

AGENCY FOR INTERNATIONAL DEVELOPMENT  
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**BIBLIOGRAPHIC INPUT SHEET**

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*Batch 72*

|                           |              |                               |                |
|---------------------------|--------------|-------------------------------|----------------|
| 1. SUBJECT CLASSIFICATION | A. PRIMARY   | Food production and nutrition | AA50-0000-0000 |
|                           | B. SECONDARY | Research                      |                |

2. TITLE AND SUBTITLE  
 Proceedings

3. AUTHOR(S)  
 (100) Stavrakis, Olga; Nelson, Sally; (101) Conf. on the U.S. University and Title XII, Minneapolis, Minn., 1977; Minn. Univ. Inst. of Agr., Forestry, and Home Economics

|                  |                    |               |
|------------------|--------------------|---------------|
| 4. DOCUMENT DATE | 5. NUMBER OF PAGES | 6. ARC NUMBER |
| 1977             | 114p.              | ARC           |

7. REFERENCE ORGANIZATION NAME AND ADDRESS  
 Minn.

8. SUPPLEMENTARY NOTES (Sponsoring Organization, Publishers, Availability)

9. ABSTRACT

This report includes the major addresses and summaries of the discussions at the Title XII Conference in Minneapolis in May 1977. The conference had three major purposes: to provide an opportunity for the Board for International Food and Agricultural Development to report on its deliberations, identify emerging issues, and to present programs, policies and procedures for implementation of Title XII legislation; to provide an opportunity for university administrators and faculty to raise questions and discuss issues with BIFAD and A.I.D.; and to provide an opportunity to identify and discuss various possibilities for effective university involvement in international food and agricultural development through Title XII. Some of the papers presented in the first section include: ways in which U. S. universities need to be strengthened to effectively respond to Title XII, a brief report on university linkages study, mobilizing resources of universities for agricultural development in developing countries, mobilizing resources to effectively contribute toward solving world hunger and malnutrition, and a progress report on the first six months for BIFAD. Section three contains several appendices which provide background, support or elaboration on various parts of sections one and two.

|   |                       |
|---|-----------------------|
| 10. CONTROL NUMBER                                  | 11. PRICE OF DOCUMENT |
| PN-RAB-767  |                       |
| 12. DESCRIPTORS                                     | 13. PROJECT NUMBER    |
|   | 14. CONTRACT NUMBER   |
|   | 15. TYPE OF DOCUMENT  |
| Cooperation<br>Meetings<br>Research<br>Universities | AID/ta-G-1423 GTS     |

**PROCEEDINGS**  
**Of The Conference**  
**THE U.S. UNIVERSITY AND TITLE XII**

**Minneapolis, Minnesota**

**May 5-7, 1977**

**Edited by**  
**Olga Stavrakis**  
**and**  
**Sally Nelson**

**Published and Distributed by:**  
**Institute of Agriculture, Forestry and Home Economics**  
**201 Coffey Hall**  
**University of Minnesota**  
**St. Paul, Minnesota 55108**

**July 1977**

**Cover Design by Karen Lilley**

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## FOREWARD

The potential for progress under Title XII is remarkable, but it is a path that is by no means clear. If we use Title XII wisely -- that is, if we take full advantage of it -- we can do much good. The obligation is ours and it is both legal and moral.

As we all know, the world food crisis is by no means over, although newspaper headlines may have ceased. A true measure of our commitment to help people help themselves will be the passionate concern with which we respond to this crisis, now that it has gone into a temporary and incomplete remission and has fallen off front pages.

We have become sophisticated enough to know that no single scientific or scholarly discipline has all the answers when it comes to agricultural and developmental problems. We must make a stronger commitment to using multidisciplinary approaches. We must more aggressively employ all the resources available to us in our agriculturally talented and rich universities. We must use and view these universities as the national and international resources that they are.

We must acknowledge the understandable tensions that crop up at times between the major participants in our international development activities. Yet we must not permit these tensions to prevent us from doing the work we are charged to do. We must not allow anything to compromise the Title XII mandate.

In order for our universities to realistically meet this mandate, they must be strengthened and provided with resources to do the job. Simple reshuffling of existing actors and programs will accomplish little.

Representative Paul Findley, Senator Hubert Humphrey and others worked with enthusiasm and skill to turn Title XII from an idea into a far-reaching law in a dramatically short period of time. We owe it to them -- and more fundamentally, of course, to the hungry people of the world -- to have Title XII bear real fruit as soon as possible. I think we have made good progress and I am confident we will continue doing so.

C. Peter Magrath, President  
University of Minnesota  
July 1, 1977

## ACKNOWLEDGMENTS

A special thanks is extended to the many people who participated in the conference and to those who assisted in its planning and implementation. In the latter category, a special appreciation is extended to David Eckholm, Administrative Assistant, University of Minnesota, for all his efforts in planning and implementation, to Olga Stavrakis, Research Fellow and Sally Nelson, Editor, University of Minnesota, for assembling and editing the proceedings, and to Dr. William F. Hueg, Jr., Deputy Vice President and Dean, Institute of Agriculture, Forestry and Home Economics, and Dr. C. Peter Magrath, President of the University of Minnesota, for their strong support and guidance throughout the conference planning process.

Also deserving recognition are those many individuals who carried out valuable and essential general support functions before, during and after the conference. Among this group are several who were especially helpful and whose work deserves acknowledgment. Lois Anderson, Lillian Werling and Martha Rukavina provided superb secretarial assistance and helped organize and conduct the conference registration process. Special gratitude is expressed to Kathy Boyer for her exceptional patience and diligence in typing the final manuscript for the proceedings. And finally, thanks must be expressed to Linda Buranen and Chris Moen for aid in all financial matters concerning the conference.

Three organizations deserve recognition for their support and assistance which contributed immeasurably to the credibility of the conference: The National Association of State Universities and Land-Grant Colleges; the Board for International Food and Agricultural Development; and the United States Agency for International Development. The latter deserves special appreciation for providing direct financial support to partially cover the costs of planning, conducting and concluding the work of the conference.

## ABBREVIATIONS

|         |  |
|---------|--|
| AAC     | Association of American Colleges   |
| AACJC   | American Association of Community and Junior Colleges  |
| AASCU   | American Association of State Colleges and Universities  |
| AAU     | Association of American Universities   |
| AAUAA   | American Association of University Agricultural Administrators   |
| ACE     | American Council on Education  |
| AICHER  | Association for International Cooperation in Higher Education and Research (no longer exists; has been succeeded by International Linkages in Higher Education)  |
| AID     | (U.S.) Agency for International Development  |
| BIFAD   | Board for International Food and Agricultural Development  |
| CGIAR   | Consultative Group for International Agricultural Research   |
| CID     | Consortium for International Development (members-University of Arizona, University of California - Davis and Riverside, Colorado State University, Oregon State University, Texas Tech., Utah State University) |
| EFNEP   | Expanded Food and Nutrition Education Program (Extension Service)  |
| FAO     | (United Nations) Food and Agriculture Organization   |
| IBRD    | International Bank for Reconstruction and Development (World Bank)   |
| ILO     | (United Nations) International Labor Organization  |
| JCAD    | Joint Committee on Agricultural Development (BIFAD)  |
| JRC     | Joint Research Committee (BIFAD)   |
| LDC     | Lesser Developed Country   |
| MUCIA   | Midwest Universities Consortium for International Activities   |
| NAS     | National Academy of Sciences   |
| NASULGC | National Association of State Universities and Land-Grant Colleges   |
| NIEO    | New International Economic Order   |
| NOAA    | National Oceanic and Atmospheric Administration (U.S. Department of Commerce; operates the Sea Grant Program)  |

TAB            Technical Assistance Bureau (AID)

Title XII    Title XII of the Foreign Assistance Act of 1961 as amended;  
              Public Law 94-161

UNCTAD      United Nations Conference on Trade and Development

UNDP         United Nations Development Program

UNIDO        United Nations Industrial Development Organization

USDA         United States Department of Agriculture

## INTRODUCTION

LaVern A. Freeh, Conference Chairman  
Assistant Dean, Agriculture, Forestry and Home Economics  
Institute of Agriculture, Forestry and Home Economics  
University of Minnesota

These proceedings contain copies of the major addresses and the summaries of group discussions which were a part of the U. S. University and Title XII Conference conducted in Minneapolis/St. Paul, Minnesota, on May 5-7, 1977.

The purpose of the conference was to:

- Provide an opportunity for the Board for International Food and Agricultural Development to report on its deliberations, identify emerging issues, and present programs, policies and procedures for the implementation of Title XII legislation;
- Provide an opportunity for university administrators and faculty to raise questions and discuss issues with members of BIFAD and representatives of AID;
- Provide an opportunity to identify and discuss various possibilities for effective university involvement in international food and agricultural development through Title XII.

The conference involved over 300 persons and included:

- Members of The Board for International Food and Agricultural Development (BIFAD);
- Representatives of the Agency for International Development (AID);
- Administrators and faculty from land-grant colleges and state universities and other agriculturally related colleges and universities.

The conference was sponsored by the University of Minnesota in cooperation with:

- The National Association of State Universities and Land-Grant Colleges (NASULGC)
- The Board for International Food and Agricultural Development (BIFAD); and,
- The United States Agency for International Development (USAID) which also provided a grant to partially support the conference.

Thanks are again extended to all these organizations and particularly to the many individuals who represented them throughout the long conference planning process.

The first section of the proceedings contains the papers presented in the conference general sessions including the evenings with three exceptions. Papers from Dr. Sherwood Berg, Dr. D. Woods Thomas and Arvonne Fraser were not made available in time to meet the printing deadline. They may become available in the future as addenda to the proceedings.

The second section contains summaries of the discussions conducted by the six assigned discussion teams. The six assigned teams summaries plus one that was organized by an interested group of individuals during the conference were also delivered at the conference during the final general session.

Finally, section three contains several appendices which serve to provide background, support or elaboration on various parts of sections one and two. Appendix A, the conference program, should be particularly helpful in assisting the reader to integrate the many papers and discussion team reports.

## SECTION I - FORMAL PRESENTATIONS

MOBILIZING RESOURCES TO EFFECTIVELY CONTRIBUTE  
TOWARD SOLVING WORLD HUNGER AND MALNUTRITION

David E. Bell\*

This is an important conference and I am honored to be invited to join in opening the discussion. The conference organizers have asked me to talk about a very large subject -- mobilizing the resources of the U. S. universities to contribute more effectively to the alleviation of world hunger and malnutrition -- in a very brief time. Needless to say, I will not try to cover the subject with thoroughness, but instead will focus on what seem to me four of the central issues.

The conference organizers have also asked me to draw on the findings of the "World Food and Nutrition Study" recently completed by the National Academy of Sciences, since I was a member of the steering committee for that study. I will be glad to do this, although under Academy rules, because the report of the study will not be published until next month, I cannot quote from it.

The four central issues are how far the U. S. should be concerned with world hunger, what is needed to alleviate world hunger and malnutrition, what U. S. universities can contribute to these objectives, and how the government can be most helpful to the effective involvement of U. S. universities in addressing problems of world hunger and malnutrition.

1. How far should the U. S. be concerned with world hunger? The title of this conference assumes an answer -- that it is clearly appropriate and desirable for the U. S. to help relieve hunger and malnutrition in the world. But the assumption should not go unexamined. There are important questions here, relating to the international interests of our country and of various groups within it, to the sometimes conflicting demands of humanitarian and commercial values, to the always heated arguments over the allocation of federal and state tax dollars. For example, how far should federal funds be used, through AID, to help raise agricultural output in developing countries -- perhaps to the detriment of U. S. commercial markets for agricultural exports? How far should state funds be used, through the state universities, to support professors doing research on problems of tropical agriculture or to support graduate students from developing countries?

---

\*Executive Vice President, The Ford Foundation

These are kinds of questions which are familiar to many of us in this room who have testified before federal or state legislatures. They are fair questions and deserve honest answers. My own -- in skeleton form -- run like this:

The U. S. plainly can and should help with emergency needs for food. With the world's population still shooting upward, with food supplies precariously keeping pace and with the hazards of weather and other sources of instability, there could be serious emergencies any year, as recently in Bangladesh, the Sahel and other places. Such situations raise important questions about how to make relief activities more efficient and how to share costs fairly. But surely the case is unassailable for the U. S. to contribute generously to emergencies.

The much larger and more difficult questions relate to U. S. help for expanding food production in developing countries. It is certainly true that Thai rice producers or Pakistani wheat producers may turn out to be tough competitors for American farm exports, just as Brazilian soybean producers have been in recent years. Why should the U. S. taxpayer support the expansion of competition for himself?

The classic answers are three:

In humanitarian terms, with the enormous growth of population in developing countries, there is no way to meet the growing demand for food except to produce most of it there. Neither the productive capacity nor the financial capacity of advanced countries could be expected to meet that demand.

Moreover, in economic terms, for the U. S. to support economic growth and development in other countries pays off. The huge U. S. farm exports today are a direct result of successful U. S. foreign aid programs to Europe and Japan after World War II, and the evidence of recent years suggests that strengthening the economies of developing countries will also result in larger export markets for U. S. farm products. There will certainly be difficulties of adjustment, but the argument seems very strong that with world markets growing as a result of larger populations and higher incomes for at least the rest of the century, the higher competitive U. S. agricultural producers have much to gain and little to lose from U. S. help to the developing countries.

Finally, in political terms the U. S. is part of an increasingly interdependent world society, and one which faces extraordinary risks as the capacity to manufacture atomic bombs spreads to country after country. There is no way to conceive of a successful international political system in the next few decades except in terms of cooperative action among nations to meet major world problems -- among the most important of which are the atomic bomb, the population explosion, the pollution of air and oceans, and world hunger and malnutrition. If we in the U. S. don't show the common sense to join strongly and effectively in meeting these problems, we would, in my opinion, be missing tremendous opportunities to shape our own future in desirable ways.

These arguments, I believe, are powerful and persuasive. They amply support U. S. assistance in meeting problems of world hunger and malnutrition, including the kind of action by the U. S. Agency for International Development we will be discussing in this conference. Arguments of this kind have been accepted by the Congress -- although always with controversy -- in all periods since World War II as the basis for U. S. foreign assistance.

These arguments have become stronger, not weaker, in recent years with the growing international involvement of American society, and I would suggest in passing that it is time we changed some of our traditional attitudes toward international agricultural issues. One is that of the U. S. Department of Agriculture, which in recent years has seen itself as almost exclusively concerned with the commercial interests of American farmers, leaving the broader interests of the U. S. in world food and nutrition problems to be represented by AID and the Department of State. Surely this is a narrow and obsolete view, and the Department of Agriculture should learn to reflect the various U. S. interests involved in international agricultural policies -- the interests of U. S. producers certainly, but also the interests of U. S. consumers and the broad interest of all U. S. citizens in the world where hunger and malnutrition are being successfully attacked.

Another set of traditional attitudes I would think might change is that of state governments, which have thought it generally not appropriate to finance international projects -- except for trade promotion. Surely in present circumstances, when such a large share of the markets for the producers of a state like Minnesota are overseas, it would be sensible for

the state to contribute modestly -- for example, through the activities of the university -- to the improvement of the world economy on which the state's future depends.

11. What is needed to alleviate world hunger and malnutrition? To produce more food is one requirement, but it is plainly not a sufficient one. Any careful look at the situation will identify multiple causes for hunger and malnutrition. For convenience, the NAS study grouped them under four headings and I will repeat that usage here.

The first cause of hunger and malnutrition in the world is of course the growth of population and national income. Since World War II, the world has seen an astonishing explosion both of population and of income -- which has been distributed in extremely uneven ways. World population is now four billion, and while rates of growth have probably passed their historic inflection point and are beginning to decline slightly, there is no way to escape further increases in the total -- probably to nearly six billion by the end of the century and to eight to eleven billion by the time zero population growth could be reached sometime in the next century. The great bulk of the increases will be in the low-income countries of Asia, Africa and Latin America. Even slow rates of growth in income per capita will result in very large increases in demand for food in the developing countries.

These are familiar facts and projections, but their significance does not pale with repetition. They mean that the developing countries -- especially those of lowest income -- face a constant precarious struggle to obtain enough food to keep up with their growing populations and (hopefully) their slowly growing incomes. At the same time, rising affluence in the high income countries is likely to increase their demand for food and feed imports, particularly in Europe and Japan.

To meet these demands, the first requirement is for an increase in food production in the developing countries at unprecedented rates for at least the next two decades. In addition, there will need to be continued expansion of food production and trade by the more developed countries.

There are several authoritative estimates of the needed rates of increase in food production in developing countries. The NAS study suggests the need for the developing countries (excluding China) to increase food production by

about 3 to 4 percent per year to the end of the century, which compares to the expansion of production in those countries from 1950 to 1975 of about 2.8 percent per year. So the need is to do even better in the future than the extraordinarily high rates of the recent past -- and at a time when water and land resources are growing more scarce and more costly. There is also some question whether we are not outrunning the additions to basic scientific knowledge permitting increases in crop yields. Moreover, the figures I have just given are overall averages, and the situation in a number of lower income countries is much more difficult.

There is no doubt, therefore, that a rapid, continuing expansion of food production, especially in the developing countries but also in advanced countries, is one requirement for responding to world hunger and malnutrition. But is not the only one.

A second requirement, is to reduce the instability of supplies to the most vulnerable consumers. Instability of production is inevitable although its amplitude can perhaps be reduced through biological and agronomic improvements in production processes. But instability of supplies and prices have in recent years reflected more than the ups and downs of production: They have also reflected the inadequate arrangements in the world for stockpiles in the U.S., accumulated largely as a result of domestic political factors which have served fairly well to cushion the instability of world production. The reduction of U. S. stockpiles has revealed how vulnerable the world is at present to the vagaries of weather, pests, etc. We lack international and national policies and programs capable of dealing sensibly with production instability and of protecting the most disadvantaged countries and consumers from the swings of supplies and prices. The development of such policies and programs is urgently needed to deal with world hunger and malnutrition.

But the list does not stop there. The poor in any country -- those without the resources to produce or buy the food they need -- make up the bulk of those who are hungry. Any serious attack on world hunger and malnutrition therefore must include an attack on poverty. In the circumstances of developing countries, this means a concern for the rural poor -- landless laborers who need land or jobs, low-income farmers who need credit, information, supplies -- and for the urban poor -- low-income workers who need jobs, small-scale entrepreneurs who need credit, information, supplies. All of these, rural

and urban, need various types of organization to pool their limited resources and gain some degree of economic and political power.

These requirements for dealing with poverty -- and therefore with hunger and malnutrition -- have become clearer in recent years as we have all learned more about the development process. But to satisfy the requirements is extremely difficult, since in the normal case strongly entrenched interests will oppose the needed changes.

A fourth set of requirements has to do with nutrition. To me, the biggest element of surprise connected with the NAS study was how little the world has learned about nutrition. There are plainly very serious nutritional difficulties in advanced countries like the U. S. as well as in low income countries like India or Bangladesh. We know very little about how to establish better nutritional policies and make them effective in either kind of country. We know a fair amount about individual nutritional factors like some vitamins and iron, but we have little knowledge of an epidemiological nature about the relationships between diets and health, or of a social science nature about how to educate or otherwise influence people in their handling and use of food.

The importance of achieving a better understanding of policies that result in high levels of nutrition and health, even though they may not have been consciously designed for that purpose, is shown by comparative data. For example, Sri Lanka and the Indian state of Kerala, with average per capita incomes of less than \$150, have achieved standards of life expectancy and infant mortality far better than those of many countries with higher per capita incomes.

Summing up this issue, then, I am suggesting that a serious concern with world hunger and malnutrition requires attention to the rapid expansion of food production, to ameliorating the instability of food supplies, to the reduction of poverty, and to policies and programs affecting nutrition.

### III. What can U. S. universities contribute to these objectives?

Clearly a great many actions are required, by governments and by private individuals and groups in many countries. Among them, U. S. universities may seem limited in resources and distant from the scene of action. But my own view is that they could help a good deal through their traditional avenues of teaching, research and (for some universities at least) service.

With the explosion in undergraduate enrollments in most parts of the developing world, the potential value of the U. S. university as a teaching location for young men and women from the developing countries is heavily concentrated now in the post-graduate years. There are as yet few post-doctoral experiences as high-quality institutions. For the next decade or two, therefore, U. S. universities have a great opportunity to train young people from developing countries for universities, research institutions and other positions of intellectual leadership in their own countries. The opportunities to select very promising young people for such training have never been better, and the opportunities for them to return to positions making full use of their training in most countries are steadily rising.

U. S. universities plainly have deficiencies at the present time as they look ahead to these opportunities. Few American universities have made any serious effort to think about changes in post-graduate curricula or in the dissertation process that might result in better training for students from developing countries. Few universities have undertaken seriously to build and sustain a thorough knowledge of other parts of the world so that graduate students coming from those places can find knowledgeable teaching and guidance. On some of the subjects badly needed by students from developing countries -- especially inter-disciplinary subjects like nutrition -- U. S. graduate teaching for the most part needs updating and modernizing even for the purposes of U. S. students, let alone those from developing countries.

So there is much to be done to improve the U. S. universities as centers for post-graduate teaching dealing with world hunger and malnutrition. Title XII should provide helpful assistance but the universities themselves will have to take major initiatives if much progress is to be made.

There is another aspect of the teaching process to which U. S. universities could contribute and that is the development of teaching institutions in developing countries. The past record in this respect is a mixed one, and for every example of comparative success such as Los Banos or Vicosia there are several which have been far less successful. Title XII provides the opportunity for a fresh start in this difficult and challenging field, and I hope

very much the opportunity will be accepted. But to do the job right will require a much more sophisticated and up-to-date view of what is needed and how to get there than most of us had in the past. We have all learned through painful and expensive experience that the U. S. land-grant university is an institution which grew out of the U. S. historical background to fit the U. S. social, political and economic circumstances. It cannot be transplanted to any other environment without major adaptation and evolution. Nor can the United States Extension Service, as I have been reminded recently by colleagues who note that no project to date concerned with improving extension services in developing countries has successfully responded to the simple fact that in many developing countries women, not men, do much of the field work in agriculture. After 25 years of U. S. technical assistance in agriculture, the observation is strong testimony to the difficulty of getting outside one's own cultural habits! (To avoid misunderstanding, I should perhaps add that the observation applies to the Ford Foundation as much as to any other United States organization engaged in technical assistance).

In any fresh effort to help build teaching institutions in developing countries, therefore, I hope the accent will be on experimentation and the development of appropriate new systems, not on the transfer of American models no matter how successful they may be in the U. S.

With respect to research by U. S. universities bearing on world hunger and malnutrition, I would offer two main comments.

First, much of the research needed to deal with world hunger and malnutrition can be done in the U. S. This is true especially of more fundamental types of research -- on biological nitrogen fixation, for example, or photosynthesis. Much of this kind of research is of course equally as necessary to increase agricultural production in the U. S. as it is to increase output in developing countries, and financial support for such research can and should come from normal federal and state budgets, not from AID.

Second, other portions of the research needed to deal with world hunger and malnutrition can best be done -- some of it can only be done -- in the developing countries. This is true especially of more applied types of research, on plant breeding, for example, or nutritional problems in different

local settings, or the comparative economic benefits of alternative cropping patterns. Support for such research, and for the building of research capacity in developing countries, is appropriately provided by AID (under Title XII and otherwise). But much of it would also be appropriate for funding by the USDA and other government agencies because of the potential value in the U. S. of knowledge gained from research abroad. Research conducted at the International Wheat and Maize Improvement Center in Mexico, to cite only one example, has already resulted in substantial benefits for wheat and corn farmers in the U. S. Our scientific community -- and our domestic producers and consumers -- can only benefit from participating more vigorously in international research efforts which will inevitably become steadily more effective and more fruitful in the years to come. For this to happen will require more initiative among American university researchers to seek out more international involvements and collaborators than has been customary in the past.

With respect to service activities abroad by U. S. universities, I would think even more change and innovation is needed, compared to past efforts, than in the case of teaching and research. On the one hand, it is evident that a great many important things need to be done to which U. S. universities might contribute, such as designing and building institutions in developing countries for teaching, for research, for extension, for credit, for rural development and many other purposes. Title XII provides a framework for supporting such activities.

On the other hand, everyone concerned needs to recognize that conditions have changed greatly since the first wave of university technical assistance projects twenty years ago. There are in developing countries today thousands of university faculty members and government officials, with good training and considerable experience, who did not exist 20 years ago. With few exceptions they will welcome professional collaboration from people they respect. But they will resent and refuse any suggestion that American professors are ready to come to their countries and tell them how to do their jobs. They are even more aware than we are that technical solutions which have been developed for the U. S. will not work in other countries by simple transfer but, if at all, only after substantial adaptation normally requiring extensive

research and experimentation. Hence, they welcome research collaboration, help with methodology, and other cooperative efforts in which we join them as colleagues seeking to find successful technologies and institutions to fit the conditions in their countries.

In summary, on this issue I believe U. S. universities have a great deal to contribute to the alleviation of world hunger and malnutrition, if they approach the problems in a spirit of research, experimentation, innovation and cooperation with professional colleagues abroad.

IV. How can the Government be most helpful to the effective involvement of U. S. universities in addressing problems of world hunger and malnutrition?

This conference focusses on AID and on Title XII, so it is appropriate to begin there. In my opinion, Title XII permits two extremely important advances over past practice. The first major advance is to allow for longer-term involvements by U. S. universities. The various kinds of activities I have just discussed -- in teaching, research and service -- require for success a sustained effort over a period of years, because they are inherently difficult and time-consuming and because they must be conducted across major barriers of distance, language and culture. Such activities cannot be conducted effectively on two or three-year time tables. The NAS study suggests that the norm for planning and commitment should be a five-year period, regularly reviewed and extended into the future. Only under some such arrangement can one hope to obtain first-quality professional talent and cumulative results.

It should be noted in passing that providing for longer-term commitment periods does not and should not mean any relaxation in quality standards. Quite the contrary: experience has amply demonstrated that the successful conduct of teaching, research and service activities in developing countries is extraordinarily demanding, much harder than conducting the same kinds of activities in the U. S. Under Title XII, therefore, as under any other AID activities, standards of periodic review and evaluation should be high and rigorous.

