u>160</u>
Of which: Canadian	9	9	9	27
Other	42	68	23	133
Total Enrollment	<u>221</u>	<u>230</u>	<u>1574</u>	<u>2025^{a/}</u>
Percent Non-Canadian Foreign Students	(19)	(30)	(1.5)	(6.5)

^{a/}Excludes 33 short-term visitors of which 25 were in Extension.

APPENDIX C

Summary of Questionnaire Sent to Foreign Graduates of MSU From Asiatic, African and Latin American Countries 1962

I. Introduction

In order to determine how effectively MSU has been training post World War II foreign students from underdeveloped countries, this committee sent out 144 questionnaires to MSU graduates in the summer of 1962. Addresses were supplied by departments but letters were sent only to those whose address appeared fairly complete. About 10 percent were returned because of incorrect addresses.

The main conclusions to be drawn from the returns are:

1. Our training would be greatly improved by strengthening the advisory service to students. This could be partly achieved by using professors having knowledge of specific foreign countries as advisors.
2. Many of the graduates stated they would have benefited by having obtained practical training or experience on farms or related commercial enterprises. Examples given were dairy plants and floral shops. Some indicated that some courses were not useful in their home country. Attempt to make courses more useful, therefore, should deserve attention.
3. Although only about 10 percent of the foreign students in the survey felt their English was unsatisfactory when they arrived, the committee feels that a much larger percentage is actually

hampered in their course work and associations with advisors because of poor communication.

4. The need for training in administration in addition to technical subjects was stressed by those graduates who had advanced to positions of greater responsibility.
5. Foreign students would benefit if they were not permitted to live as segregated nationality groups in rooming houses.

II. Results of the Questionnaire

The following response was obtained indicating a return of 35 percent.

<u>Department</u>	<u>Number</u>	
	<u>Sent</u>	<u>Replies</u>
Agricultural Engineering	27	7
Agricultural Economics	4	0
Animal Husbandry	17	5
Biochemistry	2	0
Dairy	9	5
Farm Crops	18	5
Fisheries	1	0
Food Science	13	2
Forestry	11	4
Forest Products	4	2
Horticulture	20	8
Poultry	4	4
Resource Development	2	1
Soil Science	12	7
TOTAL	<u>144</u>	<u>50</u>

Degrees granted by Michigan State University to respondents:

Short Course	1
B.Sc.	6
M.Sc.	31
Ph.D.	<u>14</u>
	<u>52</u> (some had 2 degrees)

A. Orientation:

1. How well were you prepared in your own country for the courses you took at MSU (check one)

Very well (11)	26%
Well (20)	46%
Fairly well (7)	17%
Poorly (4)	9%

2. How good was your English when you arrived (check one)

Very satisfactory	30%
Satisfactory	55%
Unsatisfactory	15%

B. Curriculum:

1. Did the courses you took at MSU prepare you for what - (check on)

(a) you expected to do	50%
(b) you are actually doing	50%

2. Which additional courses at MSU do you think you should have taken to prepare you for your present position? (Answers varied with departments)

3. Should students from your country be required to take one term of: (check one)

(a) American History - yes, 54% - no, 46%
(b) American Government - yes, 60% - no, 40%

Why or why not? (answer) Many felt they get good basic background in these subjects (e.g., Indian students) in their own countries. Examination of transcripts may help indicate need upon arrival in U.S.

4. How should MSU improve its training to students from your country getting a degree at MSU? (single replies to one topic not included)

<u>Replies</u>	<u>Topic</u>
12	Practical training on farm, dairy plant floral shop, etc.
8	Professor knowing student's country better.
7	Stay in dormitory to discourage similar nationalities living together in one rooming house.

<u>Replies</u>	<u>Topic, cont.</u>
6	Practical training presumably in university
4	Orientation of students socially and academically.
4	Better counselling at university level.
4	More social contact with American families.
3	Have students attend more conferences, field trips, extension meetings.