The second major advance permitted by Title XII as compared with recent practice is to allow for relationships between U. S. universities and countries which are no longer receiving concessional economic aid from the U. S. government. It is highly appropriate that AID's economic assistance on concessional terms should be concentrated on the world's poorest countries. But scientific

collaboration, especially in research and training, can be highly fruitful with "middle-income" developing countries such as Brazil and Mexico, and Title XII fortunately permits such relationships.

In addition to these two major innovations -- permitting longer-term commitments and scientific relationships with countries not receiving economic aid -- Title XII encourages a fresh look at the whole range of AID-university relationships, and I would hope both AID and the universities will take advantage of this opportunity to break out of past rigidities and to think anew. AID, for example, clearly needs a vigorous recruitment and training drive to replenish its professional staff, depleted by retirements and departures, and a series of changes to simplify its procedures and to offer strong incentives for high-quality, long-term university commitments. The universities, in turn, clearly need to understand that Title XII is not a convenient way to obtain more funds for what they were doing anyway, but an opportunity -- if they wish to seize it -- to make major commitments on a sustained basis to international research, teaching and service. Title XII plainly cannot work unless the universities are prepared to invest an important share of their own time and talent in these efforts. The partnership effort between AID and the universities which Title XII requires is therefore a demanding one on both sides, and you will be discussing it in detail during this conference. I hope as you do so you will bear in mind the enormous potential gains to many millions of the world's people which can result from the effective use of Title XII.

In closing, I would like to make two brief comments on matters that are beyond the direct scope of this conference.

The first comment is that other agencies of the U. S. government besides AID must be involved in an effective assault on world hunger and malnutrition. One of the major recommendations of the NAS study, for example, is a major enlargement and reshaping of the support of research by the Department of Agriculture, in order to achieve several objectives: to put greater emphasis on fundamental research; to introduce into the USDA system a much stronger reliance on competitive grants; to place on the USDA a major new responsibility for research and nutrition; and to build in to USDA a strong and continuing interest in international research on food and nutrition. This is only one illustration of many changes in government policies and programs which will be needed if the U. S. is to make a stronger contribution to alleviating world hunger.

The second comment is to ask whether Title XII should be broadened. I have personally encountered situations in developing countries, in the fields of health and family planning, and of education, in which it would appear that the ideas expressed in Title XII would be highly relevant. U. S. universities plainly have capacities which might contribute to the solution of other major problems in the developing countries aside from hunger and malnutrition. Might it be that Title XII, if it works well, should be broadened to education, health and other fields?

But clearly the first step is to use well what is now available. Title XII exists and this conference is concerned with how to make it work as it stands. You have a great deal to discuss and I wish you success in your deliberations.

MOBILIZING RESOURCES OF UNIVERSITIES  
FOR AGRICULTURAL DEVELOPMENT IN DEVELOPING COUNTRIES

E. H. Hartmans\*

1. Introduction

About six weeks ago President Carter, in his first speech to the United Nations, urged the World Organization to take more vigorous action to advance the cause of human rights. He made it quite clear that this issue is not just an internal matter for each country but is of concern to all mankind. He stated: "No UN member nation can claim that mistreatment of its citizens is solely its own business." With these words President Carter firmly established a cornerstone of American foreign policy and therefore of American foreign aid. While the President's statement has been given particular emphasis with regard to free expression of thought and religion, the human rights declaration equally stresses the right of equal opportunity for all citizens: whether born in a poor or rich family in the high mountains or the plains, in the rural areas or in the cities, as a black or a white. As such, this issue of human rights is intimately related to social justice for all citizens within a country, the interrelationships between countries and hence, to the establishment of a New International Economic Order (NIEO).

I would like to treat the subject of my paper against the background of these fundamental moral issues in the hope of advancing perhaps some ideas which may lead to more effective technical assistance programs under Title XII of the Foreign Assistance Bill.

2. The role of Agriculture in Establishing a New International Economic Order (NIEO)

The call for a New International Economic Order was first recognized in May 1974 with the Resolutions of the Sixth Special Session of the UN General Assembly. The concept of NIEO was further promulgated through the Charter of Economic Rights and Duties of States adopted by the UN General Assembly

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This paper reflects the views of the author, but not necessarily those of the Food and Agriculture Organization.

in 1974 and in many international conferences, such as the World Food Conference in Rome, the Second General Conference of UNIDO in Lima, the UN General Assembly's Seventh Special Session on Development and International Economic Cooperation, the fourth session of UNCTAD in Nairobi, the World Employment Conference of ILO, the UN Habitat Conference in Vancouver, the Non-Aligned Summit Conference, Colombo, the Mexico Conference of the 77 and the so far disappointing but still not concluded North/South Conference in Paris on International Economic Cooperation.

These conferences have served to elaborate global approaches and strategies for the NIEO and to highlight the special sectorial responsibilities, such as for agriculture, for industry, etc., if the NIEO is to be achieved.

The overall goal and approach for action is "to correct inequalities and redress existing injustices, make it possible to eliminate the widening gap between the developed and developing countries and ensure steadily accelerating economic and social development and peace for present and future generations."

Implicit in this goal for accelerated economic and social development is not only elimination of the widening gap between the rich and poor countries but also between the rich and poor within countries, and of the gap between the privileged, the educated and politically powerful and the groups characterized by illiteracy, poverty, undernutrition and political weakness. Only if this happens can political stability and progress really be obtained. And only then will there be a sound basis for accelerated progress.

A UN study under the leadership of Prof. W. Leontieff has tried to quantify targets to be obtained by the year 2000.

If the present ratio of 12:1 for the Gross Nation Product of developed countries as compared with developing countries were to be reduced to 7:1 by the year 2000, the economy of the developing countries would have to grow at an annual rate of 6.9%. The developed countries for their part would have to accept a growth rate of 3.1%, nearly one percentage point below their present rate of 4.5%.

The 6.9% overall growth rate for developing countries would imply a growth rate for the agricultural sector of nearly 5%. The magnitude of such a task, especially in the agricultural sector, can best be judged against the fact that the present growth rate in agriculture world-wide is less than 3%; in the developing countries it is less than 2%.

For the countries of Latin America, our neighbors on this continent, the overall rate of growth over the last 19 years was relatively high, namely 6% per year. Naturally this general picture does not illustrate the wide difference between countries in Latin America nor does it show the big influence of some major countries. In fact, high growth rate figures are apt to obscure problems of critical poverty in many rural areas. It is estimated that 140 million, or 40% of the population of the Latin American region, live in the countryside. Of these, about 30% are estimated to be suffering from the effects of malnutrition. Furthermore, agricultural imports in the region have increased at the annual rate of 10% over the last five years, which in turn has contributed to growing balance of payments problems.

The poverty problem in the rural areas and the lack of alternative employment opportunities has led to serious urbanization problems in Latin America, and the growth of poverty strikes slum areas around towns. The total population of 19 cities of the region with over 1 million inhabitants increased from 21 million in 1950 to 52 million in 1970. The population of the same 19 cities is expected to reach 77 million in 1980.

Furthermore, the growth in gross national product has been accompanied by a more than proportionate increase in imports which, together with a drop in exports, has led to growing external debt obligations.

All these factors have led to a negative impact on the income distribution within the countries of this region and to a growing economic vulnerability. The basic reason for this unhappy and even explosive situation is the limited or non-participation in the development process of large masses of the population mostly living in the rural sector.

This not so favourable picture given for Latin America is somewhat hidden, if only measured in terms of economic growth. On other continents,

the situation is yet more disturbing since even gross economic growth rates are low. General statistics do indicate that, on an average, real income per person in the Third World has doubled since 1950, but this progress has done little to improve the lot of the rural poor.

In Brazil, in the sixties, average real income of the richer half of the population grew by 30%, that of the poorer half by under 1%. Living standards in the last 10 years have stagnated or even declined for the poorest 20-40% in all the large developing countries of Asia; notably in India, Pakistan, Bangladesh, Indonesia and the Philippines. Most of the poor of these countries are in the rural areas. Even in a country like Nigeria, with considerable investment potential, agricultural production declined from an index of 103 in 1969 to 98 in 1973.

From all these facts, we must conclude that overall progress in narrowing the gap between developed and developing countries and between the rich and the poor within countries depends fundamentally on the participation in the growth process of the large masses of the rural population, which still represent from 50-80% of the total population in developing countries. Or, in other words, narrowing the gap depends on the ability to obtain and sustain a high rate of growth in food and agriculture involving the rural poor. In this sense, agriculture holds a key position in the establishment of NIEO.

### 3. Characteristics of the rural sector in developing countries

Various answers are proposed by different bodies and different people. One solution especially urged by the Group of 77 and endorsed at the UNCTAD Conference is the sustained, large scale, transfer of real resources to the developing world, especially in the agricultural sector. Coupled with this should be the stabilization of commodity prices at a sufficiently high level for the main export products of the developing countries. Others propose a large increase in food assistance to developing countries to provide better diets for the population. Again, others urge the adoption of radical measures to limit population growth. All these proposals, separately or combined, recognize the realities of a world situation in which interdependence and international cooperation can no longer be ignored by any nation.

the life of the majority of the people and does little to prepare them for rural life. In fact, in its successes, it often alienates the child from the local society. This means that the brighter and more courageous students will leave their community, thus contributing to a lack of local leaders so badly needed in the rural community.

Universities and agricultural faculties, with few exceptions, are copies of foreign Western institutions with a strong academically technical bias. Most university students come still from the richer and urban classes with little concept of, or inclination for, getting involved in the simple farm or village level type of problem. Too little emphasis is laid on applied sociology, on understanding people and the things that motivate people in the small farm setting, nor is emphasis given to the importance this sector holds for the welfare of the country.

Given this educational background coupled with a lack of amenities, low salaries, poor transport and little or no support from the center, it is no wonder that those who do start to work in the villages are quickly disillusioned and finally leave, with yet new biases against these same communities.

Unfortunately, the training systems at the intermediate and lower technical level of education, which should prepare boys and girls from the poor areas to work among their people, are practically non-existent, or leave much to be desired. Policy and decision-makers who do not come from, or understand, the poor areas rarely have recognized the real need for making investments in this kind of education which basically would not be formal, nor conventional, nor of the developed country type.

A prime illustration of the misdirection of education is that little has been done to reach the masses of women in agriculture, even though they do a large part of the agricultural work and take a leading role in family decisions. In spite of the fact that 1/3 to 1/5 of the labor force in Asian and African continents consists of women, extension and educational services remain almost entirely in the hands of men. Little real effort is made to get female trained workers in the rural sector.

Finally, it should be said that the bilateral and multilateral assistance programs for training people of developing countries have not given due attention to tackling the problems of peasant farmers. Many students

trained abroad come from the richer class and from the larger farms. They come rarely from the rural villages. As they follow our normal university programs, geared towards the needs of American agriculture, these foreign students most likely have strengthened their bias against peasant agriculture and after four to six years in the States may even have become strangers to their own environment at home.

Those returning home are soon placed in administrative and managerial positions although they were generally trained in narrow specialized technical areas, especially at the graduate level; hence, they are unprepared for the important positions entrusted to them. No wonder that management ability and managerial skills are most seriously lacking in developing countries, even in countries which have a sufficient or even an abundant supply of university-trained personnel.

The picture presented is discouraging as it has concentrated on peasant agriculture. Much progress has been made, however, in traditional export and large or medium-scale agriculture. Much progress has been made in institution building; research institutes have been established or strengthened; departments of agriculture with their various responsibilities are functioning, mostly staffed by local people; extension services exist, although perhaps sometimes entrusted with functions they should not be asked to undertake.

Further progress is required in the non-peasant sector, but it is my conviction that this will come about almost automatically since for large and medium scale undertakings the farmers or farm managers usually have the necessary initiative and the means and the services to take advantage of new developments, just as leading farmers in the United States have always done.

The key to bridging the gap between rich and poor, the key to a new social order and the key to feeding the ever increasing population is the mobilization in the development process of the masses of small underprivileged poor peasant farmers. Governments of developing countries will have to take new and special measures to move this important component of agricultural production into higher gear. Their institutions of research, education and extension will have to be adjusted to deal with this task.

It is my belief that the universities can make an important contribution to this vital task, not by imposing our own system of research education and extension, but by assisting countries to develop their own institutions fully adjusted to their specific conditions and requirements.

#### 4. Research, Education and Extension in Developing Countries

Let us now briefly examine the present situation in research, education and extension in developing countries.

First of all, I should emphasize that there are many different forms of organization and structure. I cannot possibly enumerate them all. I will have to restrict myself to certain main generalizations.

I should also mention that a system, like the land-grant colleges in the United States with a coordinated and unified approach and leadership for the three consecutive stages of development and transfer of knowledge -- research, education and extension, is almost non-existing in other countries. Most commonly, the university is a wholly or semi-independent entity or it belongs to the Ministry of Education. The agricultural faculty may have little if any contact with the practical farming community or with the extension workers.

Research is generally commodity oriented with semi or wholly independent research institutes for major crops. Research workers may be teaching at the university on a part-time basis, but generally they have little contact with extension workers. Some of these institutes were started by the colonial powers; hence, most of their work was concentrated on export crops. New institutes have been added or old ones have branched off into other activities. Generally, an effort is made to coordinate the work of these various institutes into a National Research Program.

Extension services exist on paper in practically all countries, usually as a part of the services of the Ministry of Agriculture. They are often used as an arm of regulatory and law enforcement bodies of government.

There is definitely a general lack of coherency and specific practical development orientation, especially with regard to programs in the food production sector and in the rural development sector in general. In the field of research, however, the founding of the Consultative Group on International Agricultural Research (CGIAR) in 1971 has been a most dramatic and positive development. Sponsored by the Food and Agriculture

Organization (FAO), the World Bank and the United Nations Development Program, CGIAR is an international consortium that seeks to increase food production in the developing countries through research programs and through the training of research scientists and production specialists in the developing nations. In 1972, the first year of funding, the Group supported the work of five international research centers with financial assistance to an amount of \$15 million. By 1976, the network of centers and programs had increased to 11, and financial support had increased to \$64 million. Programs supported by CGIAR are now dealing with the major crops and livestock of most of the ecological zones of the developing world. By August 1976, some 35 countries, international agencies and foundations could be counted as Consultative Group members. Of these, 18 were donor governments in addition to the original sponsors (FAO, IBRD, UNDP). The centers bring an unprecedented concentration of international talent to bear on crop and livestock development in the humid, semi-arid and arid tropics.

Reaching beyond the host country, the international centers have links with research centers in other developing countries through programs of research assistance and collaboration. They also seek to bring the results of their research directly to farmers through special projects particularly designed for and carried out within individual developing countries.

It is obvious that the fundamental work done by these international centers should not be duplicated by national research institutes. Rather, the national research programs should be and could be linked with the essential applied research work of the centers. To build up an independent research program on the same crops as the international centers would be a wasteful and nonproductive use of resources. Of course, the international centers do not cover all crop and livestock species, and for those not covered, but important in a given country, special national research programs may be needed.

It is a well recognized fact that fundamental technical research knowledge already available is for the time being more than sufficient to utilize the total applied technical research activities in developing countries and to carry these forward to a point where production of most food crops can be doubled and tripled.

In the field of education, many new educational institutions have been established, especially at the higher level, and to a great extent, they are staffed with local scientists. For instance, in Nigeria some 10 universities have been established where there were only two at independence.

At the same time, in many countries, there is an increasing awareness of the importance of lower and middle-level technical training of students who are socially and psychologically closer to the farmers. These trained men and women will also form a necessary basis for a more effective extension service. In several countries, mass media are becoming a major tool for reaching the farmers in the villages, but obviously the extent to which this will affect production and income depends very much on the kind of information supplied and on the way the information is brought to the farmers.

#### 5. Suggested activities for Universities under Title XII

In general it may be said that in most developing countries the infrastructure exists to undertake rural development programs. Governments, however, need to give greater emphasis to the development of peasant agriculture; to devote more resources to the rural sector and to use a different strategy to reach this sector. Only if the masses living in the rural sector become a part of a productive effort and are incorporated in the commercial process can there be harmonious growth in most developing countries. This requires a deliberate policy and real political will to assist the poorest part of the rural sector: by transfer of capital, the development of human resources, the development of new forms of production, the development of markets, the improvement of communications and, in short, by integrated rural development. This requires a change in attitude and particularly an effort to attract trainees from these poor areas to be trained and to work with their own people.

In line with President Carter's strong emphasis on morality, human rights and social justice, the US Foreign Aid Program should establish definite criteria as a pre-condition for its activities. The main general criteria would have to be that its assistance:

- (a) will lead to a more equitable distribution of the increased income;

- (b) will strengthen internal institutional structures so that the principle of equitable distribution of income and equal opportunity for its citizens becomes an integral part of its political and financial machinery; and
- (c) will benefit the poorest groups in the population to the greatest extent possible.

Following these general principles, I would like to suggest the following principal subjects for possible support by the American universities in the field of research, education and extension.

#### Research

As technical research is strongly favored by the work of the international centers and by the availability of high-level technically trained people in most developing countries, the major emphasis of the universities should be on work in the countries in the socio-economic field.

The following studies are suggested:

1. What are the basic causes of poverty in the rural sector or of groups in the rural sector, the basic causes of stagnation and the basic reason for nonacceptance of modern technology among the masses of the rural poor?
2. What are the kinds of education and training programs necessary to promote small farm development in the Third World?
3. What are the needs in terms of numbers and types of people required for rural development and how can the presently available trained people be mobilized and used with much greater effect? For instance, in a country like Egypt, 5,000 students graduate in agriculture every year, yet few well-trained workers are available for work in the villages.
4. How can the marginal and sub-marginal small farms be organized? Or, what outside inputs are required to provide the possibility for accelerated production and increase in income? Special attention should be given to the need for capital investment from outside to improve or enlarge the physical resource base and also to the role of cooperatives including production cooperatives.
5. What are the socio-economic aspects of small farm development in developing countries? What is the role of farmers groups, the community, the village, the wife and the family in small farm development?

In the technical fields, emphasis should go to strengthening the links with the international centers and on the development of crops and livestock farming systems in the developing countries suitable for participation of the masses of small farmers. This work is not done at present by either the centers or the existing national research institutes.

#### Education, Training and Extension

As a matter of general principle, in the education and training fields every effort should be made to attract students who are born and raised in the rural areas and especially on small farms.

1. Such students selected for undergraduate work should not be trained in the USA. There are now in developing countries sufficient institutions to train their own nationals or those of neighboring countries. The role of US assistance should be to strengthen the existing institutions at the undergraduate level and to assist in or strengthen the establishment of graduate programs, especially in rural development work.
2. Foreign students coming to the USA for graduate training should be given a special program with special emphasis on the development of management capabilities and management principles, regardless of their field of specialization. In their specialized field, as many courses as possible should relate to problems in their own country and certainly any thesis work should definitely relate to a subject in their own country. Arrangements should be worked out for universities to provide for this flexibility in programs for foreign graduate students and for collaborative action between institutions and developing countries. I am aware that a beginning has been made in this direction but much more can be done.  
The past procedures of selection of foreign fellows and the practice of prolonged stays of these students in the USA and other developed countries has had a negative effect on their attitudes towards the small farm problem. These same students are now high level administrators and policy makers in the developing world.
3. Strong support should be given to in-service training programs of existing staff at various levels including policy makers, planners

and administrators concerning the importance of the small farmers for increased agricultural production and concerning the approaches and techniques needed to raise their living standards.

In order to undertake this task effectively, it may well be necessary to first develop in this country a cadre of well-trained advisers.

Ideally these persons should be good, practical, agriculturalists with experience in developing countries and with a deep appreciation of rural values capable of getting the best out of people. They should be further trained in such fields as human resources development, integrated rural development and human behaviour sciences. Several universities may well need to join hands to put such a group together.

4. Once policy makers accept the role of small farmers and are willing to take active policy decisions and make resources available to the rural poor, people of different kinds need to be re-trained, for instance: local teachers, local administrators, selected extension workers, farm leaders and farmers themselves. These training programs should be conducted by nationals, although outside assistance may be required.
5. Although many more suggestions could be made in this area, let me only stress the need for a review of primary education at the village or rural level so that it prepares young village boys and girls to take a proper place in their village society and the need for simple lower and medium-level technical training programs for the training of village level extension workers, cooperative leaders, mechanics, etc.

If we go back some 50-60 years in our agriculture and in the agriculture of Western Europe, this same process took place. The big difference however with the developing countries is that the opportunity for employment outside agriculture gradually increased and became as the economy grew. Hence, there was a constant flow of young people and older people into occupations other than agriculture. Consequently, the small, marginal, sub-marginal farms disappeared. Adjustments were constantly made in the farm structure geared toward new technical and economic development, adjustments which were also supported by strong government policies and action.

Such automatic conditions for adjustments or strong government actions do not exist in most developing countries nor are they likely to exist for the next several decades. It is therefore important that government and outside action should get things moving at the farm level among the millions of rural poor.

Certain countries have already taken bold steps to solve this problem, mostly based on some form of cooperative production structures. In a democratic society such actions can only be successful if they are based on farmers' initiatives, although perhaps stimulated and inspired by wise counselling and with the support of trusted government officials.

A good example of such action is in the most backward areas of southern Italy. Here inspired by a truly great home-bred leader, Dr. Cesarine, small farmers at the subsistence or sub-marginal level have grouped together and have made immense improvements in their agricultural production and in their conditions of life. It was not done automatically, nor was it done from outside, though the government did provide capital assistance to establish a sound economic production base. In other words, the idea may be launched by the right type of extension work, but the final decision rests with the farmers.

There is no doubt in my mind that group action of various kinds and degrees, with the most advanced pooling of production resources is a solution which must be pursued in all seriousness. Such pooling of production resources opens up possibilities for the application of technology which the individual farmer in his small unit cannot possibly consider, but as already said it must come from the farmers themselves. This can only be obtained if they are advised by people who speak their language and understand their customs and beliefs.

I would therefore, as my last point, strongly urge the training of local farmers and farm boys. They may have just primary school educations or even may only just read and write, but they can communicate with their village and with the outside.

They should be trained for short periods of time, or on a part-time basis while they are continuing their farm work, applying what they are learning on their own farms. Then they may take their places in a truly, farmer-oriented, practical, extension service.

May I end by saying that these thoughts conveyed to you are, in my opinion, some of the most basic fundamental issues which should guide our aid policy, and especially the role of universities. They are basic to solving the problem of hunger and malnutrition but even more to creating a world with fewer inequalities, greater morality and justice and a lasting peace.

## BIFAD, THE FIRST SIX MONTHS -- A PROGRESS REPORT

Clifton Wharton, Jr.\*

When President Harry S. Truman in 1949 set forth as the fourth point in his inaugural address the national goal of aiding less-developed countries, among the first to respond with enthusiastic support were American universities, natural repositories of technical knowledge, research and training programs immediately perceived as greatly needed in the bold new effort. The first appointed national leader of the Truman Point IV effort was drawn from a land-grant university presidency and among the first projects to help build agricultural training capacity where none existed before.

Universities have remained committed to assisting developing countries with U. S. aid efforts ever since. Even before the Point IV program, American universities contributed graduates in scientific, technical and management fields. Many returned to their home countries in developing areas and moved into positions of broad responsibility. When aid to developing countries began, the first university teams sent abroad went under relatively simple letters of agreement and into rather unstructured institutional settings. They provided advice and worked closely with counterparts to help build new universities. In the years that have followed, the many changes in the foreign setting and in American development assistance policy have called forth a wide range of university efforts in varied settings, and with increased sophistication.

The past quarter century of university development assistance activity under the auspices of the Agency for International Development (AID) its predecessors and other sponsoring organizations, has contributed to development abroad and built a reserve of internationally experienced personnel and institutions at home. University involvement has had its ups and downs, but the active talent in many technical and scientific fields and the experienced institutions committed to aid development abroad are now a part of the ongoing reality of American resources as the nation addresses the continuing need of developing countries.

Congressman Findley and Senator Humphrey in their sponsorship of the 1975 Title XII Amendment to the Foreign Assistance Act acknowledged these university

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\*President, Michigan State University and Chairman of the Board for International Food and Agricultural Development (BIFAD)

assets, specifically as they apply to the great task of lessening the problem of hunger and famine which confronts so much of mankind residing in the less-developed countries of the world (Appendix B). The Title XII Amendment also draws strength from the widely recognized success of U. S. agriculture to which many of these same university institutions have substantially contributed throughout the U. S. The Findley-Humphrey Amendment builds on this congruence of factors -- the existence of a serious, continuing world food problem, on the one hand, and a set of internationally committed and experienced U. S. universities with a widely acknowledged success record in agriculture, on the other.

Broadly defined, the main provisions of Title XII and its central intent, are to promote an expanded role for U. S. agricultural colleges and universities in helping to solve the critical food problems of the developing world. The legislation is based upon the belief that much of U. S. agriculture's success is due to the combined approach of teaching, research and extension in our agricultural colleges and universities.

The Amendment provides for a Board for International Food and Agricultural Development (BIFAD) which is to participate actively in this new effort, providing specific guidance to significant aspects of AID activity under Title XII and participating in broader, related areas of agency food and agriculture programming. The Board met for the first time on October 19-20, 1976, and has met each month since then. In February, 1977, the seventh presidential appointee was sworn in, bringing the membership to its full strength.\* As specified in the law, four members of the Board were drawn from universities. This report provides a summary of issues and progress following the Board's first six months of existence.

#### Board Initial Objectives

At the outset, the Board pursued three basic objectives in its early stages. First, the Board assumed that the objective of Title XII was the development of a sound long-term program of involvement by U. S. universities. Second, the Board sought to achieve the fullest possible measure of participation by the Board and the universities in the ongoing AID policies, programs and procedures, a goal which called for integration rather than separation. Third, the Board sought to achieve a relationship with AID which

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\*BIFAD members listed on page 46

would maximize the strengths and comparative advantages of the universities and AID in achieving the goals of Title XII.

The implication of these three goals was the need for the Board to proceed in a systematic and thorough manner, rather than engage in what might have been a more visible "crash program." Mutual understanding of the respective views of the university community and AID required thorough exploration. Briefings and discussions regarding the policies, programs, procedures and problems of both AID and the universities were also required. Most important, this approach was intentionally designed to lay a strong foundation upon which a long-range, viable and effective program could be built.

#### Initial Issues

The Findley-Humphrey Amendment offers a direct opportunity for involvement of U. S. universities in our nation's approach to a critical world problem; and the responsibility to respond well is proportionately great. At the outset, the Board faced a number of critical issues related, in part, to the complexity of the ongoing programs both in AID and within the university community; and, in part, to the newness of the effort. These were clustered in five categories.

1. What is the authority, role and scope of the Board and of Title XII activity? Is the Board "advisory" or "operational"? In what sense is it "participatory" as specified in the Amendment? The cluster of questions was important from the very beginning, and answers to them relate to such questions as the budgetary and program involvement of the Board and the mode of initiating and funding Title XII programs more broadly (see No. 5 below).
2. How will the BIFAD staff needs be met? Will staff members be responsible to the Board, be specially recruited, be directly hired or on loan from universities? Through what arrangements will the BIFAD staff relate to AID staff members and programs? These questions, while seemingly directly tied to BIFAD operations, carry much broader implications for long-term success of university Title XII participation.

3. What committees should BIFAD move to create in order to assure effective Title XII programming? In addition to the two committees specified in the Act -- one for joint research, the other for country programming -- are others needed? What should be the authority and membership of such committees?
4. Which U. S. universities are eligible to participate in the Title XII program? The 1862 land-grant institutions, the 1890 institutions and the sea-grant institutions are expressly included as eligible. Which others? On the other side of the issue, which countries are eligible to participate? The Act requires BIFAD to resolve these questions of eligibility.
5. How should the food and nutrition program be impacted and lead-time problems be overcome? In what manner and at what level should or could BIFAD become involved in the AID program -- program guidance, program planning and budget preparation? How could BIFAD achieve the earliest impact upon a process wherein there are minimum lead times of two years? Could BIFAD take any meaningful initiatives to influence FY '77 already underway, or FY '78 whose budget had already been determined prior to the Board's establishment? Should BIFAD seek a separately identifiable budget line for Title XII activities, or should it work with existing, redefined budget categories? How should initiatives for Title XII activities be handled by the Board and in what project-program detail?

As background to consideration of these initial issues, the Board was conscious of the requirement placed upon the President to report to Congress in April of each year. The Board was given authority to submit its own views on any or all Title XII activities. This provided both a deadline for action and an opportunity to assert independent leverage.

#### Progress During the First Six Months

Over the first six months of its existence, the Board has been establishing internal operating procedures; reviewing AID basic programming and

strategy documents, examining and defining Title XII provisions in exchanges with AID leadership, and resolving some of the immediate issues confronting this new and complex program. Each meeting agenda has contained a blend of operating issues and more substantive items.

First, the Board established procedures in line with the Act and congruent with both university style and AID practice. For the most part, two-day meetings have been held. They have been open and well attended. AID representatives have participated actively, presenting views and interacting with BIFAD members on issues of process and substance. The Board agreed that it was essential that the top leadership of the Agency be present at each meeting. It also decided that Board's consideration of major policy matters would occur only when the Administrator or the Deputy Administrator was present, which has been most of the time.

At the first meeting of the Board, agreement was reached on the need for an Executive Director to be appointed to work under the jurisdiction of BIFAD and to head a small, expert group drawn from AID and the universities. The BIFAD staff is charged with establishing a Title XII program office, arranging Board and committee meetings, preparing papers requested by the Board and numerous other essential activities. In subsequent meetings, the Executive Director was designated, the nature of staff arrangements and the location of the office were approved.

Turning to more substantive concerns, the Board has dealt with a number of issues:

1. Scope of Title XII and Board Responsibilities

The Board has actively discussed the meaning and intent of Congress concerning portions of the Title XII enactment which set forth the role of the Board. There is agreement that the Board is not simply an advisory committee, although for AID management purposes, BIFAD is so classified. AID leadership and Board members agree that the Board will actively participate in policy, strategy, budget and program development. Precisely what "participation" will mean in practice is yet to be tested. At the other extreme, the Board is not in a position to operate programs independently. Its influence on policy and program will be largely dependent on its close ties

to universities, its relationship to the Administrator and his immediate deputies, and its independent reporting authority to Congress on Title XII programs.

The discussions clarified the difference between the Board's area of concern and the somewhat more limited scope of Title XII itself. The Board is authorized to participate in all aspects of AID's food and agricultural development program. It will render advice and participate in matters ranging from the system of international agricultural research centers to broad issues of budget allocation. The BIFAD will, therefore, be concerned with the full range of Agency policy formulation and program implementation.

While reaching agreement on the breadth of the Board's responsibility, BIFAD and AID have identified a "core" program of those activities which meet the criteria of university participation under Title XII. The core program has been defined to include the four following areas:

- "1. Research which includes: (a) support to International Agricultural Research Centers and similar organizations; (b) food and nutrition components of AID's centrally funded contract research program; (c) a new Collaborative Research Support Program. (Budget estimates include associated capital costs.)
- "2. The balance of the centrally funded technical assistance program, concerned with the adaptation and application of agricultural and nutrition technology. (Budget estimates include associated capital costs.)
- "3. Strengthening developing country institutions in research, teaching, extension and other institutional capabilities essential to agricultural development. (Budget estimates include associated capital costs.)
- "4. Advisory services to developing country governments and private sectors on such food and nutritional development activities as agricultural production and marketing, credit, irrigation and water management, general nutrition projects and technical assistance for rural development, in which developing or strengthening of research, educational or extension capabilities, though often an important by-product, is not

the central purpose. (Budget estimates for this category are limited to technical assistance, training and related activities and do not include capital costs.)"

The total funding for these programs in FY '77 has been estimated to be \$118 million and for FY '78, \$195 million (Table I). The Board approved a document on scope at its January meeting and it is appended (Appendix C).

TABLE I  
ESTIMATED TITLE XII LEVELS FOR FY 1976 THROUGH FY 1978  
AS SUBMITTED BY THE PRESIDENT TO THE CONGRESS

| <u>CATEGORY</u>   | <u>(IN MILLIONS)</u> |           |                |           |                |           |
|---|----------------------|-----------|----------------|-----------|----------------|-----------|
|   | <u>Fy 1976</u>       |           | <u>FY 1977</u> |           | <u>FY 1978</u> |           |
|   | <u>\$</u>            | <u>%</u>  | <u>\$</u>      | <u>%</u>  | <u>\$</u>      | <u>%</u>  |
| Title XII   | 100                  | 17        | 118            | 21        | 195            | 33        |
| Research*   | (30)                 |           | (40)           |           | (43)           |           |
| Adaptation and application<br>of technology*  | (4)                  |           | (10)           |           | (23)           |           |
| Strengthening Developing<br>Country Institutional<br>Research, Teaching and<br>Extension* | (28)                 |           | (18)           |           | (42)           |           |
| Advisory Services to<br>Developing Countries**  | (38)                 |           | (50)           |           | (87)           |           |
| Residual***   | <u>482</u>           | <u>83</u> | <u>422</u>     | <u>79</u> | <u>391</u>     | <u>67</u> |
| Total Food and Nutrition<br>(Section 103 AID Request)                                     | 582                  | 100       | 540            | 100       | 586            | 100       |

\*Includes related capital costs.

\*\*Does not include related capital costs.

\*\*\*Includes all non-Title XII Section 103 activities (e.g., rural road construction, fertilizer production or procurement, etc.). Includes also activities closely related to Title XII such as support to build capacity at U. S. agricultural universities under Section 211 (d), capital costs of advisory services to developing countries and activities of voluntary agencies.

## 2. Eligibility

The Title XII amendment defined directly a large number of institutions as eligible for participation. By statute, all land-grant (1860 and 1890) and sea-grant institutions are included. Beyond these, however, the Board was charged with determining eligibility of additional institutions based on criteria set forth in the act. Those which "have demonstrable capacity in teaching, research and extension activities in the agricultural sciences," and can contribute effectively to Title XII purposes are eligible. To establish the roster of eligible institutions required by law, the Board authorized collection of data through use of a questionnaire. This process is now underway. A paper on implications of eligibility was reviewed and accepted by the Board (Appendix D).

## 3. Committees

At its February meeting, BIFAD completed its work related to the initial establishment of subordinate committees as provided by Title XII. The Board approved two comprehensive committees and forwarded nominees to the Administrator and Chairman of the BIFAD for appointment.

The Joint Research Committee consists of 20 members drawn from universities, AID and the U. S. Department of Agriculture. It also has members chosen from other governmental and private agencies. The Joint Committee on Research will be concerned with all Title XII research activities and assist BIFAD to discharge its responsibilities in this area.

The Joint Committee on Agricultural Development, consisting of 22 members similarly constituted, has broad responsibility related to determining priorities for strengthening agricultural institutions for instruction, extension and research, as well as other incoming activities. It will assist BIFAD in a variety of activities such as "matching up" U. S. universities with Title XII projects, design of programs and projects, and review of programs. A consultant panel to participate in analysis and planning of 19 persons has also been appointed and other names will be added.

## 4. Board Participation in Policy, Planning, Budgeting and Programming

One of the most difficult and complex issues is how the Board will become involved in AID policy-making, planning, budgeting and programming.

The current status of this effort is summarized in the AID Report to Congress of April 1, 1977.

The Board's review of the proposed new agricultural strategy is an excellent example of how the Board will be involved in the policy-making and planning of the Agency. Similarly, the Board's involvement in the program guidance to country missions regarding Title XII is another example.

However, participation in budget-making and in project development by the Board has not been fully resolved, though considerable progress has been made. Every effort is being made to assure appropriate meshing of the concerns of both the Agency and the Board, while accommodating their respective statutory responsibilities. Undoubtedly, some of the difficulty in rapid resolution is due to the uniqueness of the Board's standing. However, we are confident that these issues will be resolved in the very near future.

#### 5. Pilot Projects or Models of Title XII Projects

From the outset, the Board has been concerned at the need to test certain approaches to Title XII programs and projects. Therefore, at the April meeting, the Board adopted a motion requesting the development of pilot projects or models to use in developing and testing procedures. The Joint Committee Chairmen and the BIFAD staff were requested to prepare a paper for the May meeting of the Board outlining the steps to be taken in identifying up to 10 country development projects and 10 collaborative research proposals which would provide opportunities for university participation under Title XII guidelines. Four trial efforts of university participation in development assistance program planning in selected LDC's (one country in each of the four regions) were also requested.

#### 6. Other Developments

- a. Farmer-to-Farmer Program. BIFAD endorsed the concept of the Farmer-to-Farmer program as presented by AID and referred it to one of the joint committees for further study. Essentially, the program would integrate into existing plans for selected university contracts a provision to include some practical farmers, well-known to the specific university and having capability to contribute to the project purpose, who would help to carry out specific activities overseas.

- b. A major aspect of BIFAD effort, and that of individual Board members, has been to communicate Title XII objectives and developments to the university and broader professional community. This has taken form through speeches, workshops and conferences. This conference to review Title XII has been scheduled with Board encouragement at the University of Minnesota.

The Board has conferred with officials in government and held a meeting with Secretary of State Cyrus Vance in March and hopes to have a similar meeting with Secretary of Agriculture Robert Bergland in June. The Board's position has encouraged widest possible communication about the important purposes and activities of Title XII.

#### 7. Administrative Developments

- a. Director and Staff. Although the individual who became the director was identified shortly after the first meeting of the Board, his actual appointment to a full-time position lagged due to civil service procedures and requirements. This process is now complete. However, the staff services available to BIFAD, and thus to the development of Title XII programs, have consequently been delayed. A Deputy Director has been named and the current projection of professional staff will be 14 by FY '78. The proposed staff organization and structure was approved by the Board at its March meeting.
- b. Office Space. BIFAD has requested and been allocated office space in the main State Department building instead of in Virginia with the Technical Assistance Bureau Staff. Since the Title XII program is truly Agency wide, although backstopped by TAB, there is strong logic to locate physically near the core of the Agency.
- c. Operating Budget. The operating budget for FY '77 has been completed and approved, totalling \$500,000. The proposed budget for FY '78 has been submitted, but will be reviewed by the Board at its May meeting.

### Issues Ahead

The Board has considered at some length a number of broad policy issues which ought to be clarified during the next six months. The major ones tend to cluster in two groups: Those which relate to strengthening the capacity of U. S. institutions and those which will tie firmly the work of BIFAD and Title XII programs to the main stream of U. S. development assistance.

The Board has carried a number of Title XII issues almost to the point of resolution. Some of these items which should be resolved in the six months ahead have been of Board concern and discussion from the beginning. Others will be resolved only on the basis of experience and over the longer run.

Discussion has made clear that there is some divergence of views between the AID staff position and that of the Board regarding the way in which Title XII should strengthen U. S. universities' ability to meet the important goals of Title XII, alleviation of hunger and prevention of famine in the world. There is agreement that strengthening is needed and provided under the Act, but the means through which this will occur and its relationship to specific projects is not yet clear. Furthermore, there is no agreement on which U. S. institutions should be the principal targets of the exercise, those presently committed to overseas assistance or those needing help in order to become active participants in the overseas effort. Should Title XII build on strength and experience as an initial priority or should it broaden the base of activity within the U. S. from the very outset? These are difficult questions and they may require active exchange of views and some initial experience before they can be answered. A BIFAD staff paper carefully examining alternatives is to be ready for consideration in June.

As for the strategy of tying Title XII activities closely to the main-stream of AID programming, the actions of the Board to date make it clear that this is the desired goal. Rather than jump into sporadic or ad hoc activities, BIFAD has encouraged AID to present its program and budget process through documents and discussion. Active consideration of budget cycles, programming documents and procedures has not yet revealed the most expeditious manner for BIFAD and Title XII considerations to become centrally engaged.

Final guidelines for U. S. university involvement and participation in Title XII activities are almost completed and should be distributed shortly. At the same time, the operational procedures for the Joint Research Committee and the Joint Committee on Agricultural Development will quickly emerge. The roster of eligible universities will be completed and the roster of Title XII eligible countries should also be completed in the next six months.

On the latter, one remaining issue of scope concerns programs in non-aid countries. Although AID programs can extend to only a limited number of countries and exclude important "graduate" countries and others usually considered among the less developed, the Title XII approach to the world food problem must certainly be more extensive. For example, India and Brazil, two major actors in any serious attack on world food and nutrition problems, must be considered. A clear ruling on Title XII program coverage to include developing countries outside of AID's usual orbit is needed and should be forthcoming soon.

Over the next six months, BIFAD will seek a sharpened role in new project development based upon the pilot projects or models. It will participate in development of improved strategy and in the myriad of processes which are now integral to the assistance effort in food and agriculture. As the staff moves into place and as the subordinate committees begin operating, the precise and most effective entry points into the system will become more sharply defined. Thus, over the next six months there should be considerable progress in this critical area of concern. As the effective points of entry become more apparent, related questions such as the appropriate size of the Title XII new program and project budgeting will come into focus and can be viewed within the broad lines of ongoing American agricultural assistance efforts.

#### SUMMARY

The Findley-Humphrey Title XII Amendment to the Foreign Assistance Act calls for a new and expanded role for U. S. agricultural colleges and universities in attacking the critically important world food problem. It builds on an American university success record in agriculture and a long-term involvement of U. S. higher education in development activities abroad.

During the first six months of the Board for International Food and Agricultural Development, the strategic and leadership unit under the Amendment, there has been significant progress on a number of operational and substantive issues of importance to the immediate implementation of Title XII programs. However, there are a number of important, continuing issues, some of which can be resolved in the near future, others, perhaps, only satisfactorily over a somewhat longer period.

Main lines of progress can be seen in the initial style and interest shown in the Board meetings themselves, in the attention of top leadership of AID and in specific Board decisions. The strong commitment of the Board and its committees to this effort is exemplified by their policy of monthly meetings. The Board has arrived at agreement on the broad scope within which its advice, drawn from participation, will be rendered. The core program concerns of Title XII have also been defined broadly.

There has been notable progress in clarifying issues related to defining eligibility of institutions to participate in Title XII program support arrangements. The subordinate committee structure has been decided and members have been nominated. And of considerable long-term importance, an expansion of communication about the Title XII program is taking form.

As for the unsettled issues, a number should be clarified in the period immediately ahead. The appointment of a full-time director, establishment of more adequate staff and operating budget arrangements, and designation of a Title XII office should facilitate program development.

Some issues will continue to require attention. Some of these relate to the broad issue of how and when elements of Title XII will take specific form and substance. These issues relate to the strengthening of universities so they may be increasingly effective in development programs abroad. The other cluster of issues, equally thorny in a new and complex program, is centered around the problem of meshing effectively the Title XII program within an ongoing budgeting and programming structure of the Agency for International Development. The Board and AID are making progress on the resolution of this set of questions.

In conclusion, we realize that the level of expectations within the university community is high and matched only by the level of university

potential for their contribution to the goals of freedom from hunger and famine prevention. We are confident that the first six months have provided sound groundwork and that the pace of program activity will begin to accelerate significantly in the next few months. The massiveness of the problem which we seek to address is one that will not be solved by hastily crafted, though superficially glamorous, approaches, but which must be based upon a strong foundation for a long-run assault upon this most crucial human problem.

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THE ROLE OF THE JOINT RESEARCH COMMITTEE (JRC)  
IN SERVING THE BOARD  
FOR INTERNATIONAL FOOD AND AGRICULTURAL DEVELOPMENT

F. E. Hutchinson\*

I welcome this opportunity to participate in the conference here in Minnesota to discuss Title XII of the Foreign Assistance Act and its implications for the Agricultural and Sea Grant Universities. As chairman of the joint Research Committee which is presently being appointed, I find it a particularly opportune time to gain from you at this meeting insights for the JRC. We have had only one meeting up to this date and that was an unofficial meeting because the members have not been appointed. We have not yet had an opportunity therefore to formalize our procedures of operation and my remarks must be understood to be my own since they have not been formalized by either the Board or the members of the JRC. I hope, however, that they are representative of the consensus of opinion in those groups at this time.

Role of the JRC

The decision to create the Joint Research Committee was made by the Board a few months ago and its role was defined at that time. I therefore quote for you from the document which was prepared for and accepted by the Board. It is as follows:

"It is the responsibility of the BIFAD to help mobilize and deploy U. S. scientific capacity in order to make maximum contributions to the eventual solution of the world food, nutrition and agricultural development problems. The Board's responsibilities and duties cover a broad spectrum of agricultural research activities authorized, funded and implemented by AID. This spectrum includes support of the International Agricultural Research Centers, centrally funded research contracts and grants, and country-specific and/or region-specific research funded through regular and special budgets of individual AID Missions and Regional Bureaus. Additionally, the BIFAD has participatory responsibilities for developing and implementing collaborative research support programs newly authorized by the Title XII Amendment and to strengthen U. S. universities to perform this function.

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\*Vice President for Research and Public Service, University of Maine

"The JRC will be concerned with all Title XII research activities directed toward the discovery of new knowledge and development of technology useful to the developing countries. The Joint Committee on Agricultural Development (JCAD) will be concerned with the expansion of institutional capacity in the LDC's to adapt such knowledge and technology to local conditions and to assure its delivery to producers, processors, distributors and consumers. Arrangements will be made to provide essential interaction between the JRC and the JCAD at this interface.

"The BIFAD must be in a position to consider the total LDC-oriented agricultural research commitment of the U.S. if it is to participate effectively in the management of the significant aspect of the U. S. bilateral assistance program. The Joint Research Committee (JRC) will serve the BIFAD in all ways essential to the discharge of this responsibility."

As you can see from the above quotation, the Board has chosen to assign responsibility to the JRC for all appropriate research including centrally funded contracts and grants, in addition to the responsibility for developing and implementing collaborative research support programs newly authorized by the Title XII amendment.

#### Collaborative Research Support Programs

Section 297 (A) of the Title XII amendment provides authority for a totally new type of research program. This program is identified in the legislation as follows: ..... "To provide program support for long-term collaborative University research on food production, distribution, storage, marketing, and consumption." During the process of discussion which occurred concerning the development of Title XII legislation, a group of agricultural university representatives worked for several months in collaboration with representatives from AID to give form and substance to the new Collaborative Research Support Program concept. This concept has been accepted tentatively by AID in the form which it emerged from that committee report. The JRC which is now being appointed is in the process of reconsidering the definition which

was given to this new concept, but it appears that the committee feels the definition is adequate and that it is the proper manner in which to proceed. I therefore present to you at this time, the material relative to that specific area of the research program.

The term Collaborative Research Program denotes an arrangement which facilitates collaboration among universities, USDA, International Agricultural Research Centers and developing country university and other research institutions on a problem-oriented basis in a common research and development program to solve a priority food and nutrition problem. This may require fundamental research projects in some instances. For example: a collaborative research program on sorghum might be established by the JRC with the approval of the Board as a high priority program in addressing the world food problem. If such a program were identified, it would then become necessary for the above listed agencies to become involved in some type of an arrangement by which the total program could be managed under this new entity.

The Collaborative Research Support Program on a single problem common to the U. S. and several of the developing nations might involve a single U. S. institution as the U. S. leader, an international center and several developing nation agricultural universities and/or research centers. More commonly, two or more U. S. universities with exceptional competence and interest in the problem would work as a team with the collaborating foreign institutions either under a special consortium or under prime grantee or subcontractor arrangement. Under any organizational model, certain specialized competencies required for effective solution of a given problem might not be available in the principle participating institutions and would need to be drawn from whichever source, U. S. or foreign, most capable of providing them.

Title XII financial support for the program would flow from AID in the form of long-term grants through the special consortium or prime grantee to the U. S. universities and other entities formally involved in the problem. All such funds could be used to support research conducted as part of the approved research program.

For each Collaborative Research Program an administrative "management entity" with required legal status will be required for their capability to contribute to solution of the identified priority research problem. Division of effort will be worked out in large part by the collaborating researchers

themselves. It would not necessarily follow a standard pattern. In some cases, U. S. scientists might do the major portion of the more basic research because of access to costly laboratory facilities requiring specific expertise; in other instances, because of special aptitudes or interest, this might be a primary contribution of developing country researchers. Interest, capability and the above design requirement of an effective research program would be the ultimate consideration.

AID would hold the management entity responsible for performance of the research program. The management entity would hold the collaborating institutions responsible for performance for their respective projects. Similarly, AID would hold the management entity accountable for the funds and for their appropriate use in the projects. This entity would in turn hold the participating institutions accountable for the funds and for their use in the projects according to budgetary plans.

The first step in this process would be for the JRC to organize a meeting, or a series of meetings if necessary, for a larger group than would ultimately be involved in the collaborative research program. This could include representatives from all eligible universities having an interest and capability in the subject, and representatives from developing countries, international agricultural research centers, AID Missions and other research agencies. Out of this meeting would come a delineation of the problem and the identification of the institutions which would become actively engaged through a supporting project.

The institutions ultimately selected to conduct a particular collaborative research program through their management entity would prepare a program proposal as a basis for a grant. Their proposal would be submitted to the JRC for consideration and approval and for forwarding to the Board for final approval before being submitted to AID.

Essential features of such a grant proposal would be as follows:

- (1) a master plan for the entire collaborative research support program grant,
- (2) project statements from each participating entity, including a description of collaborative relationships with the developing country and other institutions,

- (3) a plan to show how the collaborative research support program will be coordinated, including the management of the funds provided by the grant and
- (4) program and fiscal accountability.

#### Key Issues In Getting Underway

It has been agreed by the members of the committee and others, that one of the first responsibilities to be addressed by the JRC is to develop a prioritized list of the programs which need to be given attention in linking the U. S. institutions to the world food problem. The committee has accepted this responsibility and intends to give this attention as soon as possible. At its original meeting, the committee heard reports from various members of divisions within the Agency for International Development concerned with world food programs. This information will serve as a basis for developing such a prioritized list. We are also cognizant of the several reports which have been prepared by committees of the National Academy of Sciences and others on this same issue. All this information is being reviewed by the committee at the present time and will be used as it proceeds with this planning process.

All eligible universities desiring to participate in the programs under Title XII should be prepared to make long-term commitments since the agricultural development problems to which this title is directed are very long-term in nature. Also, it is essential that all interested eligible universities carefully assess their fundamental interest and capacities to participate in this title. Given the breadth of Title XII, there should be no limit on the opportunity for universities to participate.

The JRC feels strongly that it should place before the total university community a process for participation before any grant or contracts are approved and implemented. We recognize that interest in the community is strong at this point and that many universities are ready to participate if the process could be defined. However, we think it would be unwise for us to move in this direction too fast without having first informed the total community on this matter. As soon as guidelines for participation have been properly prepared and approved by the Board, we would expect that meetings would be held in appropriate regions of the country to discuss them with all interested university representatives.

I would like to make one final comment relative to the issue which frequently gets raised in these meetings concerning the potential for indirect costs to be paid on the collaborative research programs, and also the requirements for matching funds. Although neither of these issues is clearly defined at this time, it is my impression that representatives from AID do not object to the notion that indirect costs would be paid on these grants. A matching requirement has been suggested in the guidelines for the implementation of the collaborative research programs, but no clear delineation as to the amount of the match has been agreed upon. It is my impression that it is not intended the matching requirement be on a one to one basis; that in fact it might well be substantially less. The true issue is to ascertain that the university or universities in question are truly committed to the effort and that they are willing to show some of their funding on that program as being used appropriately to match the new international dimension they are proposing.

I have appreciated this opportunity to participate in the meeting and I am now hopeful that we will hear comments from you as to your reaction to these preliminary thoughts.

## THE UNIVERSITIES AND TITLE XII

Governor John J. Gilligan\*

I appreciate the opportunity to discuss with you briefly a new and exciting effort to achieve the goal of Famine Prevention and Freedom from Hunger. I suppose there is some sort of irony in the fact that we have all just had an excellent lunch and I am now asking you to turn your attention to the problem of famine. But that has been the nature of America's experience throughout the years. We have been blessed, and this state in particular has been blessed, with a great abundance of food. With God's help we will continue to reap great harvests, and we shall feed our own people well. But, we will continue to think of less fortunate people throughout the world.

In many countries, as we know, hunger is a daily reality. In fact, about half a billion of the world's population are malnourished or facing starvation. Not so long ago, representatives of 134 nations, including the United States, meeting at the World Food Conference in Rome, adopted a solemn declaration that every man, woman and child on the face of the earth has a right to food, a right to an adequate diet. While all nations have given vocal support to that principle, the world, unfortunately, has fallen far short in taking the steps necessary to put it into practice. It seems that the only time we give food problems adequate consideration is when a food crisis is upon us, and we reach for emergency aid.