C. Faculty-student relationships

1. How was your relationship with your major professor?
(check one)

Excellent	81%
Good	15%
Satisfactory	2%
Poor	2%

2. How many times did you have dinner in an American home?

1 - 5	54%
6 - 10	10%
10 or more	36%

3. How could the advice given you by your faculty advisor be improved?

<u>Replies</u>	<u>Topic</u>
9	Professor have knowledge of country
3	Proper course selection
3	More discussion of research program between student and professor
1	Better social contact with professors

4. What is our biggest fault? (single replies to topic not included)

<u>Replies</u>	<u>Topic</u>
4	No practical training
3	No systematic contact with foreign students after graduation(newsletter?)
2	Courses not useful in home country
2	Need stronger foreign counselling at university level
2	Losing good professors to other schools

D. Experience

1. Would any apprenticeship type of practical training, for example, spending 3 months on a typical American farm, have been helpful to you in your present work?

Yes - 84%
No - 16%

Why or why not? Answers favored practical training in general, e.g., work in a dairy plant, dairy farm, floral shop, etc.

2. Did you tour the United States before you left the country?

Yes - 62%
No - 38%

If yes, for how many weeks?

1 week - 0%	4 weeks - 19%
2 weeks - 19%	4-10 weeks - 39%
3 weeks - 23%	

3. What kind of experience which you attained at MSU was most helpful to you in your present job?

Answers varied tremendously.

E. Present job: (check one)

1. How well did your degree prepare you for your present position?

Very well	56%
Good	42%
Fair	22%
Poor	0%

2. Are you in the type of work for which you were trained at MSU?

Yes - 89%
No - 11%

APPENDIX D

Estimated Annual Costs to Finance an Expanded Overseas Program

Estimated costs of operating the 1961-62 overseas operations of the college, including staff of two in Colombia, five in Taiwan, two in Nigeria, and one in Pakistan, have been estimated approximately as follows:

Colombia	\$ 50,000.00
Taiwan	200,000.00
Nigeria & Pakistan	75,000.00 ^{a/}
Research Projects:	
Colombia ^{b/}	20,000.00
Miscellaneous ^{c/}	<u>40,000.00</u>
TOTAL	\$385,000.00

a/ Estimated prorated costs

b/ Department of Agricultural Economics
research program using USDA funds

c/ International Programs-Ford Foundation
grant funds

The estimated financing for the recommended expanded program based on three overseas projects, plus supporting research projects and 30 full-time staff equivalents, is given in the attached table. These estimates include sabbatical allowances of 16-2/3 per cent of salaries which is normally computed in the university overhead. The latter estimate has accordingly been reduced from an average of approximately 25 per cent to 10 per cent. Data has been rounded to the nearest thousand dollars.

Estimated Ordinary Annual Expenditure
For An Expanded Program

A. Overseas Projects

1. Salaries:

(a) Staff salaries (15 staff members) ^{a/}	\$206,000
(b) Retirement contribution (7-1/2 percent)	15,100
(c) Sabbatical allowances (1/6 of salaries) ^{b/}	34,000

2. Allowances:

(a) Overseas differential (15% of salaries) ^{c/}	31,000
(b) Housing (15 families) ^{d/}	45,000
(c) Education - campus based staff only (@ \$600 per child x 12)	7,000

3. Travel and Transportation:

(a) Personnel	30,000
(b) Goods and effects	12,000
(c) Business travel	10,000

4. Administration, Overhead, etc.

(a) Insurance, social security, etc.	21,000
(b) Institute administrative support	30,000
(c) University overhead (10% of salaries)	<u>23,000</u>

Sub-Total \$464,000

B. Research Projects

1. Salaries:

(a) Staff salaries (15 staff members)	165,000
(b) Retirement contribution (7-1/2 percent)	12,000
(c) Sabbatical allowances (1/6 of salaries) ^{e/}	28,000
(d) Graduate assistantships (12 @ \$2,500)	30,000

(e) Post-prelim travelling fellowships (6 @ \$6,500)	39,000
(f) Overseas personnel support	50,000
(g) Secretarial, etc. (12 @ \$4,000)	48,000
2. Travel and Transportation:	
(a) Internal USA	5,000
(b) International MSU staff travel	15,000
(c) Per diem allowances	40,000
3. Administration, Overhead, etc.	
(a) Insurance, social security, etc.	17,000
(b) Institute support	30,000
(c) University overhead (10% of salaries)	<u>19,000</u>
Sub-Total	\$498,000
TOTAL	<u>\$962,000</u>

a/ Based on an average on-campus salary of \$11,000 plus a 25 percent increment specialist.

b/ Normally included in university overhead.

c/ Combines hardship and/or cost of living allowances.

d/ Usually included in AID contracts as a local currency contribution but included here for completeness.

e/ Based on a average on-campus salary of \$11,000.