What we have all too often failed to grasp is that dramatic examples of famine, such as Bangladesh and the Sahel, reflect an underlying and continually worsening global situation of malnutrition, starvation and hunger that is the symptom and result of "underdevelopment." This is a permanent misery -- not an occasional disaster -- and it will require new efforts toward a permanent solution.

In this work, the United States -- because of our predominant position in agricultural technology and productivity -- has a special responsibility. We have a special responsibility in ensuring that our food surpluses are used to the greatest extent possible to feed the neediest abroad. Moreover, we have a special responsibility to help enlist the support of other countries in the

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\*Administrator, Agency for International Development, Washington, D.C.

design of a global food strategy. And, in particular, we have a responsibility to promote agricultural development in countries where food shortages are severest, so that these countries can look forward to self-sustaining national growth.

We recognize that the United States will not be able to feed the world. The World Food Conference estimated that by 1985 the developing countries, based on present trends, would be confronted with a grain deficit of over 85 million tons. We have only to compare this projected deficit with the Peace program -- which constitutes more than half the world's food assistance -- to recognize the limitations on any foreign assistance effort to feed the world.

Any long-term solution to the food problem lies in the expansion of agricultural production in the developing countries themselves -- especially in the very areas where food shortages are severest. As we know, increases in food production in developing areas can often be achieved at relatively low cost. Most of the world's under-utilized crop land, both in acreage and in yield, is located in the developing countries; and through increased use of so-called agricultural "inputs" -- seeds, fertilizer, energy, pesticides training and the like -- substantial progress can be achieved in a relatively short time.

Our efforts in foreign agricultural development must be directed at the small farmer, the backbone of developing societies. We must design our assistance programs to bring this small farmer the kind of help he needs to expand his production. He would have little use for high technology, resource depleting, agricultural practices commonly associated with modern American farming. Any assistance to the Third World farmer must, of course, be "appropriate" to his environment and his needs. At the same time, we must emphasize the need for recipient governments themselves to establish incentives for the small farmer -- in pricing, taxes, exchange rates, credit and land tenure. These incentives are essential to sound agricultural development.

Senator Humphrey and Congressman Findley have led the way, through Title XII, in seeking to apply the great resources of our universities to agricultural development abroad. As we know, it has been a combination of our

university research, extension services and energies of our farmers that has helped make the miracle of American agriculture. And now under the Title XII program, we shall avail ourselves of American university skills in all aspects of our foreign agricultural effort.

We look forward to university involvement in policy formulation, program design, implementation and evaluation. In particular, we hope to get our universities more directly involved in the field operations of our program. That is where the job has to be done -- in close cooperation with officials of recipient countries, and the scientists and farmers of these countries. Now underway is the effort to determine specific university capabilities, to identify programs in which university skills and experience can be effectively applied.

Let me cite a few examples of opportunities for university participation in specific A.I.D. projects:

- A project in Peru calls for the design and management of increased crop and livestock production for some 15,000 farm families now living below subsistence conditions. We would welcome technical advice and assistance on this project from American universities.
- In the Philippines, we are helping to establish four regional agricultural research centers. Experts from American universities are invited to contribute to this effort.
- In Indonesia, we are engaged in solving problems of low soil fertility, drought and disease on the island of Sumatra. We would welcome university participation in the expansion of research stations addressing these problems.
- In Sri Lanka, we are developing a Post-Graduate Institute of Agriculture. This project is in its first stages, giving ample opportunity for early university involvement in its design and implementation.
- In Senegal, as part of a general overhaul of that nation's agricultural education and research program, we need expertise in arid land agriculture.

I could go on -- and, in fact, these examples are from a long list of opportunities that we shall be submitting to the Board for International Food and Agricultural Development.

I know that the universities you represent have an invaluable expertise to contribute to our programs, and we look forward to a good working relationship. Let me say it is heartening to see the range of universities here today, representing all segments of our diverse society. All have a special contribution to make to our development efforts abroad.

You may be interested in knowing that I am leaving for Africa this afternoon, and that I will be addressing our United States Ambassadors and A.I.D. Mission Directors there. I intend to emphasize the cooperation I expect from them in implementing the Title XII program.

We are still at a relatively early stage in this effort, but I can assure you that all of us in Washington, with the help of the universities in this country and our Missions abroad, are determined to get it moving.

WAYS IN WHICH U.S. UNIVERSITIES NEED TO BE STRENGTHENED  
TO EFFECTIVELY RESPOND TO TITLE XII

Daniel G. Aldrich Jr.\*

As one who has been involved from the beginning in the discussions that culminated in the formation and passage of the Findley-Humphrey Amendment to the International Development and Food Assistance Act of 1975, I am delighted to be a participant in a conference devoted to the U. S. University and Title XII. After more than a quarter of a century of involvement with nations around the world, a mechanism appears now to be available that will permit our agricultural universities to play a more active role in focusing their considerable expertise in food production on the problems of developing nations.

Through trial and error, the state and land-grant universities during the past 25 years have modified and improved their teaching-research-extension methods in order that they might more effectively respond to needs of developing countries. In the 1950's, our institutional involvement consisted primarily of attempts to transfer U. S. technology. It soon became obvious that institutional deficiencies were too great to support such an effort and a shift to institutional development was made. I suspect that a great many more useful things were done during this period than is generally recognized. At least we began to see the need for developing an in-country capability.

During the 1960's, emphasis was placed on building universities in the land-grant mold. Although the idea of transplanting our system intact may have been faulty, it did not take long for university staff to recognize that the concept of our integrated approach to agricultural development, rather than the land-grant college system per se, was the only workable solution. Thus, the universities settled down to the task of teaching, training, establishing new departments, revising curricula and, in general, building the internal capability to educate agricultural scientists. In more advanced situations, graduate programs were established, and research and public service capabilities were developed, often in different agencies. As we learn more about institution building, programs are modified to make use of experience gained. There is no question that major and long lasting contributions to international agriculture were made by the land-grant colleges during this period.

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In the early 1970's, there was a new theme and national policy shifted away from the type of program we were carrying out in the 1960's. We were told that the new role of the universities would be in supporting research and development projects and in participating in research network systems. Regardless of the pros and cons of research and development projects and research network systems, they still did not provide the mechanisms which the land-grant colleges needed to utilize most effectively their resources in agricultural science and education development.

Without going into a detailed discussion of Title XII, I would like to stress the factors which I believe permit the universities to have a far reaching effect on world food problems, providing they respond positively and forcefully. Through this Title:

- (1) Congress formally recognizes the effectiveness of land-grant and other U. S. universities in promoting agricultural progress in this country and the importance of using our universities in the U. S. government's international efforts to apply more effective agricultural sciences to the goal of increasing world food production.
- (2) Congress has essentially given the universities a mandate to become involved in international development. Though this act may be far from the Hatch Act which has been so important to us, it does give us a more direct path to Congress for funding in this area.
- (3) A mechanism is provided for universities to make an input in setting policy in planning, development and implementation of international activities. This establishes a new cooperative and co-equal relationship with AID which will involve universities in the development of programs at a much earlier stage than has been possible to date. This is especially important in developing programs which will make more effective use of university resources.
- (4) The capabilities of U. S. universities are to be strengthened, enabling them to implement more effectively activities authorized in the Bill, and longer-term funding (or at least a basic commitment to funding) of these activities is projected. These factors are extremely important to the universities, allowing us to develop

long-range plans from the department level up and to cover justifiable costs for campus support. Essentially this would allow us to "institutionalize: more formally international activities in our universities and other national associations.

- (5) The importance of international activities to U. S. agriculture is recognized. This removes the sharp distinction between domestic and foreign programs as has been the case in previous foreign aid programs which interpreted "international" as meaning "foreign."
- (6) We are provided a potential source of funding to enable us to work more effectively in institutional networks which include other U. S. universities along with international research centers and with foreign universities. Previously it has been relatively easy for research centers and foreign agencies to obtain support for networking activities while U. S. universities received little support to maintain these important linkages.

The major problem before us may well be in organizing ourselves to meet the challenges offered by the new legislation. We must find ways to present a sufficiently unified approach to AID, other international agencies and Congress to develop a more meaningful participation of U. S. universities in world food problems. We must develop effective long-range cooperative relationships with these agencies as we have done with the USDA. The new legislation "opened the door," but we must react positively and rapidly to keep it open.

In recent months, I have talked with many colleagues in the universities of the association which I represent about their most pressing needs as they prepare to respond to the opportunities afforded by Title XII. Their comments, together with responses made by 50 institutions, to an issues survey conducted by the organizers of this conference provide the information base upon which my remarks on ways in which U. S. universities need to be strengthened to respond to Title XII are founded.

Most institutions are concerned about the length of the funding period. Few were satisfied with the short-term AID contracts of earlier programs. Two years generally do not provide enough time to conduct a meaningful program, yet it is long enough to make a staff member feel he has lost touch with

advances in his own discipline. Several respondents reported that work abroad actually hurt their careers in terms of promotions and in carrying on their domestic research even though the experience abroad was for them personally the highlight of their careers.

To assemble experienced overseas-oriented faculty, institutions must gamble on funding remaining sufficiently long-term to warrant overstaffing at home. Many schools simply cannot afford such an expensive gamble. Furthermore, fruitful programs frequently require longer-term projects than even the most experienced faculty can carry out alone. Team assignments are suggested as a means of carrying on vital work beyond tenure for any one person. Assuming that overseas projects can be funded on a longer-term basis, the university can rotate two or three teams of faculty between their home institutions and the overseas project. The project then could have the necessary continuity of overseas career specialists who in turn could maintain contact with advances in their disciplines by periodic home rotation.

Some suggest they would have experts visit the overseas projects on very short consulting trips, not to deal with the host's country or the host's faculty but to review the work of the visiting faculty there and to keep them updated. I think we may safely conclude that the answer lies in a combination of approaches. There is reason for both long-term and short-term overseas assignments provided there are the crucial commitments for long-term funding of projects. Above all, an academic career in overseas agricultural work must be integrated into the full stream of university life into its organization, status system, dialogue and perquisites.

In addition to longer-term funding, two other dimensions of the food crisis are important for consideration by our institutions. These are that the magnitude of population to be fed might be altered, and that the kinds of items people consider acceptable as food might be changed. Each of these approaches is important to our basic challenge. With the horrendous scale of the population explosion before us, it would appear that all three should be pursued fully, quickly and simultaneously.

Although many underdeveloped countries have taken impressive steps in agricultural production, their population growth has accelerated even faster,

and, for all their hard running, they are further behind than ever. Herein lies the most distressing findings of my discussions with colleagues in the institutions of this country. Little research is being funded on such critical matters as how to deal with the cultural, ideological, sociological and political complexities in changing family planning, market mechanisms, acceptance of innovations and eating habits, and the little research of this variety which has been funded has suffered from very inadequate interdisciplinary consideration at the universities and colleges.

Some report an impression that our government has shown a reluctance to delve into the highly sensitive areas of social and cultural values, norms and customs. Others have observed a lack of interdisciplinary communications within their universities, communications which could foster the programming of research of broader scope. They also note that the academic world at large has made less than adequate use of the interdisciplinary stimulation and knowledge that is derived from overseas experiences of the faculty.

Crash programs to improve agricultural productivity may provide good propaganda, but our own experience with the great dustbowl of a few decades back should have taught us to be wary of short-sighted gains. Until we have more thorough studies of the ecosystems with which we would tamper, we can never be sure that today's quick gain may not be tomorrow's embarrassing retreat. The introduction of fertilizer in rice production, for instance, produced negative results in Southeast Asia until new varieties of rice were found which would respond favorably to the added nutrients. But studies and experiments of this variety and magnitude take time. Even more intricate is the study of the social, political and economic systems in which our agricultural productive efforts must take place. Yet without understanding those systems, we have little assurance that our technological discoveries can be put to widespread and beneficial use.

Consideration of lengthening contracts for overseas research and educational programs also will require added sophistication in our planning system. Since the effectuation of any planning program is a political process of sorts, we have ventured into the very briar patch which many of our technological specialists wish to avoid. Indeed, the comment appeared in more than one of

the responses to my inquiry that politics was involved too much either in the host country or in the central control by the contracting federal agency.

Whether we proceed systematically in what may be called a planned approach or not, it seems apparent there is much opportunity for innovation within our own institutions of higher learning if we intend to render the most effective assistance to others. Collectively, for example, the academic community has not sold its political representatives and tax paying public on the value of work overseas to our educational programs at home. Moreover, it appears that many institutions of higher learning have failed to make good use of professors with overseas experience to enrich the overall university fare for our own students.

In this time of abundant food production in America, it is easy to forget that it took nearly a half century after the Morrill and Hatch Acts for America's phenomenal explosion in agricultural productivity to ignite. It has taken many years for production breakthroughs to occur elsewhere too. The crucial difference now is in the urgency. We cannot wait half a century or even decades for our institutions to tool themselves piecemeal to meet the challenge. Whether we agricultural scientists and academicians like it or not, we must recognize that we are dealing with matters which go far beyond finding a new fertilizer or developing a new plant variety. Food preferences, family size, cultural positions and the economics of distribution are highly political in today's world because they lay open men's emotions, and men's emotions affect their political commitments. The manner in which we go about dealing with a man's food, his family, his cultural and economic systems can generate reactions quite different from those initially intended.

An extremely interesting example of a successful foreign agricultural program which has made cognizant political decisions is the Rockefeller Foundation's agricultural project in Mexico. A decision was made there on the question of where to apply limited resources for extension work. Should extension concentrate on the smaller farmer who is often difficult to reach, poorly educated and cautious about innovating with his meager capital resources, or should extension efforts concentrate on the larger farmer who is usually better educated, readily accessible and who possesses the capital for innovations?

In the interest of hastening the economic takeoff, the larger farmers were chosen even though that decision had serious political implications. It meant that the rich grew richer and the poor farmer was placed at even greater disadvantage in the market. In other countries, which might not be so remote in time from an era of political revolution, this sort of decision is fraught with political dynamite, and it cannot be ignored on the grounds that we are simply technological experts focusing on purely technological problems.

The Rockefeller Project in Mexico was successful because it considered both the participants as well as the system of operation in developing its strategy of involvement. Great care was taken in choosing the American participants. They had to possess both scientific competence and missionary dedication. Apparently this care in selection paid off as the majority of the Americans were still on the project 20 years later. In terms of operation, priority was laid upon research. It was easy to say that new crop varieties, fertilizer and pest control were needed, but which varieties, what kinds of fertilizer and what pest control. Only experimentation in the target area would reveal the answers, and that experimentation required long-term commitments in both funds and personnel.

In view of the careful documentation of the work carried on by the Rockefeller Mexican Project, proposals by knowledgeable leaders in and out of government and the comments of my colleagues who have responded to my inquiries, the suggestions I make about university participation are neither new nor particularly radical. They are more in the nature of emphases and the recognition of urgency. Our planning must at once be more thorough and more comprehensive both within our universities and colleges and in preparing for AID support, and we must contemplate much longer terms than heretofore have been typical for carrying out multifaceted programs overseas.

The magnitude and kind of planning we face depart dramatically from our traditional ivory tower pace. The crisis is too great to allow academic institutions the luxury of muddling through. We must work energetically and resourcefully to improve our planning process. It is traditional among academicians that they act only when they have first ascertained all the facts. There is much to be said for that tradition, but a startling conclusion emerged from

some of the comments made to me by colleagues. Our universities may be doing less than we should expect from them in the way of gathering the facts toward a thorough planning of our research and instructional capabilities vis-a-vis meeting the needs of the world's developing nations.

We academicians cannot excuse our shortcomings by pointing a finger at the federal government and claiming we need more freedom and longer-term commitments of funds. As true as that may be, the federal administrators of the funds in turn need only reply that contracts may well grow longer-term when universities can demonstrate a viable planning process and an overseas record equal to the inherent political risks. For this chicken and egg situation, we need a cooperative effort by government and university to enhance the effectiveness of the university's participation overseas.

Since I speak as an academician and not as a representative of government, I have laid my stress upon the responsibilities of academic institutions for evolving more effective organization planning and program evaluation systems. Only by taking these steps can the universities and colleges begin to perform as they should in an overseas agricultural activity.

On the other hand, those who control the purse strings for overseas agricultural programs should become more aware of the questionable returns on investments in short-term projects. The Rockefeller Mexican program succeeded because the experts were there long enough to develop a trust and a rapport with the local people. Their advice was not only followed, it came to be sought. This is the kind of relationship which characterizes the university-agricultural industry involvement in America which has produced the miracle of abundance for our land. It is the kind of relationship which also must come to characterize our efforts in other parts of the world if we are to meet the great challenge provided by Title XII.

WAYS IN WHICH U. S. UNIVERSITIES NEED TO BE  
STRENGTHENED TO EFFECTIVELY RESPOND TO  
THE TITLE XII MANDATE

Walter Washington\*

Speaking at Southern University in Baton Rouge, Louisiana, Dr. Curtis Farrar stated that Title XII can be regarded as a charter that provides for continuous long-term involvement of the U. S. land-grant colleges in the solution of the world's food problems. If Dr. Farrar's utterance is the mission statement for Title XII, then this is the most profound and far-reaching statement made by any government in recent times. Very few people can evaluate the profound hope that this statement brings to the poor and dispossessed of the world.

In recent years, the population growth that has occurred took place in the developing countries. These countries have a tradition of poverty and malnutrition. Poverty is not only related to food but to governmental policies and to national leadership, as well as to the will of the people. On an individual basis, it attacks the entire human being -- his attitude, his perception of reality, his self-concept, his sense of the future and his hope for life itself. Therefore, the mission of Title XII must address itself to the total individual.

The 1890 land-grant colleges and Tuskegee Institute have a tradition of delivering services to the poor. These institutions have special expertise in improvising, in making ends meet and in doing more with less while not losing hope in the process. Therefore, if the mission of Title XII is to deliver service to the poor of the world, the 1890 land-grant institutions offer a reservoir of strength in this area. However, before these institutions can function on the international level they must be strengthened in order to respond to the Title XII mandate.

I recommend the following areas in which the 1890 institutions must be strengthened so that they can effectively participate in the feeding of the poor of the world:

1. Cooperative joint efforts should be emphasized. A focal point for this might be the establishment of a special task force or even a new joint committee on institutional development. Its

\*President, Alcorn State University

mandate would be to stimulate cooperative ventures between 1862 and 1890 universities and to develop long-term linkages between universities in the United States and the developing countries. Consistent with this goal, AID/BIFAD should give preference in the allocation of funds to 1862/1890 collaborative efforts.

2. The frequency of exchanging students and faculty should be increased. The 1890 faculty and AID personnel should be encouraged to exchange places under the IPA mechanism. Transfer of credits between 1890 and 1862 universities should be standardized to facilitate arrangements whereby foreign students who begin study at one university can finish at another.
3. Specialization or problem-oriented contracts should be encouraged. The types of arrangements that AID now has with Mississippi state (seed multiplication) and Auburn (marine studies) should be extended to 1890 universities or to consorcia of 1862/1890 universities.
4. Additional faculty from the 1890 universities should be appointed to the staff of BIFAD and to the joint committees.
5. BIFAD should maintain a bio-data bank and resource profiles on all eligible universities. The latter should include preferences and interests in developing programs related to Title XII, as well as to existing capabilities.
6. Funded release time for faculty members at the 1890 institutions should be made available in order for them to serve on joint 1862/1890 efforts.
7. Funds should be made available to purchase needed facilities at the 1890 institutions as such facilities relate to Title XII mandate.
8. 1890 institutions should be granted additional personnel in the area of research and supported areas so that they can more adequately participate in Title XII ventures.

The 1890 institutions have a problem of quantity of strength, rather than quality of strength; that is, the 1890 institutions do not have enough qualified staff to make an adequate response to international participation. These

institutions have never been considered as full partners in the funding pattern of the land-grant college communities and because of this they have not had adequate strength to play an equal role in the whole agricultural community. If Title XII is to achieve its goal of feeding the poor of the world, then the 1890 institutions are worthy colleges to strengthen so they, like the 1862 institutions, can participate adequately in the Title XII concept.

Our commitments have been to the poor. Title XII offers the 1890 institutions the opportunity to extend their experiences of working with the poor from a domestic level to the international sector.

WAYS IN WHICH U.S. UNIVERSITIES NEED TO BE STRENGTHENED  
TO EFFECTIVELY RESPOND TO THE TITLE XII MANDATE

James Dollahan\*

First, I would like to take this opportunity to thank Dean Freeh for the invitation to address this distinguished group and to the University of Minnesota for hosting this conference on the implementation of Title XII. As Chairman of the American Association of University Agricultural Administrators (AAUAA), I represent about 50, four-year state supported institutions which offer baccalaureate degrees in the agricultural sciences and/or renewable natural resources. In the fall of the 1976-77 academic year, this group of universities had 29,365 students enrolled in undergraduate agricultural and natural resource programs and 1,397 students pursuing graduate degrees. A survey of available statistics indicates that collectively 4,599 bachelor's degrees and 479 graduate degrees were awarded during the 1975-76 academic year.

A total of approximately 1000 faculty members are employed by this group of universities during the current academic year, of which 96 percent hold advanced degrees. This group of dedicated faculty members are vitally concerned with the future of the agricultural industry and the importance of insuring an adequate supply of food and fiber for this nation and the world.

AAUAA universities have been developed from state resources for the purpose of providing education and public service in the field of agriculture. The major thrust or objective of these universities has been undergraduate education. However, during the past 10 to 15 years, the scope of the agricultural programs in many of these institutions has expanded to a point where many have developed graduate programs and have ongoing research efforts relating to food and agriculture. In some cases, the programs may be quite small; in other institutions, the efforts are extensive and may well rival the program size of some of the state agricultural experiment station-affiliated universities.

As a group, AAUAA universities are pleased that a provision has been included in the "Title XII Mandate" whereby the opportunity has been provided for them to participate in this endeavor. We are concerned, however, that

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this provision, even though it is a part of the mandate, may be looked upon as an appeasement to those outside of the land-grant system, and may be ignored when proposals are reviewed and contracts awarded.

Considering past history and making the assumption that history repeats itself, few, if any, contracts will be developed with universities other than those within the land-grant system. Through the years, a number of AAUAA universities have attempted to secure grants and contracts from USDA and other federal agencies. It is our opinion that USDA, including the Agricultural Research Service and the cooperative State Research Service, in conjunction with the land-grant system and some of its individual members, have systematically and deliberately excluded the AAUAA universities from involvement in agricultural research and extension. We strongly urge USAID, BIFAD and the joint committees not to ignore this potentially important pool of talent available to assist with the implementation of Title XII.

The majority of the AAUAA universities have a common set of problems from the standpoint of participating in international programs. First, as is the case with most institutions, whether AAUAA or land grant, a lack of flexibility exists. Faculty positions in AAUAA universities are allocated on the basis of student number and/or student credit hours produced. If released time is to be provided for a faculty member to participate in an activity other than teaching, funding is required to employ a replacement. With this fact in mind, a commitment from USAID to secure replacement faculty will be required. Substantial periods of time are required for alterations in ongoing programs on most campuses; therefore, it is recommended that contracts be developed on a long-range basis to enable the various colleges and universities to field programs with a minimum duration of five years. In addition, provisions should be included whereby an option to extend meaningful projects for longer periods would be available. Arrangements of this type will be necessary to provide those universities selected to participate with the needed flexibility to carry out the mandate.

Secondly, to promote a greater degree of understanding of problems related to country development and collaborative research, a program of grants for feasibility studies and for the preparation of proposals will be necessary. As a part of feasibility studies, provisions for on-site inspections and evaluation would appear to be a necessity.

As has been explained previously, the majority of the AAUAA universities lack flexibility which in many cases may thwart an interest on the part of certain faculty and administrators to attempt to fulfill the mandate. To overcome this problem and to promote a greater degree of interest in participation, it is suggested that USAID guidelines provide an opportunity for certain universities to develop consortia whereby two or more campuses could combine their strengths to field significant programs. Arrangements for one university to serve as the lead campus for purposes of coordination and administration, but working in conjunction with others to field a meaningful program, would greatly enhance the possibility of participation by AAUAA universities.

As mentioned previously, the mission of the AAUAA universities has been that of providing education and public service in the field of agriculture. They have operated as regional entities with the role of strengthening educational endeavors in states where a need has existed. These universities have stressed agricultural education, production technology, farm management and low income farming techniques. The experience accumulated at this type of institution would be of significant value to regional universities in developing nations. If a suitable vehicle can be designed, AAUAA universities are in the best possible position to provide competent faculty members to deal with programs related to agricultural education. The level of competence, along with the fact that the faculty from AAUAA institutions are attuned to the needs of students as well as those engaged in production agriculture and agricultural business enterprises, warrants serious consideration of the use of this potentially important pool of talent.

After having reviewed certain USAID projects in developing countries, it appears that varying degrees of resentment frequently develop where an attempt is made to impose new systems and solutions to problems in existing situations. Perhaps the negative aspects of the Title XII Mandate could be minimized if workshops, which would include participating U.S. universities and their counterparts as well as cooperating agencies in the developing countries to identify specific problems and projects, were included as a part of all contracts awarded. The assistance to be provided could be discussed in depth

and all parties would have input in attempting to arrive at plausible solutions. Each contract would be reviewed annually by the seminar participants to record the progress achieved and to modify when necessary, the low or non-productive portions of the contract.

In summary, AAUAA universities have a strong desire to assist with the implementation of the Title XII mandate. It is recognized that certain obstacles must be overcome to enable this group of universities to participate. A major factor is the lack of flexibility which exists on most campuses. Through long-term commitments and the possible formation of consortia, it appears that most of the roadblocks can be removed if USAID will design appropriate guidelines.

AAUAA universities have a pool of talent which can, if the opportunity is provided, make significant contributions in the upgrading of the agricultural programs in developing nations. USAID, BIFAD and the joint committees are strongly urged to give equal consideration to this group of universities in designing the procedures for the implementation of Title XII and in fulfilling the mandate contained therein.

## A PLACE IN HISTORY

Congressman Paul Findley\*

We cannot escape history. Nor should we try. History eternalizes the collective wisdom of mankind. It is a marvelous teacher of timeless dimension -- a reflection of the past, a mirror of the present, an inkling of the future. And history is the ultimate court in which mankind can judge its own success or failure. It can be a shrine. Or it can be a prison.

This conference had its origin in a similar meeting last fall, held at the Virginia Polytechnic and State University, at which the call was made for continued close university involvement in shaping the Famine Prevention Program. I was glad to have a part in that. And I'm delighted to be here this evening.

But the origins of this conference are rooted in history -- past and future -- in a much larger sense. Until the year 1830, world population numbered less than one billion people. During the next 100 years, this figure doubled. Just 45 years later -- by 1975 -- the number had doubled again, reaching four billion people. Some population watchers think the size of our global community could double yet again in three or four decades if present growth rates continue.

It is estimated that roughly one-sixth of the world's population is undernourished. Of the 70 million increase in world population expected this year, 60 million -- more than 85 percent -- will occur in developing countries where food production already is chronically inadequate.

Productivity differences in agriculture are increasingly a function of investments in education of rural people in scientific and industrial capacities rather than natural resource endowments. The one inescapable implication is the importance of literacy and schooling among agricultural producers and of technical and scientific education in the agricultural sciences.

Consider these 1975 statistics, which no doubt hold true today:  
-- the difference in average agricultural output per worker between eleven less-developed countries and nine older-developed countries in one study was 83.5 percent. Human capital investment alone

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\*House of Representatives, Washington, D.C.

accounted for over one-third, while land resources per worker accounted for only 2 percent of the difference.

-- in the United States there was one agricultural extension agent for every 382 farmers and farm workers, and in Japan the figure was one for every 785. But in seven East Asian developing countries, one agricultural extension agent had to serve 3,185 farmers and farm workers. In fifteen Near East South Asian developing countries, one agricultural extension agent had to serve 4,353 farmers and farm workers. In twenty-one developing Latin American countries, one agricultural extension agent had to serve 5,490 farmers and farm workers. And in nineteen developing countries in Africa, one agricultural extension agent had to serve 9,140 farmers and farm workers.

-- in the United States 99 percent of our agricultural extension workers have at least a bachelor's degree. The comparable figures are 31 percent in thirteen developing Latin American countries, 12 percent in five Near East South Asian developing countries, 6 percent in five East Asian developing countries, and 1 percent in six developing countries in Africa.

-- eleven out of twenty-nine developing countries -- nearly 40 percent -- either provided only irregular in-service education or no in-service training at all to keep their agricultural extension agents up to date on new techniques and developments.

The world food problem is further complicated by present day resource and ecological concerns.

Some say that the history books of the future will portray a bleak picture of human existence. And others claim that there won't be any history books at all -- that doomsday is just around the corner; that the human race is destined to starve because world population will eventually outstrip man's food production potential. I disagree.

The most recent statistics indicate, for example, that the world birth rate is declining. Other pieces must be put into place before the global population puzzle finally can be solved. But I'm optimistic that the world at least is headed in the right direction.

More important, though, is the enormous potential to increase the world's food production. As pointed out by my good friend, Dr. Clifton Wharton, who is Chairman of the Board for international Food and Agricultural Development: "While the world's resources may be limited, we have yet to discover the bounds of human creativity."

I'm optimistic because the mechanism for fully achieving the world's food production potential now is in place -- the Famine Prevention Program, which became law in late 1975. It was the lessons of history that demonstrated the need for the Famine Prevention Program and shaped its image. As a great philosopher once said, "Those who ignore history are doomed to repeat its errors."

We have learned that overseas food handouts will not solve the world food problem.

We have learned that government stockpiles for supply and price management will not solve the problem.

We have learned that the simple transfer of research and technology to developing countries will not solve the problem.

We have learned that government-to-government contacts will not solve the problem.

We have learned that short-term developmental projects abroad will not solve the problem.

There's no question that the solution to the world food problem is to improve the system for educating farmers abroad -- to mobilize the land-grant university system which made American agriculture preeminent in the world and which is uniquely suited to the task -- to make long-term commitments abroad -- to reach beyond the bureaucracy, right to the men and women in the field. This in essence is the foundation of the Famine Prevention Program.

Through this program, famine can be banished from the face of the earth -- and within our lifetime.

Through this program, malnutrition can be virtually eradicated worldwide -- and within our lifetime.

Through this program, both of these great goals can be achieved with only modest sacrifice by the people of the United States.

I have a dream of the world in 1987 -- the 200th anniversary of the Constitutional Convention -- the 200th anniversary of the date when a tiny handful of Americans took on what seemed an impossible task and, in the process, changed the course of human history.

Let me share with you my dream of the future as I wish it to be recorded in 1987. In that year the second decade of the Famine Prevention Program will begin.

In 1987 I see:

The University of Minnesota in Tunisia

The University of Illinois in Indonesia

The University of Florida in Colombia

Cornell University in Nigeria

Purdue University in Brazil

Washington State University in Jordan

North Carolina A & T State University in Tanzania and Nigeria --

to mention just a few.

Dr. Wharton is in his third term as Chairman of the Board for International Food and Agricultural Development. As a result of the Board's actions:

- Fifty-nine universities are working in 62 countries, some as prime contractors and others as sub-contractors.
- Twenty-six of these universities are now accepted by the host government as permanent partners in agricultural education.
- The 62 countries have designated offices, office space and staff support for 453 U.S. university specialists in agricultural education.
- Half of the U.S. specialists are in their fifth year in the host countries. Sixty-seven are on a temporary two-year home-campus hitch, teaching U.S. undergraduates and advanced degree students who are preparing for Title XII careers.
- Meanwhile, U.S. universities are abroad in 17 other countries, developing recommendations for new projects under the Famine Prevention Program.

BIFAD, in its tenth year, is meeting each month with an agenda which consumes never less than three full days and often more than a week. BIFAD has five items on its current agenda.

The first item is to review the status of two projects: The first project, a cooperative agriculture and rural development program conducted by the University of California and the University of Mexico, is in its ninth year. Two hundred thirty-five Mexican adults and young people have received higher degrees in agriculture and research, and extension offices are now operational in 212 locations. Agricultural production in Mexico has gone up 27 percent since 1978; and the movement of illegal aliens across Southern U.S. borders has been cut by over 80 percent.

The second project involves three universities, and has been underway since 1980. The University of Hawaii is the prime contractor, with the University of Arizona and Fresno State University serving as sub-contractors. The objective of this project is to establish an improved system in Colombia for keeping coffee producers up to date on better techniques and useful weather information. So far the Colombian government has approved the establishment of an extension-type program, with technicians to be trained at Bogota.

The second item of business on the Board's agenda is to act on a proposal which would expand the roster of eligible U.S. universities from 75 to 100.

The third item on the Board's agenda is to act upon a tentative agreement reached between Texas A & M and Sri Lanka to develop a country-wide continuing education program for adults in the area of crop production technology and farming practices.

The fourth item on the Board's agenda is to act upon the requests of three countries for the establishment of Title XII programs, including selection of the most appropriate U.S. schools to work out a tentative agreement with the host countries and conduct the projects when approved.

The fifth item on the Board's agenda is to review a draft of its budget request for the five-year period beginning in Fiscal Year 1988.

In addition to direct Board activities, the U.S. universities of 1987 have taken the initiative to prepare their institutions, staff and students for their expanded international role. Fifty-eight U.S. schools now have special programs in international agricultural education -- with a total enrollment of over 5,000 undergraduates and 500 graduate students -- producing nearly 1,000 technicians each year for careers in famine prevention.

In the first decade of Title XII, food production in the third-world has risen almost as fast as the population with the greatest advance in those countries with the longest participation in the Famine Prevention Program. Continuing education of farmers is now accepted by 75 percent of third-world countries as a high priority goal. The number of extension specialists with college-level training has tripled. In-service training of these specialists is underway in 21 countries.

This is my dream for the world in 1987. And there's no question in my mind that it's within reach. This dream can be reality.

During the year and a half that has passed since Title XII became law -- and it has been almost 18 months now, I've had extensive contact with people in the university community and others throughout the country. I'm sure that Senator Humphrey has too. Expectations have built up; they are at a high level. People are excited about the potential of the Famine Prevention Program. But there is also a growing impatience and a wonderment as to why further progress has not been achieved in a year and a half.

I have great confidence in the leadership of the program, as evidenced by the distinguished gentlemen here today. Dr. Wharton, I think, is a splendid person to be Chairman of the Board. I'm pleased with the selection of each Board member. I am very much impressed that my friend and former colleague, Governor Gilligan, now heads AID.

These gentlemen share my conviction that this is a great and exciting program. I believe it can make a difference. One of the members of the Board, Jim O'Connor, told me privately -- and I'm sure that I do not embarrass him by quoting him now -- that after his first few experiences as a member of the Board he was convinced that this can really help the world to solve the food problem.

Solving the world food problem is of no less consequence than the forging of our democracy just 200 years ago. In fact, it has been one of the preeminent problems facing mankind since Biblical days.

The small group of people on the Board and key leaders in AID working closely with you in the universities and in Congress can literally change the course of history and open up a brilliant new era for mankind. I believe that in a reasonably short period of time the specter of famine can be banished from the face of the earth.

The responsibility for this undertaking lies squarely on the shoulders of the people sitting in this room. If those who are in a position of trust and responsibility fail to do the job, the hopes and dreams of many Americans and countless others around the globe will be dashed. A barrier of cynicism will develop that will have to be overcome before another noble experiment can be tried. The forecasts of those who see Armageddon just around the corner may come true.

Senator Humphrey and I recently held a hearing on the Famine Prevention Program during which Don Paarlberg gave a most insightful description of the potential pitfalls confronting the Famine Prevention Program.

Dr. Paarlberg cited the first hazard as "AID inertia." There's no question that business as usual at AID would be fatal to the Famine Prevention Program. But I'm convinced that, under Governor Gilligan's leadership, AID can make the necessary internal changes to adapt to Title XII, and will also do its job in working closely with other federal agencies, such as the Department of Agriculture, and with the university community.

The second hazard cited by Dr. Paarlberg was "university duplicity" -- the danger that Title XII funds might be diverted to domestic programs. Like AID, your institutions are going to have to make the changes and set the priorities to make Title XII work. This will mean more money and staff to ensure that your expanded involvement overseas doesn't create a gap at home. This means new curricula and new faculty standards that facilitate and reward a true international focus on agriculture. You've been waiting for resources. The resources are on the way. At this point it's up to you. You're going to be the combat generals in the war to end famine. I'm sure you're up to the task.

You can start by deciding here and now to hold another conference, as well attended as this one by top decision-makers, in six months. I'd like to see it held in the Land of Lincoln -- let's say in January, 1978, in Springfield, Illinois.

The third pitfall cited by Dr. Paarlberg was "Congressional impatience." In his words, "a slow-growing plant does not flourish when frequently pulled up by the roots to see how it is doing." I will try to resist the temptation, and I'm sure so will others. But I assure you that we'll be involved --

actively involved. We expect to see results, and we will do whatever it takes to clear out any dead wood or other roadblocks to success. We just completed one hearing and will hold others on a regular basis. But as you are the pulse of the Famine Prevention Program we will have to rely upon you extensively for advice, counsel, ideas and problem identification. Contact us. Come see us. Let us know what we can do to help. We can do the job if we all pull together. The question is, will we?

One thing is certain -- as certain as the passage of time. We cannot escape history. To paraphrase Abraham Lincoln, we will be remembered in spite of ourselves. No personal significance or insignificance can spare one or another of us. The path we travel will light us down, in honor or dishonor, to the next generation. We all say that we want to put an end to famine and hunger. The world will not forget that we say this. We know how to solve the world food problem. The world knows we know how to solve it. The people here in this room tonight hold the power and bear the responsibility. We will nobly save or meanly lose the best hope of earth. Other means may succeed; but this cannot fail. The way is plain, peaceful, generous, just -- a way which, if followed, the world will forever applaud and God must forever bless.

## BRIEF REPORT ON UNIVERSITY LINKAGES STUDY

Ralph Smuckler\*

International Linkages in Higher Education is a feasibility study which is examining carefully a number of models of international cooperation among universities and reviewing alternative means of serving important needs in the higher education community as we enter a new era of international relationships. It is widely accepted now, both officially and unofficially, that the period ahead can best be described as an era of "interdependence" among nations, one which will call for new modes of cooperating internationally. In a broad sense, the Linkages study group to which I am attached is one step in that direction. It is seeking to encourage a productive new phase in the relations of American higher educational institutions with those abroad, particularly those in less-advanced countries.

The study group operates under the auspices of NASULGC, and the five other major associations of higher education (ACE, AAU, AASCU, AACJC, and the AAC). It heavily involves the international offices of these associations and others drawn in from institutional members. It is supported by a major grant from AID as well as more modest grant funds from the State Department/CU., and the Kellogg Foundation. The services of the director of the group, Dr. Fred Harrington who was formerly president of the University of Wisconsin and more recently with The Ford Foundation in India, are being provided by the Ford Foundation.

The study group has been active during the past year and will be reporting this summer and fall. The year has been a busy one, filled with planning sessions which were sometimes held jointly with AID staff who were appointed to a joint task force for the study, with sessions with other sponsors and with a number of national and international groups, with field research in various parts of the world and numerous other activities related to determining what is needed, what shape it should or might take, what alternatives exist. My own role while on leave from MSU since January has brought me in touch with a number of U.S. universities, helping to determine their present interests and their readiness for new initiatives internationally.

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\*Dean, Office of International Studies, Michigan State University

I have also spent some time reviewing existing organizations to try to appraise their experiences as they might help us define new directions for international educational ties.

The Linkages study effort grows out of initiative taken by the NASULGC international affairs committee several years ago. At that time, there was a growing sense that we needed new modes of working with institutions in other countries, that to a large extent the contract devices to which we had become accustomed had run their course, that somehow our ties with institutions in other countries -- particularly with those we helped originally to bring into being or to strengthen -- ought to be encouraged to continue over the long run. In short, we were seeking new ways of achieving the widely held goals of American universities in the international realm -- to be of service and to grow in the process, to deepen and refine our own international research and instructional programs.

There was a sympathetic audience for these views and an alliance was readily formed with the other higher education associations. There was also a receptive ear at the upper levels of AID, the State Department and in other national bodies as we put together a proposal for a new association which would foster these new directions -- AICHER, as it was called. Our present Linkages study ties back to all of that and represents a wise move, in my judgement, to test the water a bit, to examine systematically, before we take the next major step.

Our review is not limited to any particular region, nor to relations only with institutions in developing countries. Nor are we confined to agriculture and food as a main focus. We are, however, looking carefully at the role of higher educational institutions in less-developed countries, at ways in which relations with American institutions may help them to serve their own nation's development needs more effectively. We are also examining the linkage concept more broadly, as it relates to institutions in advanced areas of the world and to relationships which are defined by the two parties -- for example, departments or schools within a larger university, or even whole universities -- as mutually beneficial even though not directly related to development as such.

What conclusions are we coming to and what does all of this have to do with Title XII?

First, there are some significant needs which are often identified in our discussions abroad and in Washington and which we believe should be met more effectively. One gap is the absence of an "entry point" into relations with American universities and colleges which impedes approaches by foreign institutions or causes them to be aligned in ways which are less than satisfactory over the longer run. We have a bewildering array of organizations and doorways into our system. Only the experienced can move in with confidence. From the national perspective, there should be a way of improving this situation.

Second, we need a more centralized information and reference center which, perhaps, could fit closely with the new entry point. A foreign university leader should be able to learn about American higher education, about past experiences in international higher educational cooperation without a grand tour of the United States. At present, there is no easy channel to obtain this type of useful information either for the person from abroad or for the leader of an inexperienced or small institution in the United States who may be wishing to tie his school to one of similar interests abroad.

Another gap relates to recruitment of American academic personnel by institutions abroad. The need is great, particularly in specific countries -- Algeria, Nigeria, countries of the Middle East. Perhaps there ought to be an easier way to recruit -- one which is more certain to find the best talent available and which would help to strengthen individual careers and institutional programming rather than to raid or weaken careers and programs as is often now the case.

There are other needs, but the one which is of most importance in this discussion-- and one which I consider to be of primary importance -- is the need for a national organization or agency to provide support and encouragement. This support could be provided through information and modest financial grants to the many new, long-term institutional ties or linkages for which there now appears to be substantial institutional readiness -- a readiness which includes in a number of significant cases a willingness to invest in such ties if they can be established as genuinely mutually

beneficial. The long-term, mutually beneficial, institutional (meaning departmental or college, as well as all-university) linkage represents a concept whose time appears to have arrived.

Linkage has many meanings. Many universities have well-established ties with parallel institutions in other countries. However, many of these are completely dependent on large or continued funding from outside sources -- and the linkages end when the money ends. Furthermore, many do not go beyond the one-way assistance phase. They reflect our desire and willingness to be of service to others. They do not reflect the long-term, mutually beneficial understanding which ought to increasingly prevail.

It appears that relatively modest investments by a new central fund would encourage programs of much broader importance in which departments or universities would invest. A financial multiplier effect is predictable. Furthermore, since perceived mutual benefit would be an essential ingredient, the sensitive problems of inequality could be minimal. And one could more easily defend use of institutional funds before legislatures. Through such agreements, a whole series of advantageous relations and exchanges could begin to occur or to expand -- joint research, exchange of advanced students, faculty exchange, undergraduate exchange, assistance in strengthening a weak program and long-term planning of individual careers, permitting investment in language learning.

I should make clear that the desirability of encouraging a new mode of international relations among colleges and universities does not in any way negate the need to continue to improve those ways of working together which have prevailed in the past. Rather than supplant individual exchanges, international technical assistance or research contracting, and the other existing forms of international interactions, long-term mutually beneficial institutional linkages would augment these others and become gradually a more programmed and useful means of organizing institutional efforts. Each mode has its appropriate time and place. I do feel, however, that linkage relationships based on negotiated definitions of mutual benefit will increasingly prevail because they are in tune with our universities' needs and match well the characteristics of an interdependent world.

There clearly is a need for a new organized effort to meet these various needs and a number of others to which I have not referred. Exactly what form this new organization should and might take is still to be determined. Perhaps there should be a consortium of the higher educational associations, those which sponsor the study group, which would take on the task of meeting these needs.

As for the relationship to Title XII, I believe the work of the study group in looking for new and improved ways of relating to universities in other countries -- i.e. new modes of cooperation -- is directly related to Title XII thinking and to what will certainly become another phase of Title XII action. Obviously Title XII is focused differently, directly on food and nutrition problem-solving and clearly Title XII programming will be financed at levels well beyond those envisaged in the Linkage study group. However, we do believe that the model of institutional cooperation which we are working with may have direct applicability in the case of cooperative work with some of the more advanced countries among the LDCs -- those commonly referred to as the "graduate" countries or "middle income" group. Furthermore, much of the work we are doing relates to a problem well-known to many of you and one which Title XII is also addressing -- how to sustain productive and regular ties with an institution after the intensive assistance contract comes to an end. In other words, the linkage model offers an answer at one end of the assistance spectrum which Title XII programs may address, the other end being the building-up of a new research or teaching institution.

I should add that many of the same people -- Glen Taggart, Woods Thomas, Jack Rigney, Elmer Kiehl, Jerry Thomas, to name a few -- who were instrumental in the launching of the AICHER effort which grew into the Linkage study -- have been and are an integral part of the Title XII movement.

We will be reporting both on program and organizational recommendations this summer. We believe that we will have audiences which are receptive and supportive -- both philosophically and financially. We need your interest, your comments and questions, and your views, and if you believe we deserve it, we need your active support as well.

## LOOKING AHEAD

Erven Long\*

My assignment, to make one conference-concluding comment on the topic "looking ahead", is especially difficult, as the substance of the entire conference has been so largely pointed to the future. Besides, as we all know so well, "looking ahead" is risky, uncertain business.

But one statement about "looking ahead" I can make with complete assurance: now that the good work of this splendid conference is done, you are all "looking ahead" to its coming as speedily as possible to a close. Therefore, I shall be brief.

Some comments have been made about the so-called "inertia" of A.I.D. Lest we become too impressed with this "inertia", I should like to point out that A.I.D. programming processes responded very sharply indeed to the legislative guidance of Title XII. As Congressman Findley pointed out last night, Title XII is about eighteen months old. Our field missions have taken seriously the legislation and the guidance sent to them about its importance. As a result -- even though the total amount for food and nutrition remained virtually constant -- the activities falling within Title XII categories described by Dr. Wharton yesterday essentially doubled for fiscal year 1978 (from \$100 million to \$195 million) as compared to the last pre-Title XII year, 1976. These expanded program emphases constitute the opportunities for early action.

Very properly, much of the discussion at this meeting has been about BIFAD/A.I.D./university working relationships. Great progress has been made in hammering out these relationships, and much more progress will be made. The Board, its joint committees, its staff and, through them, the universities, are in our tissue, as they should be. I personally no longer have great concern over this issue. We are now one American family with a common purpose.

My question, as I try to "look ahead" is, rather: how well can we, this American family, do the job? As I shall point out, this is not one question but three. But before I get to this, I feel I must comment briefly on one proposition put forward strongly this morning by one of the discussion groups; namely, that of "formula funding".

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The difficulties in dealing with the concept of "formula funding" is that it is a complete abstraction. Everything depends, of course, on the formula. I assume the genesis of the concept is in the Hatch Act approach to domestic research funding. As I understand it, that involved two types of formula -- one tied to the farm population of the state and one to shared-cost funding by state and federal governments. The first is clearly irrelevant to Title XII purposes, as none of its clientele lives in any of our states. And the second, we are told, is not generally feasible from the universities' standpoint.

I suppose the phrase "formula funding" is used to denote some type of sustained support not tied, or closely related, to program activities. This would be clearly in conflict with the intent of Congress as we read it. But in any event, it would fail of its purposes which must surely be that of developing through time the capabilities needed most effectively to carry out these program activities. These activities must therefore be guided by the requirements of this function. Much hard work and thought, utilizing many means of getting at this objective, is necessary. No applicable formula or model is, unfortunately, available.

Now to return to my three questions, the answers to which will so largely determine the future effectiveness (and therefore political survival) of Title XII.

1. How can we, the American family, really harness to the world food problem the tremendous explosion of technical possibilities inherent in the present state of the basic scientific arts? Can we cut through the false distinctions between basic and applied research? Can we break the methodological barriers which separate the disciplines and the institutional barriers which separate academic departments so that problems can be tackled as they exist in real life, and not as we would define them to fit our institutional conveniences? Can we organize into effective institutional arrangements? Can we locate the one Einstein who may be in some small college and make him or her a part of the problem solving team?

I am optimistic because, in my discussion group at least, you were raising these questions. If you were not doing so, I would be pessimistic.

2. How well can we accommodate ourselves to the fact that in all aspects in Title XII, as in all other development assistance, we are cultivating in our neighbors' gardens, guests in their homes? We have heard a good deal of the need for sensitivity to cultural differences, economic variations, etc. But, though important, this is not really the central point. Rather, it is that we are dealing with countries determined to make their own decisions. Surely we would not really want it any other way. Can we devise radically better systems for mobilizing our university resources which recognize this central, affirmative reality of national sovereignty of the developing countries, and which anchor in their sense in our sense of their needs. Again, I am optimistic that we can, because I have heard many of you worry aloud about this same problem.

3. Lastly, can we find ways of helping American citizens recognize that international problems are their problems? That our successes or failures 10,000 miles from Minneapolis in some starving country have consequences just as direct, and probably more significant, to their own lives and their own future well-being as do undertakings in the next county, the neighboring state or even within this city itself? Only as this realization becomes deeply and firmly felt by the public at large can we hope for the long-term commitment we all here recognize as necessary.

Once again, I am confident because you live where the people are. Title XII is our people's program; and you and we are now a part of the family of public servants charged with carrying it out most effectively on their behalf.

## SECTION II - DISCUSSION REPORTS

## INTRODUCTION TO DISCUSSION TEAM REPORTS

As the program indicated, a major purpose of the conference was "to provide an opportunity for university administration and faculty to raise questions and discuss issues which are of concern to them with members of BIFAD and representatives of AID". Hence, six discussion teams were developed to facilitate the desired interchange.

For the most part, each of the six teams were structured to include from the higher education community a university president, a dean of agriculture, a director of international programs, a director of resident instruction, a director of an agricultural experiment station, a director of an agricultural extension service, a home economist, a representative from an 1890 college, and a representative from a non-land-grant agriculturally involved university. Each team also included one member of the Board for International Food and Agricultural Development (BIFAD) and at least one representative of the AID. A department head from the College of Agriculture, University of Minnesota, was assigned to each group to serve as the recorder.

The community of higher education institutions interested in participating in Title XII programs is not monolithic. Consequently, the membership on two of the teams was augmented to reflect special concerns. On team five, membership from the 1890 land-grant institutions was strengthened. Membership from the non-land-grant institutions including some sea-grant institutions was augmented on team six.

The conference schedule allowed two separate periods for discussion. The first was devoted to general discussion keying off the presentations made during the conference general session. This discussion was chaired by the BIFAD member on the team. In the second period, discussion was directed at a specific issue. A university representative on the team served as chairman during this period.

The following six discussion team reports summarize the results of the second discussion period only. In each instance, the team membership is given; the chairman is indicated; and, the issue object of the discussion is identified. An informal seventh team, the Ad Hoc Discussion Team, was organized and announced during the conference, and its report is also included here.

## DISCUSSION TEAM #1

- Recorder:** R. W. Touchberry, Head, Department of Animal Science, University of Minnesota, St. Paul, Minnesota
- Chairman:** James Anderson, Director, Agricultural Experiment Station, Mississippi State University, Mississippi
- Discussants:** M. Peter McPherson, BIFAD Member, Washington, D.C.  
Curtis Farrar, Assistant Administrator for Technical Assistance, AID, Washington, D.C.  
Jack S. Robbins, Dean of Agriculture, Washington State University  
M. G. Smith, Assistant Dean of International Affairs, Ohio State University  
James Anderson, Director, Experiment Station, Mississippi State University  
Dempsey Seastrunk, Assistant Director, Agricultural Extension, Texas A & M University  
David Armstrong, Director, Resident Instruction, Michigan State University  
Philip G. Stiles, Coordinator, International Agriculture, Arizona State University  
George F. Ilg, Assistant Dean, School of Agricultural Science, California State University, Fresno  
Charles M. Smallwood, Dean, School of Agriculture, West Texas State University  
B. D. Mayberry, Dean, School of Applied Science, Tuskegee Institute

Issue Assigned for Discussion: Organizing for Title XII Programs Within the University.