APPENDIX E

Some Problems of Financial and Staff Adjustment

The advocacy of a specialist overseas staff and an expansion in overseas project activities is based, among other things, on the assumption that United States foreign policy will support a substantial program of foreign aid in the foreseeable future. Should, however, a reversal of this policy occur, then, if MSU were heavily dependent upon U.S. government financial support for overseas projects, a difficult period of adjustment could occur. The purpose of this appendix is to indicate the likely financial magnitude of such an eventuality and measures which could be taken to guard against its occurrence.

As a basis for analysis it is assumed that the equivalent of 15 full-time campus based tenure staff members are working on international programs either on assignment abroad on overseas projects or on campus in research and that a total of 15 overseas specialists have been hired in addition to campus based staff of which two-thirds are on tenure and one-third are subject to one year's notice. It is also assumed that the college has an average advance notice of six months before termination of any single contract (Note: the minimum under AID contracts is 90 days) and that it has three contracts outstanding.

The worst situation which could occur would be, if all three outstanding contracts were terminated at the same time with only six months notice. Under these circumstances a liability for

salaries over and above regular on-campus staff of \$172,500 would be incurred under the following assumptions:

- (1) An active research program financed independently of the overseas projects would continue for two years carrying 15 full-time equivalent staff.
- (2) Five non-tenure staff were immediately given a year's termination notice for which the college would be liable for six months salary after the end of the overseas contracts.
- (3) With a normal staff turnover of about 5% per annum or 15 positions the departments could absorb up to 10 of the redundant staff from the international program each year.

The calculations are as follows:

	<u>Staff on Research</u>	<u>Staff on Overseas Assignment</u>	<u>Total</u>
1. Staff involved at termination notice	<u>15</u>	<u>15</u>	<u>30</u>
2. Staff terminated - 0.5 years salary liability	0	5	5
3. Staff absorbed end 1st year - 0.5 salary liability	0	10	10
4. Staff absorbed end 2nd year - no salary liability	10	0	10
5. Staff absorbed end 3rd year - 1 year salary liability	<u>5</u>	<u>0</u>	<u>5</u>
6. Total salary liability - full year equivalents	<u>5.0</u>	<u>7.5</u>	<u>12.5</u>

7. Average individual salary liability	\$ 13,800 ^{a/}
8. Total liability	\$172,500

^{a/} Includes an average salary of \$11,000 plus retirement contribution and sabbatical allowance.

Under more normal conditions it may be assumed that only one project would be liquidated at any one time with a two-year interval between such liquidations and that during any two-year period a new project could be found. A temporary redundancy of five positions would occur. Here it could reasonably be expected that one year's termination notice would be given. The college would not desire to reduce its staff in the interim. The redundancy could be anticipated by departments so that at the end of the one year termination period the extra staff could be carried by means of the normal reduction in staff through retirement and resignations, etc.

Under these assumptions the committee recommends the following guides to project planning procedures in order to avoid incurring any undue financial burden:

- (1) Attempt to have at least one out of three overseas projects under non-government sponsorship.
- (2) Include in the non-government sponsored special project contract a provision for two-years notice of termination.
- (3) Negotiate new contracts in such a way that there is a reasonable likelihood that termination dates, except for an emergency, would not overlap by less than two years.

- (4) Plan for a research project program which would continue at least two years from any given date. Such programs should be financed, wherever possible, through non-AID sources.
- (5) Arrange for the accumulation of a reserve fund from overhead project charges and/or additional charges to the projects for this purpose up to a minimum of \$150,000. This would take about three years under a full program.
- (6) Negotiate with a foundation for an emergency on-campus special international agricultural program involving special courses, seminars and/or research of three year's duration which would cover about \$170,000 in academic salaries to be put into effect in case of a complete liquidation of all overseas projects. When the reserve fund of \$150,000 were accumulated this recommendation could be eliminated.