- What preliminary steps should be taken by an institution in preparation for participation in activities under Title XII?
- Universities must develop appropriate policies and procedures to insure the effective integration and/or coordination of Title XII programs with domestic programs.
- Agricultural successes achieved in the United States are rooted in well planned and conducted research frequently extending over a considerable period of time. This requisite will not change with inclusion of problems to be encountered in developing countries. Will administration of Title XII recognize, and thus provide, assurance to participating universities for financial support of like activities as related to the needs of developing countries?
- Within the framework of extension, there are several organizational and educational delivery models currently being used. Will one or more models be utilized or will a specific model be selected?

- A philosophy that the international dimension is a part of their regular program activities rather than a "4th dimension" should be developed in universities.

Discussion Summary:

Organizing within the university was the topic of this discussion. It was pointed out that universities must establish international activity as legitimate and make it possible for involved faculty to hold regular appointments. A number of new administrative mechanisms will have to be developed which will facilitate team work as well as the participation of non-agricultural experts especially ecologists and social scientists. Smaller universities may still have difficulty participating because of their smaller number of faculty and lack of flexibility. International activities must become an integral part of university missions, enhancing the education and well-being of the citizens of the state and improving the professional caliber of faculties. It was urged that decisive action be taken quickly as international programs at most universities have been and are likely to remain in a holding pattern until the new directions and policies are spelled out.

1. One of the major things that must be done is to establish the philosophy or attitude that international activity is a legitimate and creditable professional activity for faculty members. Department heads and higher administrative officers must recognize international activities as a bonafide professional activity and treat it as such.

Staff members who have served on foreign assignments should be expected to prepare concise, technical reports on accomplishments and such reports should be reviewed and published in appropriate journals. Through such published reports on foreign experiences and projects, a body of useful information would be established and the experiences and information would add strength and breadth to faculties of colleges of agriculture.

2. The specific administrative mechanisms for expediting international activities will and probably should vary greatly among universities. However, there seems to be a consensus that a director of international programs is necessary. To cope with the many developments and changes in AID, and to effectively organize staff and expedite projects in less developed countries, a full time director is almost essential. Any program or project in a less developed country will likewise require a highly competent team of professionals, an adequate budget and a plan of work similar to a research function.

3. The faculty involved in international activities should hold regular appointments in subject matter departments and should be bonafide members of the faculty of established departments. Positions should be assigned to departments for work in international activities. In some cases, the same individual could be appointed to one of these positions for extended periods of five to ten years. In other cases, staff members would be

appointed to these positions for shorter periods of two to four months and then reassigned to a regular appointment involving various percentages of time for research, teaching or extension. Such use of positions would allow the necessary flexibility for a department to participate in international activities. Further, it would provide a wealth of experience and knowledge of international agriculture in the faculty of a department. This knowledge would be useful to the teaching as well as to the research program of the department.

The department head is the key individual in assuring that the assignment of faculty to international activities in this way will be effective. Without a positive philosophy on international activities at the department level, such an assignment of faculty to international activities could be a resounding failure.

4. In undertaking research, teaching and extension activities of international dimension, universities, colleges and departments should become involved in those projects for which they have professional expertise and the facilities and means for making a program productive and successful. It is recognized that some international activities require professional expertise beyond the range of any one university. Such activities would naturally require cooperation among universities and between universities and industry.
5. Many small universities, including some land-grant universities, universities of 1890 and state universities will have difficulty participating because of the smaller number of faculty at such institutions. It seems desirable that larger universities aggressively attempt to include such institutions as equal partners in international activities. As an example, suppose that the University of Minnesota were to become involved in the Sahelian Zone in Africa. Such an activity could be much better served by a cooperative effort by the University of Minnesota, South Dakota State University and North Dakota State University than by any one of these institutions alone. There would certainly be a greater diversity of professional expertise for coping with problems of the animal and plant sciences in dryland agriculture and the same diversity would likely result in other fields.
6. Ecologists and social scientists such as geographers, anthropologists and sociologists should be made a part of most university efforts in agriculture. Likewise, agricultural scientists such as animal scientists, agronomists and soil scientists should be made a part of efforts of the social scientists in international activities. It is all too easy for one group to naively criticize and summarily reject the recommendations of the other without making an effort to understand and evaluate the information and logic on which such recommendations are based. Both groups have something to learn from each other and neither has all of the correct answers.
7. Successful international activities will require team work with levels of cooperation and commitment beyond those we have practiced in our domestic research, teaching and extension.

8. International activities must be sold to state legislators, industries, agricultural organizations and citizens as activities that will enhance the education of citizens of the state, improve the general professional caliber of faculties of colleges of agriculture and directly improve the well-being of the citizens of the state. We have essentially neglected this phase in the past and have left this activity to the federal government.
9. For the past two or three years, international activities at most universities have been in "a holding pattern." Most seem to be holding because of pending future actions of AID, BIFAD and the funding of Title XII. This holding pattern tends to erode interests in international activities; thus, relevant decisions on Title XII should be made soon.

## DISCUSSION TEAM #2

- Recorder:** Francis Al Wood, Head, Department of Plant Pathology,  
University of Minnesota
- Chairman:** Jack Claar, Director, Coop Extension Service, University of  
Illinois
- Discussants:** Gerald W. Thomas, BIFAD Member, New Mexico State University  
Fletcher Riggs, Chief, Agricultural and Rural Development,  
Asia Bureau, AID, Washington, D.C.  
F. Matsuda, President, University of Hawaii  
Lee Kolmer, Dean, College of Agriculture, Iowa State University  
Robert G. Dyck, Director, International Programs, Virginia  
Polytechnic Institute  
Keith Huston, Director, Agricultural Experiment Station,  
University of Minnesota  
Charles Browning, Director, Resident Instruction, University  
of Florida  
F. L. Richards, Dean, College of Agriculture, Prairie View A & M  
E. E. Hegen, Director, International Projects, Western Kentucky  
University

### Issues Assigned For Discussion: Staffing and Funding for Title XII Programs.

- Adequate funding, not only to permit overseas programming but to provide continuity of staff and program leadership within participating U. S. institutions, must be provided.
- A mechanism for long-term funding commitments to land-grant institutions must be developed as the basis for generating and maintaining a cadre of highly competent professionals dedicated to international development issues. The accountability requirements confronting most land-grant universities today, especially the agricultural experiment stations, preempt major support for international development activities from existing state and federal funds.
- Will long-range funding be programmed and provided to assure positions and funds at U. S. universities for international development counterpart training in the developing nations?
- Protection of personnel must be provided in case of emergency or involuntary termination of assignment.
- Retirement and fringe benefits of participating personnel, including those on civil service retirement, those from other institutions and those from industry should not be jeopardized.
- Adequate arrangements should be made for encouraging land-grant staff to accept rotating positions in the staff component for Title XII.

- Arrangement by which universities can provide personnel for international assignments without losing in the normal promotion and tenure procedure of the university.

- Development of a clearinghouse for names and vitae of persons available for direct hire for foreign assignments.

- Recognition of U. S. university personnel sent abroad under terms of Title XII as "ambassadors" and official representatives of the people of the United States with no less than equal status to direct hire employees of the Department of State.

- Agricultural successes achieved in the United States are rooted in well planned and conducted research frequently extending over a considerable period of time. This requisite will not change with inclusion of problems to be encountered in developing countries. Will administration of Title XII recognize and thus provide assurance to participating universities for financial support of like activities as related to the needs of developing countries?

- Position of Title XII management with respect to strengthening competencies of U. S. universities to conduct high priority areas of research such as biological nitrogen fixation, photosynthetic efficiency, genetic engineering of plants, plant protection with emphasis on biological stressing, etc.

#### Discussion Summary:

Staffing and funding for Title XII were the issues assigned to this discussion group and the following is an outline of problems and recommended solutions associated with these issues. In general, the universities, the BIFAD and AID must recognize the need for a commitment on the part of cooperating universities to develop specialized faculties to work in international programs and in Title XII in particular. We must divest ourselves of traditional approaches, develop program solutions that will aid in solving the problem of feeding the poorest of the poor and subsequently train staff to attain these goals. Cooperation with other existing institutions and agencies should be dictated by the nature of the solution proposed and not by federal edict nor social adjustment. In order to maintain a long-term commitment to a Title XII program, there must be a mechanism established whereby long-term funding can be made available to participating institutions by AID. The following is a brief outline of some of the problems associated with staffing and funding and our recommendations for solving these problems.

The following issues were discussed:

- A) Problems with current staffing patterns
- B) How to staff and what type of staff is needed
- C) Funding

A) Problems with current staffing patterns

1. In the current system, the professor that volunteers to go abroad loses. He or she loses support, students, salary, time, professional recognition and, in the end, there is a loss of morale. In short, instead of an array of incentives to induce people to go abroad, we work from the basis of an array of disincentives.
2. The department loses. It loses talent to solve existing problems, there is an overall loss or weakening of programs, and in some instances, department morale is affected.
3. Exchange professorships in general do not work because it is not an exchange of like kind. The language barrier and professional background of exchange professors from abroad often prevents them from teaching existing courses in this country and, as a consequence, an additional burden is placed on the residual or home faculty.

Recommendations:

1. That an international program component be developed as a part of the overall university program just as research, extension and teaching are components of the university program in agriculture; this approach would eliminate many of the current staffing problems.
2. Develop a set of selection, promotion and salary increase criteria that are comparable to those used in evaluating teaching, research and extension faculty and use them in the evaluation of international program faculty.
3. Develop linkages with organizations such as the Peace Corps and other agencies. This is an excellent method of extending our current staff.

B) How to staff and what type of staff is needed

1. There needs to be a fundamental change in our thinking or our philosophy regarding staffing for international programs. We must begin to think of faculties in international programs or in a fourth dimension-- the fourth dimension to research, extension and teaching.
2. The international program staff should consist of individuals at all levels to provide the full spectrum from faculty to grad students to undergrad to paraprofessional to farmer.
3. International programs do involve teaching, research and extension but in a different setting -- the international arena -- and with a different goal -- to feed the poorest of the poor. Consequently, the different setting and the different goal dictate the development of a different type of faculty.
4. A long-term institutional commitment is required for success.
5. The role of faculty in Title XII must begin at the inception of programs and the faculty must be involved in the selection and evaluation of projects and in the development of a commitment or, said another way, at the front end of the program planning process.

6. Criteria must be developed which would be used as a basis for evaluating the effectiveness of international program staff. Mechanisms have to be developed whereby competence in teaching, research, extension and international programs can be equated or at least recognized.

### C) Funding

There are two general approaches to the solution of the funding problem and they are:

1. The project basis which is currently being used.
2. Long-term funding or some form of formula base funding as it is sometimes called.

Funding is currently on a project basis and most projects have a finite period, i.e. two years, three years, five years, at most. There is a role for project funding in Title XII but we do need to develop new approaches to systems of project funding. For example, overhead might be increased and provided to the departments -- this would give the departments flexibility in staffing and work as an incentive to keep them and specific faculty members involved. As it now stands, in most instances the only flexibility available to the department is that which accrues from already existing resources. This is generally inadequate.

There is a need for long-term funding or "formula" base funding to provide continuity to the Title XII program and to specific university programs. The development of a long-term basis for funding is consistent with the development of a long-term program in interphilosophic base developed above. It was the very definite opinion of our discussion group that without some type of long-term funding either formula base or otherwise Title XII would not be very successful. It is realized that AID at the present time does not have authority to grant funds on other than a project basis and that in general the maximum project term is five years. Thus, in order to effect the change or approach suggested above it will be necessary to work with the Congress and ultimately to convince Congress to provide AID with the authority to make these kinds of grants. This can be accomplished through the BIFAD as well as through contacts with specific legislators.

#### Recommendations:

1. Develop incentive approaches to project base funding and
2. Promote the development of a basis for the long-term funding to cooperating universities. This is mandatory if Title XII is to be successful.

### DISCUSSION TEAM #3

- Recorder: J. L. Ozbun, Head, Department of Horticultural Science and Landscape Architecture, University of Minnesota
- Chairman: Charlotte Roderick, Associate Dean, College of Home Economics, Iowa State University
- Discussants: Orville G. Bentley, BIFAD Member, University of Illinois  
Woodrow Leake, Chief, Ag and Rural Development, Africa Bureau, AID  
Lewis Dowdy, President, North Carolina A & T  
William Pritchard, Dean, Veterinary Medicine, University of California-David  
J. Wendell McKinsey, Director, International Programs, University Of Missouri  
B. J. Liska, Director, Agricultural Experiment Station, Purdue University  
Henry Wadsworth, Director, Extension, Oregon State University  
W. R. Thomas, Associate Dean, College of Agriculture, Colorado State University  
G. H. Kroening, Dean, School of Agriculture, Southern Illinois University  
Webster Pendergrass, Vice President, Agriculture, University of Tennessee

#### Issue Assigned for Discussion: Assessment of LDC Needs

-The criteria currently or proposed to be used for the selection of countries to which assistance will be given.

-U. S. university unique capabilities and expertise should be matched with host country needs (more geographic specializations).

-AID and the BIFAD should develop procedures that will insure the effective involvement of U. S. universities at all stages in the various decision making processes relative to country programs, matching LDC needs to U. S. university expertise and interests and funding arrangements.

-Developing countries should be identified who have interest in cooperative work; their areas of interest; the scope of their interest.

-How will the issue be resolved of fulfilling the Title's mandate of focusing upon the needs of the "poorest majority in the developing world," while at the same time helping satisfy the equally pressing concomitant need of providing trained agricultural manpower (which is presently viewed in some official quarters as an exercise in elite "institutional-building")?

#### Discussion Summary:

The issues for this team were combined into three main topics, namely:

- A) Criteria for selection of countries to participate in Title XII programs

- B) Matching capabilities of universities with LDC countries,
- C) Criteria for program development

The discussion centered mainly around the problems of identifying criteria and assessing LDC needs and potentials for development. Throughout the period, it was repeatedly pointed out that insufficient information exists or, if it exists, it is not readily available on the local level nutritional, social and economic factors, and on the experiences of past project involvements. Information on production potential, soils, crops and agriculture is generally much better for these countries. Therefore, the recommendations for criteria and matching capabilities indicate that more research and compiling of already existing information is needed before actual decisions about specific involvements can be made.

Further, it was pointed out by those who have worked in LDC's that a careful assessment of the local conditions may indicate the willingness of the government to participate. For example, where there already are some rural roads and some government inputs into development, programs would have a better chance of success.

A) Criteria for selection of participating countries

1. Income level of the country. It was suggested that attention should be given to the poorest of the poor.
2. Diplomatic relationships of the participating country. It was felt that government stability and the opportunity for a long-term, continuing kind of effort should be given consideration.
3. Sector analysis. The current AID procedure would seem to be satisfactory.
4. Physical quality of life index. This information is currently available and would give some indication as to the needs of the people.
5. Potential for crop production. Identification of the natural resources available within the country. There is reasonably good data available in this area, particularly as it related to soils maps.
6. Determination of the government to support rural development. Is the government of the country prepared to reallocate, or at least allocate, new resources to agriculture and rural development.
7. Any criteria developed serve a useful purpose only at the margins. Existing ongoing programs and relationships should not be overlooked.
8. The capability and intent of the government to follow up on established programs after the country has graduated.

B) Matching capabilities of the university with the LDC country.

1. It was pointed out that there is not all that much difference among the universities. Any matching of universities with LDC's would essentially be a fine tuning process, possibly related to language proficiency.
2. Universities generally have experience in pulling together or integrating a total package. This sort of effort is essential if we are to have effective programs. They are particularly experienced at integrating teaching, research and extension which would be beneficial to programs in developing countries.
3. Experience gained through the establishment of EFNEP programs may be very useful.
4. The dispensing of knowledge and information at the scientific, as well as the grass-root level, has been practiced by the universities. This same approach is necessary in developing countries.
5. The universities should be involved in developing the new programs from the very beginning.

C) Criteria for developing programs

1. Literacy level of the country. This would seem to be an important criterion; however, the question was raised as to relationship between literacy level and program success.
2. Infrastructure of the country. Existing roads and transportation systems as well as marketing practices should be taken into consideration.
3. The felt and perceived needs of the people in the country should be assessed. Programs must relate to real needs.
4. The various organizations and institutions within the country should be understood and assessed. These various structures could be quite helpful in the implementation of the program.
5. Programs should be developed on an interdisciplinary basis. The social aspects of the problem may be equally as important as production itself.
6. New programs should be integrated with existing programs such as the Peace Corps.
7. An information exchange program should be developed so that information pertaining to previous projects within the country are available. This could provide valuable insight relative to what may or may not be successful.

## DISCUSSION TEAM #4

- Recorder: W. B. Sundquist, Head Department of Agricultural and Applied Economics, University of Minnesota
- Chairman: Roger Mitchell, Vice President, Agriculture, Kansas State University
- Discussants: Anson Bertrand, BIFAD, Texas Tech. University  
Philip Birnbaum, Assistant Administrator for Program and Policy Coordination, AID, Washington, D. C.  
Elliott T. Bowers, President, Sam Houston State University  
James Beattie, Dean, College of Agriculture, Pennsylvania State University  
J. A. Rigney, Administrative Dean, International Programs, North Carolina State University  
John R. David, Director, Experiment Station, Oregon State University  
Roger Mitchell, Vice President, Agriculture, Kansas State University  
Grace Goertz, Associate Dean, College of Home Economics, Auburn University  
Stanley P. Wilson, Assistant Dean, Agriculture, Auburn University  
Marvin A. Fields, Chairman, Department of Agriculture, Virginia State University

### Issues Assigned for Discussions: Guidelines for Developing Title XII Projects

-What are the criteria to be used in selecting the direction and scope of projects to be initiated?

-Will universities compete through project proposals as they now do for contracts or will arrangements be made to set up longer term or broader programs to be assigned to each university?

-By what means will specific responsibilities be assigned to one or a group of institutions?

-Will areas of work be identified by BIFAD and the committees or will programs or projects be solicited from universities?

-Guidelines for U. S. universities to implement research and in-country programs:

- a. Overall research approach?
- b. Commodity-specific research approach?
- c. Technology delivery system or problem-solving approach?

### Discussion Summary

The discussion of this team was divided into three topics, namely:

- A) Description of the activities of the Joint Committee on Agricultural Development

B) Description of the Activities of the Joint Research Committee

C) Recommendations and comments from the discussants

The discussion group drew heavily on comments from Dr. Woods Thomas, Executive Director of BIFAD, relating to the guidelines currently being developed by BIFAD. A draft version of these were distributed at the end of the Conference. The team did not have a copy of these guidelines during the discussion.

BIFAD has established two committees. One is the Joint Committee on Agricultural Development and the second is the Joint Research Committee. Since these two committees will be heavily involved in the process of identifying recipient countries, participating U. S. universities and projects to be undertaken, it seems relevant to first outline a tentative procedure by which these two committees will operate.

It was made clear that the evolving guidelines being developed by BIFAD were subject to revision and needed the constructive comment of all parties involved. The provisional guidelines appear in Appendix F.

A) The Joint Committee on Agricultural Development

The following is a list of activities the JCAD will carry out:

1. Identify and prioritize development issues, develop and maintain a list of countries eligible for Title XII assistance.
2. For each such country, develop a list of universities and/or consortia which are capable of delivering development projects for the individual countries.
3. Develop a short list of universities and/or consortia for each eligible country and recommend them to BIFAD.

A next step will be for the BIFAD to select a university, a group of universities or a consortium, to undertake a "sector analysis and planning phase" of work. The comprehensiveness of such "sector analyses" can vary substantially depending on the circumstances. They might, for example, be broadly interdisciplinary dealing with agriculture, nutrition, education, employment, etc., or they might be more narrowly centered on single commodity or resource problem situation.

Following the completion of the sector analysis, activity the BIFAD will ask the JCAD to:

- a. Take the leadership in drawing together a rather specific country-by-country agenda for high priority research projects. This might be described as the development of a priority list of development projects on a continuing basis.
- b. Select a short list of eligible universities and/or consortia to proceed with the further development and implementation of specific projects.

During the discussion on the activities it was suggested by members of our discussion group that BIFAD should develop a list of universities and/or consortia with expertise on a "functional" basis as well as on a "country expertise" basis. In fact, some discussion group members thought the functional capability was the more important one and could generally be implemented in more than one country.

B) The Joint-Research Committee

The following is a list of activities this committee will pursue:

1. Undertake to deal primarily with issues that are clearly of a "research" nature. Obviously, some problem and/or project situations in the LDC's would not fall easily into strictly a "research" or a "development" categorization.
2. The Joint Research Committee (in close liaison with the universities and with recipient countries) will proceed to lay out a prioritized research agenda for the issues to be addressed under Title XII.
3. The Joint Research Committee will then proceed to identify those institutions or combinations of institutions which can best handle the research undertakings which have been identified.
4. BIFAD, through the Joint Research Committee, might at least in some cases, proceed to recommend the approval of a planning or development grant which the relevant university, or consortium would use for the purpose of further developing and specifying a research proposal to be funded under Title XII. It is expected that such an activity would involve joint participation by the contractor, BIFAD, the recipient country or countries and USAID.

C) Recommendations and comments from the discussants

1. It is important that in the implementation of Title XII we do not go back to square one in the process of project development. Rather, we need to build on the development experience which has been acquired over the last two or three decades. And, procedures need to be found to effectively draw this experience into our planning.
2. The program of work under Title XII should include at least the following categories of work:
  - a. Institution building
  - b. Technology transfer
  - c. Training
  - d. Planning and policy analysis

And, in the final analysis, host countries will be important determiners of which program activities are approved or rejected. The point being made here is that Title XII projects cannot be viewed simply as research, teaching and extension projects, but need to be considered as "relevant development projects"

3. Mechanisms need to be provided for modifying the set of project priorities and guidelines over time. And, effective evaluative mechanisms need to be built into the project design. This includes university, AID and LDC evaluations.
4. Procedures need to be evolved to insure the consideration in development projects of socio-economic issues, family living issues, nutrition and quality of life issues, etc. This is to say that these topics are important in both development programs and strategies, on the one hand, and in research projects, on the other hand. The project agenda should not be limited solely to issues of crop and animal (food) production.
5. We need to find procedures for improving the flow of information to BIFAD and to participating universities and AID from people intimately connected with problems in the LDC's. This would include local extension workers, etc.
6. The international research centers will have an increasingly important interest in and need for having the results of their work and projects disseminated through country projects. Thus, the development of many Title XII projects needs to be in close liaison with the International Agricultural Research Centers.
7. A procedural issue was raised relative to the appropriateness of a university or consortium being involved both in 1) the initial sector analysis phase of a Title XII effort and 2) in subsequent specific development projects for the same country. The consensus seemed to be that the same university should, in many cases, be involved in both phases of Title XII activities but that an appropriate mechanism for dealing with such dual participation needs to be developed.
8. The BIFAD, and especially the Joint Research Committee is reviewing the several studies which have been previously conducted to develop a listing of needed assistance for LDC's in the food and nutrition area. They expect to utilize the results of these studies, such as the National Academy of Science's study, etc., in Title XII program development.
9. Finally, a member of the North Central Technical Research Committee working on "integrated pest management" indicated the interest in this Committee in undertaking an integrated pest management project for maize in Latin America. This suggests that the BIFAD will need to develop procedures for handling a wide range of consortia and/or administrative units if it is to maximize the potential for Title XII.

## DISCUSSION TEAM #5

- Recorder: Elwood Caldwell, Head, Department of Food Science and Nutrition, University of Minnesota
- Chairman: R. D. Morrison, President, Alabama A & M - Normal
- Discussants: Clifton Wharton, BIFAD, Chairman, Michigan State University  
Daniel Chaij, Chief of Rural Development, Latin American Bureau, AID  
Hezekiah Jackson, Dean, College of Agriculture, Southern University, Louisiana  
Bruce Anderson, Director, International Programs, Utah State University  
Joan Egner, Associate Director of Research, Cornell University New York  
Richard Merritt, Director, Resident Instruction, Rutgers University, New Jersey  
Cecile Hoover Edwards, Dean, School of Human Ecology, Howard University, Washington, D. C.  
W. C. Godley, Associate Dean and Director, Experiment Station Clemson, South Carolina  
John Beeks, Chairman, Department of Agriculture, N. W. Missouri State

### Issues Assigned for Discussion: Consortial Arrangements and the Special Concerns of the 1890 Colleges

-Will a given set of institutions be allocated funding on a formula basis, or will programs be developed on a "commodity" and "expertise" basis (so that a consortium of institutions might be involved with a given set of goals)?

-What are the advantages and disadvantages of a consortium of universities as opposed to individual foreign assistance contracts?

-The Universities must come to some conclusions about the nature of desirable consortial arrangements particularly as they facilitate or hinder long-term commitments in developing nations.

-What will comprise the incentives and mechanisms through which flexible, problem-oriented consortia of land-grant universities and other domestic and international institutional participants can be easily created, maintained and reorganized consistently to provide the best possible resources to approach changing Title XII needs, as well as to accurately and speedily identify these needs?

-How does an institution not previously involved in international training become involved in Title XII? Recognizing that smaller land-grant institutions and the colleges of 1890 frequently emphasize agricultural production, farm management and practice, and low income farming techniques -- needed by the developing nations -- how can these institutions compete successfully or contribute cooperatively with the larger universities that have a substantial commitment in international programs and institution-building programs?

Discussion Summary:

The discussion centered around the problems of participation. The overall issue addressed was one of selection of participants for international projects. There was a feeling that certain groups (i.e., the small colleges, the non-agricultural sciences and the experienced individuals who may lack the proper credentials) have not been called upon to participate as much as they might. Thus, organizational alternatives were discussed which might bring about major changes in selection and participation patterns. It was implied that such changes in procedures may well make the difference in meeting Title XII objectives.

The discussion centered around the following topics:

- A) Overall objectives of Title XII -- defining the problem
  - B) Making use of existing expertise in all areas
  - C) Consortia arrangements
  - D) Participation of smaller institutions
- A) Overall objectives of Title XII -- defining the problem
1. Although much of the discussion at the conference seems to have been oriented to food, it was pointed out that the objective of Title XII programs is to improve human nutrition and income by way of agriculture. The objective is not agriculture, but well-being.
  2. The challenge is how to define the problem in the LDC and find the organizational configuration at home which will best permit the full utilization of U. S. expertise in a variety of institutions.
- B) Making use of existing expertise in all areas
1. Depending upon how the problem is defined, how does BIFAD or its designated authority, locate the appropriate expertise? If the rural world is defined as a system, how do the experts various parts of that system get identified and selected?
  2. What seems to be needed is a roster or catalog of problems, institutional opportunities and individual unit capabilities for international assistance. This catalog needs to include not only members of technical fields but also members of such fields as nutrition, social science, economics, etc. It should include both the major universities, as well as the smaller colleges and individual skilled persons.
  3. To this end, BIFAD and AID have proposed to compile a catalog of opportunities for international assistance that would include various sizes and capacities of institutions. The 1890 institutions will also be included and will not and should not serve as a source of manpower for larger institutions.

4. Non-land grant institutions, if not eligible directly, could participate in one of three ways: 1) in a consortium with a land-grant institution, 2) in a consortium of non-land grant institutions, or 3) as a subcontractor.
5. The general conclusion was that there is a great deal of untapped and willing expertise, but what is lacking is 1) a catalog of this expertise and 2) methods of involving the participation of this expertise because it is dispersed throughout numerous small colleges and throughout disciplines in large universities.
6. Another pool of talent is the overseas institutions (in Latin America, especially) which could be loaned to U. S. institutions or consortia to mutual advantage.

C) Consortia Arrangements

1. Description of MUCIA: It was formed in 1963 and involves agriculture as well as other programs. Various mechanisms pull the task forces together. The programs are joint activities with institutions from LDC's. Basic policies are set by the Council (presidents of Minnesota, Michigan State, Wisconsin, Indiana and Ohio State). Contracts are arranged with AID and other agencies just as an individual institution might, but the consortium does not compete with its members. Usually one institution is leader for any one contract. The single most important factor for success is support of the individual member institutions. (provided by John Murdock)
2. Description of CID: It was born in optimism, nurtured in anticipation, lived in frustration, acted in desperation, and appears to have achieved survival and a measure of viability. It is made up of four institutions which failed to secure any contracts on a consortium basis. In 1974, they went full time, adding four more institutions and substantial additional capability as well as problems. (provided by Bruce Anderson).
3. Both Murdock and Anderson said that consortia are not single commodity operations and should not be used for such. They will not be particular targets of Title XII, as will the individual institutions. Consortia have a place in pulling together resources (people primarily) of several institutions. They are not a way around the general problem of staff commitment to international programs vs. to their own career development.
4. MUCIA is putting together a library on consortium activities. It will be limited to institutions of like interests.
5. A question was raised as to whether or not a consortium can serve as a mechanism to bring in institutions or faculty members who would otherwise be without access to the relatively easy kind of inter-institutional arrangement represented by a geographical group.

6. A spokesman from Puerto Rico stated that in their experience the consortium was important in providing opportunities and benefits which went beyond work with tropical soils. They and Hawaii contracted on their own with AID. The consortium helped to overcome island isolation and allowed a symbiotic relationship to develop.
7. AID spokesman Chaij said that it was easier for AID to deal with consortia on research projects, less so on "country" projects. Many of the latter are loan funded. LDC's are cautious on what they buy. Such projects have cost as much as \$100 thousand dollars per man year. The consortium arrangement could possibly increase the cost of technical assistance, and countries are demanding the right to make a choice. Contracts would be primarily between a country and an institution, not between a country and AID or even between a country and a consortium.
8. It was pointed out by Wharton that the consortium will be only one of many possible institutional arrangements and the number of projects handled through it would still be in the minority in any one institution. He listed the following advantages to consortial arrangements:
  - a) helping reduce possible sensitive problems or issues on campus or questions of crop competition with in-state agriculture,
  - b) allowing a mix of individual strengths,
  - c) helping to locate expertise, in a situation where all campuses have the same departments but differing mixes of concerns so that the consortium could be a vehicle for international involvement of their host institution,
  - d) universities have staffed contracts with other than regular faculty but a consortium arrangement may allow greater involvement of the "real" or regular faculty in consortium projects,
  - e) host countries may want a single university but may also want the multiple involvement allowed by a consortium arrangement,
  - f) a consortium may call attention within the university to international activities,
  - g) it may allow the development of talent within individual campuses.

BIFAD, however, will not be dominated by consortium considerations. The large majority of the arrangements will be made with single institutions on a contract/subcontract basis.

#### D) Participation of smaller institutions

1. It was questioned exactly to what extent consortial arrangements made it difficult for smaller institutions to participate. In some cases, smaller institutions felt they were used as "second class" members by consortia.

2. In particular, the 1890 institutions have not been involved in the mainstream of international development in an equitable manner. This is partly the result of the definition of the criteria for participation by the larger institutions which dominate the international contracts and set standards. It was urged that this be changed.

## DISCUSSION TEAM #6

- Recorder: David Schuelke, Head, Department of Rhetoric, University of Minnesota
- Chairman: R. J. Delorit, Vice Chancellor, University of Wisconsin, River Falls
- Discussants: James J. O'Connor, BIFAD member, Houston, Texas  
Erven Long, Associate Assistant Administrator for Technical Assistance, AID, Washington, D. C.  
Ken Gilles, Vice President, North Dakota State University  
James Tammen, College of Agriculture, University of Minnesota  
R. J. Delorit, Vice Chancellor, University of Wisconsin River Falls  
Hugh Popenoe, Director, International Programs, University of Florida  
Thomas S. Estes, Assistant Director, International Center, Marine Research, University of Rhode Island  
Robert Corell, Director of Sea Grant, University of New Hampshire  
Lowell Watts, Director, Cooperative Extension Service, Colorado State University  
T. E. Hartung, Dean, College of Agriculture, University of Nebraska  
William O. Caster, Professor of Nutrition, University of Georgia  
James Kirkwood, Director, Agricultural and Applied Programs, Ft. Valley State College

### Issue Assigned for Discussion: Guidelines For Participation

-Specific guidelines for the participation of universities in the Title XII activities should be developed.

-Will universities be required to justify their participation in Title XII work through delivery of hard proof of competence such as a history of foreign experience, bibliographic information on each individual to be used, facilities on campus, specialities, etc.?

-Will guidelines be made available to guide decision makers in allocating resources within participating universities between teaching, research and extension?

### Discussion Summary:

The guidelines for participation must include both the land-grant colleges as well as other programs and individuals who have expertise to lend.

Support for international involvement and programmatic development is a responsibility of the agricultural "establishment" college and university administrators, AID, BIFAD and the taxpayers through the legislators who fund programs of research and instruction in the colleges and universities who will be involved.

The discussion of guidelines centered on four major factors which need to be addressed:

- A) The criteria by which participation will be determined -- competition or otherwise?
- B) University communication processes with BIFAD
- C) Proper utilization of all existing resources
- D) Accountability and project evaluation

Much of the discussion served as an exchange of information particularly between the representatives of AID and BIFAD and other knowledgeable individuals. However, several specific recommendations for future procedures did emerge.

- A) The criteria by which participation will be determined -- competition or otherwise?
  - 1. Participation should be dependent upon three factors
    - a. quality of existing university programs
    - b. degree of commitment of individuals (investigations)
    - c. extent of integration with countries where programs will take place.
  - 2. There needs to be a person-to-person involvement with individuals from other countries -- perhaps a way is to bring individuals from other countries to the university for two to three months to explore mutual needs and concerns.
  - 3. There will be some competition for projects because institutions have variable experiences and strengths.
  - 4. Under some circumstances, the proposal process will be appropriate, however, there will be several mechanisms utilized for project selection. This is where innovative ideas are needed.
  - 5. With respect to country programs, the university should make a case for its involvement in specific areas.
  - 6. With respect to research, AID is always willing to receive proposals for research.

Recommendations:

- 1. There should be an opportunity for co-participation among several universities in delivery.
- 2. There should be development by institutions of areas of expertise and preferences for countries and areas of the world.

- B) Communication and information dissemination between universities and BIFAD and AID.
1. BIFAD should have a catalog (roster) of interested and committed individuals with expertise.
  2. Communication between BIFAD, AID and universities needs to be improved.
  3. At present, data has been gathered via institutional questionnaires, but individuals need to know what is needed by countries.
  4. AID has not done a good job of informing the universities of LDC needs.
  5. Other methods for gathering and disseminating information are also needed -- computerized data banks, advertisements in Science magazine and others. It is important to be inclusive and provide for individual input.
  6. Consortia arrangements can be useful here as they can use their information networks, particularly where small institutions are involved.

Recommendations:

1. A computer data bank is needed for storage of information on both universities, countries, individuals and projects.

C) Proper utilization of existing resources

1. Before the proper utilization of existing resources can take place, it is necessary for the universities to straighten out some internal problems and answer some questions.
  - a. They have to make decisions about the directions they wish to go and set priorities.
  - b. They have to make sure that individuals' personal and professional careers do not suffer through international involvement.
  - c. They have to get full support of the trustees and commitment of the faculty.
2. A means is needed for intercultural collegial and interdisciplinary interaction in order to achieve proper involvement.
3. Within institutions, a search should be made for trained individuals in various disciplines within and outside of agriculture, as well as AID alumni and others.
4. Methods need to be developed for tapping the expertise of the 1890 institutions and other small colleges. One such means is a consortium such as the Southeast Consortium on International Activities.

5. Universities need to develop and facilitate interaction with staff and faculties of other countries.
6. There have to be systems where a half a dozen universities work with several countries in a particular region. "Flexibility" is the key here.
7. Closer ties on campuses with international students ought to be developed.

D) Accountability and project evaluation

1. Some decisions need to be made regarding accountability. Who will monitor the progress of projects? Dean of the college? BIFAD? AID?
2. There is a definite need to evaluate the performance of individuals and project; some kind of criteria for evaluation from outside needs to be developed.

Recommendation:

1. A system for evaluating projects in the field and of individuals and institutions from the U. S. has to be developed.

## AD HOC DISCUSSION GROUP

This discussion was not on the program. It was announced during the Friday afternoon formal session and was held in the evening, Friday, May 6. It was attended by approximately fifty-five persons from different organizations and disciplines.

Topic: Organizational and Socio-economic Aspects of Development and Title XII

Recorder: Olga Stavrakis, Research Fellow, Institute of Agriculture, Forestry and Home Economics, University of Minnesota

The following issues were discussed:

- A) The role of women in U. S. agricultural institutions and the role of women in LDC's
- B) Constraints and possibilities for interdisciplinary approaches to development
- C) Problem identification in the field -- How the rural problem is defined.

Toward the end of the discussion, it became evident that these three factors were closely related. Through the historical development of international aid programs, it has happened that the total responsibility for identifying the problems in the field, for providing personnel and for providing the disciplinary tools has fallen largely to relatively few disciplines within a few large influential institutions; i.e., the technical agricultural sciences particularly in the large land-grant institutions. These have, together with AID, foundations and other agencies, formed what might be called a "core network."

It is in the existence of the core network of large institutions which carry out work in a traditional manner that the problems of women, the 1890 land-grant institutions and the interdisciplinary approaches lie. Even though, these institutions have an excellent record in domestic development of agriculture, the international endeavor has always been somewhat of a peripheral operation characterized by financial incentives luring specific technical individuals into what has often been perceived as a hostile arena. AID and the other agencies have not encouraged and facilitated the participation of those outside the core network of technical agricultural sciences and large land-grant institutions. The disciplinary structure itself has not been able to produce a technical individual sensitive to cultural factors other than those of his own society. At the same time, the social sciences which could have been providing the additional research and training have not felt that applied work equaled the theoretical in academic integrity. Further, information on projects, announcements and personnel selection pass through only a narrow information network.

As a result, not only funding and information are controlled by the core network institutions, but also the definition of what is "proper" and "pertinent" research and what would be appropriate qualifications for personnel. Because the large institutions maintain control of the decision-making positions, (by providing each other with graduate students and exchanging colleagues), set the standards for research and define qualifications for positions, it is very difficult for marginalized groups within this society to participate in a meaningful manner. They are easily defined as "unqualified" because their work is not along the lines of defined criteria and therefore, it is "not up to standard." However, even if such individuals do not fit the standard qualifications in all cases, they may have additional skills of value to development. Although there are a number of highly qualified technical and non-technical women, blacks and others outside the core network, they are difficult to locate and a special effort must be made to reach them. Those who have more general training, but who have valuable experience in LDC's or comparable situations within our own country can easily be additionally trained and can serve as valuable additions to technical teams overseas.

If the purpose of the Title XII programs is to eliminate poverty and malnutrition, and if the mandate of PI 94-161 is to be adhered to, then it is necessary to examine the factors which have limited project success in the past. It became evident during the discussion that a number of internal organizational factors within and among our own academic institutions and funding agencies, may have served to limit the success of past projects.

#### Discussion Summary:

- A) The role of women in U. S. agricultural institutions and the role of women in LDC's
1. Much of the failure of past projects has been related to the aggravation of the conditions of women who have traditionally played an important role in agriculture as well as in politics in LDC's.
  2. The lack of emphasis upon women is related to the inability of our own agricultural systems to incorporate women due to the so-called "victorian" definition of the women's role as being purely domestic. In developing countries, there is no such definition, although division of labor is always present and male and female activities are clearly defined.

#### Recommendations:

1. That women be included in the agricultural sciences in the United States, and actively involved in international development projects at all levels. There seems to be no compelling need to perpetuate the victorian division of labor and a redefinition is in order. It is particularly important to have women at high levels in order to encourage other women and to serve as role models. It was noted in the discussion that women tend

to take subordinate roles in meetings and conferences where the higher level positions are dominated by males.

- B) Constraints and possibilities for interdisciplinary approaches to development
1. There was some discussion of AID selection criteria of disciplines for field work. AID representatives pointed out that for the last ten years there has been a policy to include social scientists on their teams and to include women. It was said few contracts adhered to this policy.
  2. To some extent the problem was a result of the lower status applied work in social sciences has traditionally held. In anthropology, for example, it has been evident in the last decade that applied research has been on the rise, although with difficulty.
  3. Another reason for the problem is the traditional nature of the technical teams that are sent abroad. Because of the manner in which contracts are announced and negotiated (through a network of friends and colleagues), neither women, nor 1890 land-grant institutions, nor non-agricultural sciences can easily learn about opportunities in a timely fashion.
  4. AID representatives pointed out that the problems also lie within the universities where members of different disciplines will not work together, and often cannot even talk to each other. This was confirmed by the group, but it was also pointed out that at least two institutions have tried to break down these barriers with varying degrees of success: Berkeley and Minnesota.

Minnesota has a faculty interdisciplinary group which discusses national and international research problems pertinent to the university. Berkeley has a group of faculty who have organized discussions and classes around major international issues.

#### Recommendations:

1. That the patterns of inclusion and exclusion in terms of international development projects be identified and closely examined, and that communication networks be set up to break down these patterns.
2. That universities make an effort to break their own disciplinary prejudices and form groups of faculty who will work together in the international field.
3. That AID and BIFAD set up procedures which will make decision-making processes overt and above board.
4. That universities consider altering curricula so that they can add to training of technicians who will have an appreciation and understanding of the societal matrix; and so that they can educate social scientists who will have an appreciation and understanding of technological constraints and possibilities.

C) Problem identification in the field -- How the rural problem is defined

1. In the past, the success of projects has been affected adversely by the improper identification of problems in the field. For example, what might have seemed to be a crop problem turned out to be largely a political one; or, a cattle or pig problem may also have been a family labor issue; or, nutritional deficiencies have often been attributed to ignorance and treated with education, whereas they were caused by poverty and had to be treated with work opportunities or fair prices for production. The fact of the matter is that the rural system is a complex one and must be from a number of avenues after careful research and proper problem identification.
2. Too often the problem in the field has been defined by the disciplinary affiliations of those interested in working in the field. Thus, "...if you have an entomologist, you also have a bug problem." "...if you have an animal man, you may also have a pig problem."
3. The proper problem definition requires the input of social scientists as well as that of technical people. It requires a particular skill not found in many individuals, one which needs to be discovered and cultivated with experience and training. It is here that the interdisciplinary nature of the situation is evident. Such skilled people will be rare, but they will be found in a variety of disciplines.

Recommendations:

1. In order to identify the problems in the rural areas properly what specially trained persons are needed who are generalists, having international experience, being familiar with the technical sciences, but having an ability to take a holistic approach.
2. Such persons can be women and technical and non-technical people who may not be pure researchers but have particular abilities in this line of work. They may require additional training as recommended in Section B, recommendation 4.
3. AID and university administrations should advertise projects or potential projects beforehand and seek these people out. They must initiate efforts to include such individuals in the early stages of field assessment.
4. Information on country needs should be made available to all sectors of the national university and college community so that projects can be prepared on a competitive basis from all areas of the academic community, at the faculty level.

## SECTION III - APPENDICES

**APPENDIX A**  
**Conference Program**

THE U.S. UNIVERSITY AND TITLE XII  
A WORKING CONFERENCE ON THE CHANGING ROLE OF THE U.S. UNIVERSITY  
IN INTERNATIONAL FOOD AND AGRICULTURAL DEVELOPMENT UNDER TITLE XII--  
"THE FAMINE PREVENTION AND FREEDOM FROM HUNGER" AMENDMENT TO THE  
FOREIGN ASSISTANCE ACT OF 1961

The Registry Hotel  
Minneapolis/St. Paul  
May 5-7, 1977

Sponsored by: The University of Minnesota in cooperation with The National Association of State Universities and Land Grant Colleges (NASULGC), The Board for International Food and Agricultural Development (BIFAD), The United States Agency for International Development (AID)

Purpose

The conference will:

- o Provide an opportunity for the Board for International Food and Agricultural Development to report on its deliberations, identify emerging issues, and present programs, policies and procedures for the implementation of Title XII legislation;
- o Provide an opportunity for university administrators and faculty to raise questions and discuss issues with members of BIFAD and representatives of AID;
- o Provide an opportunity to identify and discuss various possibilities for effective university involvement in international food and agricultural development through Title XII.

Participation

The conference participants include:

- o Board for International Food and Agricultural Development (BIFAD);
- o Representatives of the Agency for International Development (USAID), the Department of Agriculture (USDA), and other federal agencies;
- o Administrators and faculty from Land-Grant colleges and state universities and other agriculturally related colleges and universities.

Discussion

Six discussion teams will lead discussions with members of BIFAD and representatives of AID during the group discussion periods. Each team will comprise a university president, a dean of agriculture, a director of international programs, a director of resident instruction, a director of an agricultural experiment station, a director of an agricultural extension service, and a home economist. One board member and one staff member of BIFAD, a representative from AID, and a department head from the College of Agriculture, University of Minnesota will also be on the discussion team. The department heads will serve as recorders.

PROGRAM

Thursday Afternoon, May 5, 1977

p.m.

3:00 Registration--Lobby, Registry Hotel.

4:00 Meeting and Get-Acquainted Hour for the Discussion Teams --  
Ballroom

5:30 Get-Acquainted Hour -- Cabana Court

7:00 Dinner -- Ballroom

Presiding: C. Peter Magrath, President, University of Minnesota

Speaker:

Arvonne Fraser, Coordinator, Office of Women in Development,  
Agency for International Development, Department of State

Friday, May 6, 1977

I. Morning Session -- Ballroom

The purpose of this part of the program is to set the stage for the conference and then to hear a progress report from the members of BIFAD. They will raise questions, identify issues, and point out areas where they need assistance and feedback from university representatives. This part of the program has been planned by the Board.

a.m.

7:00 Breakfast Meeting for the Discussion Teams

8:15 General Assembly -- Ballroom

Presiding: William F. Hueg, Jr., Deputy Vice President and Dean,  
Institute of Agriculture, Forestry and Home Economics, University  
of Minnesota

Subject: Mobilizing Resources to Effectively Contribute Toward  
Solving World Hunger and Malnutrition.

8:30 Speakers:

David Bell, Executive Vice President, The Ford Foundation,  
New York

Ermond Hartmans, Director, Agricultural Operations Division,  
FAO, Rome, Italy

- 9:15: Progress Report from BIFAD  
Clifton Wharton, President, Michigan State University,  
and Chairman, BIFAD
- 10:00 Refreshments
- 10:20 BIFAD Committee Reports  
Fred Hutchinson, Vice President, University of Maine,  
and Chairman, Joint Research Committee
- Sherwood O. Berg, President, South Dakota State University,  
and Chairman, Joint Committee on Agricultural Development
- 11:30 General Discussion

## II. Luncheon Session

12:00 noon -- Ballroom

Presiding: John Murdock, University of Wisconsin, and Executive  
Director, MUCIA

Speaker: John Gilligan, Administrator, Agency for International  
Development

## III. Afternoon Session

The purpose of this part of the program is twofold:

- a) to provide an opportunity for university representatives to raise questions and concerns relative to Title XII and to highlight ways in which universities need to be strengthened to effectively respond to the Title XII mandate; and
- b) to provide an opportunity for the discussion teams and the conference participants to enter into a discussion with members of BIFAD and representatives of AID on the issues and questions which have surfaced during the day.

2:00 General Assembly -- Ballroom

Presiding: Lewis Dowdy, President, North Carolina  
A & T State University, Greensboro, North Carolina

Subject: Ways in Which U.S. Universities Need to be  
Strengthened to Effectively Respond to the Title XII  
Mandate



- 10:30      General Assembly -- Ballroom
- Brief Report on University Linkages Study  
            Ralph Smuckler, Dean, International Programs and Studies  
            (on leave to Linkage Study) Michigan State University
- Reports from the Discussion Teams
- 11:30      Looking Ahead:
- D. Woods Thomas, Executive Director, BIFAD
- Erven Long, Federal Officer, AID
- 12:00 noon Conference Adjournment
- 12:15      Luncheon in the Cabana Court

**APPENDIX B**

**Title XII -- "The Famine Prevention and Freedom From Hunger"  
Amendment To The Foreign Assistance Act of 1961**

TITLE XII -- "FAMINE PREVENTION AND FREEDOM FROM HUNGER"

Amendment To The Foreign Assistance Act of 1961

"Sec. 296. General Provisions.(a) The Congress declares that in order to prevent famine and establish freedom from hunger, the United States should strengthen the capacities of the United States' land-grant and other eligible universities in program-related agricultural institutional development and research, consistent with Sections 103 and 103A, should improve their participation in the United States Government's international efforts to apply more effective agricultural sciences to the goal of increasing world food production, and in general should provide increased and longer term support to the application of science to solving food and nutrition problems of the developing countries.

"The Congress so declares because it finds --

"(1) that the establishment, endowment, and continuing support of land-grant universities in the United States by Federal, State, and county governments has led to agricultural progress in this country;

"(2) that land grant and other universities in the United States have demonstrated over many years their ability to cooperate with foreign agricultural institutions in expanding indigenous food production for both domestic and international markets;

"(3) that, in a world of growing population with rising expectations, increased food production and improved distribution, storage, and marketing in the developing countries is necessary not only to prevent hunger but to build the economic base for growth, and moreover, that the greatest potential for increasing world food supplies is in the developing countries where the gap between food need and food supply is the greatest and current yields are lowest;

"(4) that increasing and making more secure the supply of food is of greatest benefit to the poorest majority in the developing world;

"(5) that research, teaching, and extension activities, and appropriate institutional development therefore are prime factors in increasing agricultural production abroad (as well as in the United States) and in improving food distribution, storage, and marketing;

"(6) moreover, that agricultural research abroad has in the past and will continue in the future to provide benefits for agriculture in the United States and that increasing the availability of food of higher nutritional quality is of benefit to all; and

"(7) that universities need a dependable source of Federal funding, as well as other financing, in order to expand, or in some cases to continue, their efforts to assist in increasing agricultural production in developing countries.

"(b) Accordingly, the Congress declares that, in order to prevent famine and establish freedom from hunger, various components must be brought together in order to increase world food production, including --

"(1) strengthening the capabilities of universities to assist in increasing agricultural production in developing countries;

"(2) institution-building programs for development of national and regional agricultural research and extension capacities in developing countries which need assistance;

"(3) international agricultural research centers;

"(4) contract research; and

"(5) research program grants.

"(c) The United States should --

"(1) effectively involve the United States' land-grant and other eligible universities more extensively in each component;

"(2) provide mechanisms for the universities to participate and advise in the planning, development, implementation, and administration of each component; and

"(3) assist such universities in cooperative joint efforts with --

"(A) agricultural institutions in developing nations, and

"(B) regional and international agricultural research centers, directed to strengthening their joint and respective capabilities and to engage them more effectively in research, teaching, and extension activities for solving problems in food production, distribution, storage, marketing, and consumption in agriculturally underdeveloped nations.

"(d) As used in this title, the term 'universities' means those colleges or universities in each state, territory, or possession of the United States, or the District of Columbia, now receiving, or which may hereafter receive, benefits under the Act of July 2, 1862 (known as the First Morrill Act), or the Act of August 30, 1890 (known as the Second Morrill Act), which are commonly known as 'land-grant' universities; institutions now designated or which may hereafter be designated as sea-grant colleges under the Act of October 15, 1966 (known as the National Sea Grant College and Program Act), which are commonly known as sea-grant colleges; and other United States colleges and universities which --

"(1) have demonstrable capacity in teaching, research, and extension activities in the agricultural sciences; and

"(2) can contribute effectively to the attainment of the objectives of this title.

"(e) As used in this title, the term 'Administrator' means the Administrator of the Agency for International Development.

"(f) As used in this title, the term 'agriculture' shall be considered to include aquaculture and fisheries.

"(g) As used in this title, the term 'farmers' shall be considered to include fishermen and other persons employed in cultivating and harvesting food resources from salt and fresh waters.

"Sec. 297. General Authority.--(a) To carry out the purposes of this title, the President is authorized to provide assistance on such terms and conditions as he shall determine --

"(1) to strengthen the capabilities of universities in teaching, research, and extension work to enable them to implement current programs authorized by paragraphs (2), (3), (4), and (5) of this subsection, and those proposed in the report required by section 300 of this title;

"(2) to build and strengthen the institutional capacity and human resource skills of agriculturally developing countries so that these countries may participate more fully in the international agricultural problem-solving effort and to introduce and adapt new solutions to local circumstances;

"(3) to provide program support for long-term collaborative university research on food production, distribution, storage, marketing, and consumption;

"(4) to involve universities more fully in the international network of agricultural science, including the international research centers, the activities of international organizations such as the United Nations Development Program and the Food and Agriculture Organization, and the institutions of agriculturally developing nations; and

"(5) to provide program support for international agricultural research centers, to provide support for research projects identified for specific problem-solving needs, and to develop and strengthen national research systems in the developing countries.

"(b) Programs under this title shall be carried out so as to --

"(1) utilize and strengthen the capabilities of universities in --

"(A) developing capacity in the cooperating nation for classroom teaching in agriculture, plant and animal sciences, human nutrition, and vocational and domestic arts and other relevant fields appropriate to local needs;

"(B) agricultural research to be conducted in the cooperating nations, at international agricultural research centers, or in the United States;

"(C) the planning, initiation, and development of extension services through which information concerning agriculture and related subjects will be made available directly to farmers and farm families in the agriculturally developing nations by means of education and demonstration; or

"(D) the exchange of educators, scientists, and students for the purpose of assisting in successful development in the cooperating nations;

"(2) take into account the value to United States agriculture of such programs, integrating to the extent practicable the programs and financing authorized under this title with those supported by other Federal or State resources so as to maximize the contribution to the development of agriculture in the United States and in agriculturally developing nations; and

"(3) whenever practicable, build on existing programs and institutions including those of the universities and the United States Department of Agriculture and the United States Department of Commerce.

"(c) To the maximum extent practicable, activities under this section shall (1) be designed to achieve the most effective interrelationship among the teaching of agricultural sciences, research, and extension work, (2) focus primarily on the needs of agricultural producers, (3) be adapted to local circumstances, and (4) be carried out within the developing countries.

"(d) The President shall exercise his authority under this section through the Administrator.

"Sec. 298. Board for International Food and Agriculture Development.--

(a) To assist in the administration of the programs authorized by this title, the President shall establish a permanent Board for International Food and Agricultural Development (hereafter in this title referred to as the "Board") consisting of seven members, not less than four to be selected from the universities. Terms of members shall be set by the President at the time of appointment. Members of the Board shall be entitled to such reimbursement for expenses

incurred in the performance of their duties (including per diem in lieu of subsistence while away from their homes or regular place of business) as the President deems appropriate.

"(b) The Board's general areas of responsibility shall include, but not be limited to --

"(1) participating in the planning, development and implementation of,  
 "(2) initiating recommendations for, and  
 "(3) monitoring of,  
 the activities described in section 297 of this title.

"(c) The Board's duties shall include, but not necessarily be limited to --

"(1) participating in the formulation of basic policy, procedures, and criteria for project proposal review, selection, and monitoring;  
 "(2) developing and keeping current a roster of universities --  
 "(A) interested in exploring their potential for collaborative relationships with agricultural institutions, and with scientists working on significant programs designed to increase food production in developing countries.  
 "(B) having capacity in the agricultural sciences,  
 "(C) able to maintain an appropriate balance of teaching, research, and extension functions,  
 "(D) having capacity, experience, and commitment with respect to international agricultural efforts, and  
 "(E) able to contribute to solving the problems addressed by this title;

"(3) recommending which developing nations could benefit from programs carried out under this title, and identifying those nations which have an interest in establishing or developing agricultural institutions which engage in teaching, research, or extension activities;

"(4) reviewing the evaluating memorandums of understanding or other documents that detail the terms and conditions between the Administrator and universities participating in programs under this title;

"(5) reviewing and evaluating agreements and activities authorized by this title and undertaken by universities to assure compliance with the purposes of this title;

"(6) recommending to the Administrator the apportionment of funds under Section 297 of this title; and

"(7) assessing the impact of programs carried out under this title in solving agricultural problems in the developing nations.

"(d) The President may authorize the Board to create such subordinate units as may be necessary for the performance of its duties, including but not limited to the following;

"(1) a Joint Research Committee to participate in the administration and development of the collaborative activities described in Section 297(a) (3) of this title; and

"(2) a Joint Committee on Country Programs which shall assist in the implementation of the bilateral activities described in Sections 297(a) (2), 297(a) (4), and 297(a) (5).

"(e) In addition to any other functions assigned to and agreed to by the Board, the Board shall be consulted in the preparation of the annual report required by Section 300 of this title and on other agricultural development activities related to programs under this title.

"Sec. 299. Authorization.--(a) The President is authorized to use any of the funds hereafter made available under Section 103 of this Act to carry out the purposes of this title. Funds made available for such purposes may be used without regard to the provisions of Sections 110(b), 211(a), and 211(d) of this Act.

"(b) Foreign currencies owned by the United States and determined by the Secretary of the Treasury to be excess to the needs of the United States shall be used to the maximum extent possible in lieu of dollars in carrying out the provisions of this title.

"(c) Assistance authorized under this title shall be in addition to any allotments or grants that may be made under other authorizations.

"(d) Universities may accept the expend funds from other sources, public and private, in order to carry out the purposes of this title. All such funds, both prospective and inhand, shall be periodically disclosed to the Administrator as he shall by regulation require, but no less often than in an annual report.

"Sec. 300. Annual Report.--The President shall transmit to the Congress, not later than April 1 of each year, a report detailing the activities carried out pursuant to this title during the preceding fiscal year and containing a projection of programs and activities to be conducted during the subsequent five fiscal years. Each report shall contain a summary of the activities of the Board established pursuant to Section 298 of this title and may include the separate views of the Board with respect to any aspect of the programs conducted or proposed to be conducted under this title."

**APPENDIX C**

**Document On Scope**

## The Scope of Title XII

There are two facets to a definition of the scope of AID's work covered by Title XII. First is the extent of participation by the Title XII Board, its subordinate units and staff in the development of the U.S. foreign aid program. Second is agreement on program categories which will permit activities to be classified under the Title XII rubric.

This paper synthesizes an earlier background paper prepared by AID and revisions suggested by the Board at its meeting on December 22, 1976.

## The Role of the Board

Section 298, Title XII of the Foreign Assistance Act provides for the establishment of the Board and indicates that its general areas of responsibility shall include, but not be limited to, participating in the planning, development and implementation of, initiating recommendations for and monitoring of the activities described in Section 297. Included is participation in the "...formulation of basic policy, procedures and criteria for project proposal review, selection, and monitoring." The Board has agreed to take a broad view of its role in these matters, one which focuses on advice through participation in the full range of Agency policy formulation and its implementation.

This approach will require participation of the Board in development assistance issues broader than those accounted for under Title XII itself and broader still than those within the confines of Section 103, the Food and Nutrition authorizing legislation. Thus, the Board will have an important role in the planning, programming and evaluation of all Section 103 programs including those accounted for under Title XII. The Board will also review and advise on other development assistance programs such as those funded from the Education and Human Resources Development appropriation where such programs affect issues in Food and Nutrition. Those Supporting Assistance activities which are comparable to Food and Nutrition or Title XII activities also will be within the Board's purview. Finally, the Board will be involved through AID in agricultural development issues of interest to the Board which arise in connection with food aid administered under PL 480.

## Definition of Title XII Activities

Section 299 of the Foreign Assistance Act authorizes the use of Section 103 funds to carry out the purposes of Title XII. The Board has agreed that the purposes of Title XII are quite broad; and, as a result, a broad definition of Section 103 activities included under Title XII is necessary. In general, projects will fall within the definition of Title XII if they are designed to achieve the purposes for which assistance is authorized by Section 297 and involve:

- a. Research, research support and the development of research capacity in the LDC's, the International Agricultural Research Centers and the food and nutrition component of AID's centrally funded research program.

- b. Training and extension.
- c. Advisory services to LDC government ministries on agricultural production and marketing, nutrition projects, and technical assistance for rural development.
- d. New programs under Title XII authorities developed under the leadership of the Board.

To the extent that the research, training and extension activities listed in a. and b., above, have associated capital costs, these costs will be included within the core of Title XII activities. It is anticipated that the capital costs associated with the advisory services referred to in subparagraph c, will not be included in the core of Title XII activities.

In summary, this core of Title XII activities covers all of AID's technical assistance funded from Section 103 with two exceptions and also covers capital costs directly connected with research, training and extension. The two technical assistance exceptions are:

- a. Resources specifically earmarked for support and development of programs administered by private and voluntary organizations; and
- b. Use of the 211 (d) authority (as opposed to the Title XII Authority) to strengthen the capacity of institutions in the United States to develop and carry out programs concerned with economic and social development of less developed countries.

It is recognized that further exception may be identified and agreed to by AID and the Board as experience is gained with the application of these criteria.

Given its broad role, the Board will be involved in planning and programming of the total Food and Nutrition program but will concentrate first on the core of Title XII activities defined above. Less attention is expected to be devoted to capital costs directly associated with such Title XII activities and less still to activities like fertilizer and road construction loans which are not directly related to Title XII activities.

**APPENDIX D**

**The Implications of Eligibility**

(Conforms To BIFAD Comments of January 10, 1977)

### THE IMPLICATIONS OF ELIGIBILITY

There are two dimensions of the issue of eligibility. One is the problem of determining which institutions may be "eligible" under Title XII. In addition to the land-grant and sea-grant institutions specified in the legislation, appropriate criteria and procedures are required to determine which of the "other" institutions have the "demonstrable capacity," etc., to be "eligible." (These are being developed elsewhere.)

The other dimension, to which this paper is addressed, deals with the practical operational differences between eligible and non-eligible institutions in their relationship to the A.I.D. program.

It is clear that the Title XII authority does not preempt any other existing authorities to conduct food and nutrition activities, nor does it diminish the Agency's right under those authorities to involve any institution (eligible or otherwise) in its Food and Nutrition program.

For purposes of programs under Title XII of the Foreign Assistance Act, the practical difference between eligible universities and other institutions\* is as follows:

1. A required minimum of four members of the Board for International Food and Agricultural Development must come from eligible universities. There is no restriction on the institutional connection, if any, of other Board members. Membership on subordinate committees will not be limited to representatives of eligible universities.
2. The authority in Section 297(a) to strengthen U. S. universities is limited to strengthening eligible universities.
3. The authority in Section 297(a) to provide program support for long-term collaborative university research is limited to eligible universities as grantees. (This is a new joint program - distinct from ongoing contract research mentioned in point 5 below - featuring contributions by the participating universities.)
4. Institutions, whether or not they are eligible universities, can participate as contractors to help build and strengthen the institutional capacity and human resources skills of agriculturally developing countries (Section 297(a)(5)).
5. The authority in Section 297(a)(4) to involve universities more fully in the international network of agricultural science is clearly directed to the greater involvement of eligible universities. However, this does not preclude other institutions from participating in these networks as contractors.

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\*Includes non-eligible universities, private firms, governmental agencies, etc.

6. Institutions, whether or not they are eligible universities, can also participate in any activity under Title XII as sub-contractors of an international agricultural research center.
7. Only eligible universities may be included on the roster to be kept by the Board under Section 298(c)(2).
8. Eligibility for Section 211(d) Institutional Grants is not affected by eligibility under the Title XII definition.

It is understood that program decisions on the involvement of both eligible and non-eligible institutions will be based on competence, experience and relevance of their resources to the development objectives of the A.I.D. program.

Regardless of the authority utilized or of the eligibility of the university involved, any activity which fits the definition outlined in the Scope of Title XII paper, would fall under the provisions of Title XII.

AA/TA:EJLong/CHBarker - 1/25/77

**APPENDIX E**

**Approved Document on Subordinate Title XII Committees  
and  
List of Members on the Joint Committees**

## BOARD FOR INTERNATIONAL FOOD AND AGRICULTURAL DEVELOPMENT JOINT COMMITTEE STRUCTURE

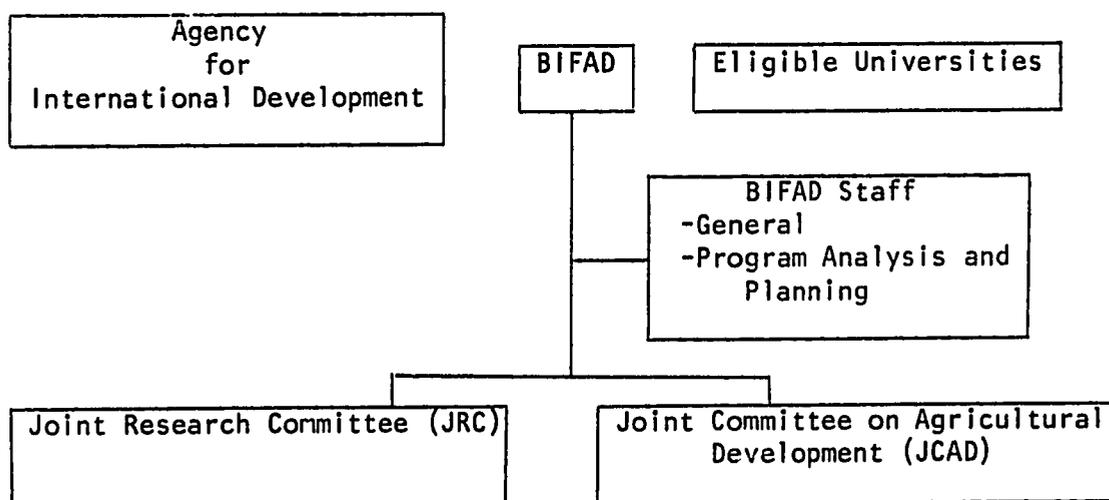
The Title XII Amendment to the Foreign Assistance Act of 1961 indicates that the President may authorize the Board for International Food and Agricultural Development (BIFAD) to create subordinate units necessary to the performance of its duties. The legislation specifies that these subordinate units may include but not be limited to:

- A Joint Research Committee (JRC)
- A Joint Committee on Country Programs (JCCP)

Given the broad scope and complex nature of the responsibilities and duties which the Title XII Amendment assigns the BIFAD, it is clear that a slight variant of the joint committee structure suggested in the legislation would be desirable. Initially, under authorization provided by the Title XII Amendment, the BIFAD will create the following joint committees:

- A Joint Research Committee (JRC)
- A Joint Committee on Agricultural Development (JCAD)

In recognition of the fact that the BIFAD must participate actively in the programming and budgetary processes associated with food, nutrition and agricultural development programs funded through AID, the BIFAD also will establish a special staff group to serve its needs in the program analysis and planning area.



This joint committee and staff structure, appropriately interfaced with existing entities within AID, the university community and the LDC's, will facilitate greatly the discharge of the BIFAD's responsibilities. Organizational and operational aspects of this committee structure are given below.

The Joint Research Committee  
(JRC)

It is the responsibility of the BIFAD to help mobilize and deploy U.S. scientific capacity in order to make maximum contributions to the eventual solution of the world food, nutrition and agricultural development problems. The Board's responsibilities and duties cover a broad spectrum of agricultural research activities authorized, funded and implemented by AID. This spectrum includes support of the International Agricultural Research Centers, centrally funded research contracts and grants, and country-specific and/or region-specific research funded through regular and special budgets of individual AID Missions and Regional Bureaus. Additionally, the BIFAD has participatory responsibilities for developing and implementing collaborative research support programs newly authorized by the Title XII Amendment and to strengthen U.S. universities to perform this function.

The JRC will be concerned with all Title XII research activities directed toward the discovery of new knowledge and development of technology useful to the developing countries. The Joint Committee on Agricultural Development (JCAD) will be concerned with the expansion of institutional capacity in the LDC's to adapt such knowledge and technology to local conditions and to assure its delivery to producers, processors, distributors and consumers. Arrangements will be made to provide essential interaction between the JRC and the JCAD at this interface.

The BIFAD must be in a position to consider the total LDC-oriented agricultural research commitment of the U.S. if it is to participate effectively in the management of this significant aspect of the U.S. bilateral assistance program. The Joint Research Committee (JRC) will serve the BIFAD in all ways essential to the discharge of this responsibility.

Roles of the JRC

The JRC will play several roles. Important among these will be:

1. To participate in the administration and development of the collaborative research activities described in Section 297(a), (3) of the Title XII Amendment. It will assist the BIFAD in conceptualizing, planning and implementing the collaborative Research Support programs authorized in Section 298(d), (3) of Title XII. It will participate in the identification of research needs as well as in program selection, development implementation and evaluation.
2. To participate in the continued development and implementation of other research activities directed toward the solution of food, nutrition and agricultural development problems of the developing nations. Included

will be all relevant research activities supported by AID through centrally funded research contracts and grants and country-specific or region-specific research funded through regular and special budgetary allocations of the AID Missions and Regional Bureaus.

The JRC will serve the BIFAD by identifying opportunities for research to be mounted through these authorizations, participating in essential review, monitoring and evaluation processes and providing specific recommendations relative to research programs and projects of this type to be included in annual and 5 year programs and budgetary projections for Title XII.

3. To serve the BIFAD in meeting its responsibility "to provide program support for international agricultural research centers." The JRC will develop mechanisms essential to understanding and evaluating the research and outreach activities of the International Agricultural Research Centers, strengthening the relationships between the cognizant programs of the Centers and U.S. universities involved in Title XII programs, assessing the trade-offs between investment of Title XII resources in Center-based research and alternative research programs and participating in the programmatic decision-making processes of the Centers.
4. To assist the BIFAD in discharging its responsibility to strengthen the capacity of Title XII-participating U.S. universities to contribute to the generation of the body of knowledge and applicable technology essential to the amelioration of world food and related problems. It will help devise innovative, non-traditional mechanisms for providing federal (AID) funding to U.S. universities for long-term support of scientific staff, research programs, graduate training activities and the like.
5. To develop for the BIFAD such analysis as it may request, including but not limited to, those dealing with desirable Title XII research program and budgetary projections.

To play these roles, the JRC will need to perform several specific functions. Such will be elaborated in collaboration with the BIFAD and its staff.

#### Organization and Composition

Selection of members of the JRC will be guided by the specific talents required to play the essential roles of the Committee. As a group, the JRC should have in-depth understanding of food and nutrition, by training or experience, and should understand the development process and the role of agriculture in it. Members should have an understanding of the research

process and the nature of agricultural and fishery research.

JRC members should have recognized stature in and the respect of their parent organizations and professional colleagues. The University component of the JRC should include representation of the Agricultural Experiment Stations and research coordinating units of 1890 and other institutions. Agricultural deans, international agriculture directors and sea grant directors should also be represented. The JRC should include individuals representing a broad range of relevant scientific disciplines and in-depth knowledge of the scientific needs of the LDC's in the several geographic regions of the world.

#### Membership

- 5 members from AID;
- 9 members from universities;
- 3 members from USDA;
- 1 member representing the National Oceanographic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce;
- 1 member representing the Consultative Group on International Agricultural Research (CGIAR);
- 1 member representing the private agricultural sector.

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20 members in total

#### Appointments

JRC members will be appointed jointly by the AID Administrator and the Chairman of the BIFAD.

#### Terms of Office

The terms of office of non-university representatives will be determined by the parent agency. Terms for university representatives initially will be for three, four and five years, with three-year terms thereafter.

#### Chairmanship

The Chairman of the JRC will be designated by the BIFAD.

#### Joint Committee on Agricultural Development (JCAD)

The Title XII legislation places major responsibility on the BIFAD and U.S. universities for effective participation in the expansion of world food supplies, improving human nutrition and accelerating agricultural development in the poor nations. In virtually all cases, this will involve assistance in developing and strengthening the public and private agricultural

infrastructure, including that essential to the fishery sub-sector. It will also involve human resource development at a variety of levels. Functionally, the key sets of institutions are those required to (a) provide an adequate supply of appropriately trained professionals, (b) develop location-specific technology capable of sharply increasing productivity, output and income, (c) deliver to private and public decision-makers and action-takers packages of appropriate technology and related information, and (d) provide other essential services on the input and output sides of the production, processing, distribution and consumption process.

In the developing countries these services are provided through a variety of institutional forms which seldom coincide, structurally, with the cognizant institutional forms characteristic of the United States. However, the functions to be performed and the services to be provided tend to be identical. Few sound developmental assistance activities can be neatly packaged into extension, teaching or research program development projects; rather, they tend to require two or more such elements to avoid exacerbating typical fragmentation of these services.

The fundamental expertise in the relevant U.S. research and education community is institutionalized in the traditional "teaching," "research," "extension" trilogy. To service well the development needs of the poor nations and, simultaneously, to tap effectively U. S. institutional expertise, the BIFAD should have a permanent joint committee capable of bridging this structural gap. The Joint Committee on Agricultural Development has been designed with this in mind.

#### Roles of the JCAD

The Joint Committee on Agricultural Development will have the following roles:

1. To participate in the identification of priority needs for institutional development in the LDC's to assure adequate internal capacity for human resource development, research, the delivery of information and technology to end-users and such other services as may be required for the rapid modernization of agriculture.

The JCAD will assist the BIFAD in a country-by-country assessment of priority needs for strengthening agricultural institutions.

2. To participate in the conceptualization and design of Title XII projects and programs directed toward meeting such needs. In performing this role, the JCAD may:
  - review, appraise and advise BIFAD on the status of AID-supported country programs involving institutional development activities,

- identify the primary constraints to technology transfer and agricultural development and conceptualize new approaches to removing such constraints,
  - participate in monitoring and evaluating technical assistance programs designed to strengthen education, extension, research and related institutions,
  - assess existing AID program formulation and review processes in this area and recommend desirable modifications.
3. To evaluate the interest and capacity of eligible U.S. universities to participate in country problem analysis as well as project conceptualization, design and implementation. It will assist the BIFAD in "matching up" U.S. universities and Title XII country programs and projects.
  4. To identify areas in which U.S. universities must be strengthened if they are to be effective in the development of essential agricultural and related institutions and national systems in the LDC's. Further, the JCAD will assist the BIFAD in devising programs and procedures capable of achieving this end.
  5. To assist the BIFAD in the development of policies, practices and programs which will assure the most efficient use of Title XII funds invested in formal and informal education of LDC personnel in the U.S. and elsewhere.
  6. To determine ways and means whereby Title XII activities may be utilized to provide international professional experience for young U.S. agriculturalists and for agricultural scientists, educators and administrators.
  7. To respond to the BIFAD as requested in receiving, reviewing and acting on country program and project proposals.
  8. To assist the BIFAD in the effective integration of agricultural research and development programs implemented under Title XII authorizations with complementary development activities such as those implemented under Title XII authorizations with complementary development activities such as those implemented under P.L. 480, farmer-to-farmer programs, and private voluntary organizations.
  9. To develop for the BIFAD such analyses as it may request, including but not limited to, those dealing with desirable country programs and budgetary projections.

#### Organization and Composition

The JCAD will play a set of roles requiring a broad spectrum of professional training, experience and understanding on the part of its members. Corporately, the JCAD should have expertise in the range of agricultural

sciences, social as well as bio-physical, and in the educational, research and extension functions as such relate to the development process. This expertise should incorporate in-depth experience in these areas in both the U.S. system and in systems characteristic of developing nations in the several geographic regions of the world.

JCAD members should have recognized stature in and the respect of their parent organizations and professional colleagues. The university component of the JCAD should include representatives of the international programs, resident instruction, extension and research divisions of the agricultural complexes of eligible universities.

Given the scope of responsibility of the JCAD, it will require access to additional talent and expertise in the form of short-term consultants, panels and study groups. These may be drawn from appropriate extension, instructional, research and development personnel as required.

#### Membership

9 members from universities;  
7 members from AID;  
2 members from USDA;  
1 member from the private agricultural sector;  
2 members from the voluntary organizations.  
1 NOAA

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22 total

#### Appointments

JCAD members will be appointed jointly by the AID Administrator and the Chairman of BIFAD.

#### Terms of Office

The terms of office of non-university representatives will be determined by the parent agency. Terms for university representatives initially will be for three, four and five years, with three-year terms thereafter.

#### Chairmanship

The Chairman of the JCAD will be designated by the BIFAD.

#### Staff Group for Program Analysis and Planning

The BIFAD is charged with numerous responsibilities for participating in planning, developing and implementing the food, nutrition and agricultural development programs funded through AID. It follows that the Board must have some means of objectively evaluating Title XII programs and projects to determine if U.S. resources are being utilized in optimal fashion. It must also have an effective means of identifying new, high-payoff investment opportunities in agricultural development abroad. Further,

it must have a means of assessing the degree to which U. S. bilateral efforts are complementary to the agricultural development activities of other organizations and if the Title XII program is, in fact, doing those things in which the U.S. has a true comparative advantage.

To serve the BIFAD's needs in this area, it is imperative that a staff group charged with specific analytical and planning responsibilities be created to work in partnership with AID.

#### Roles of the Staff Group

The staff group on program analysis and planning will:

1. Assess the needs of the agricultural sectors of developing countries utilizing sector analyses and other available studies and information. It may also commission special studies and analyses as required.
2. Determine priority opportunities for Title XII projects and programs for recommendation to the BIFAD.
3. Recommend to the BIFAD desirable modifications of ongoing programs and new programs which should be developed.
4. Conduct objective analyses of Title XII activities to determine the degree to which they are effective.
5. Provide the BIFAD with objective analyses of complementary, competitive or substitutive relationships among Title XII activities and other developmental initiatives in cooperating countries, in the international centers and in institutions involved in centrally funded research and development activities.
6. Participate in short-term and long-term planning exercises for Title XII and related programs.
7. Develop for the BIFAD, such analyses and reports as it may request including, but not limited to, those dealing with desirable Title XII programs and funded allocations. In conducting such work, it will work closely with the JRC and the JCAD.

## JOINT COMMITTEE ON AGRICULTURAL DEVELOPMENT

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- John T. Murdock, Executive Director of MUCIA and Director of International Programs in Agriculture, University of Wisconsin
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- Harold F. Robinson, Chancellor, Western Carolina University
- L. H. Watts, Director, Agricultural Extension Service, Colorado State University
- Daniel Chaij, Agricultural Development Officer, Latin America Bureau, AID
- Rollo Ehrich, Agricultural Economist, Asia Bureau, AID
- Leon F. Hesser, Director, Office of Agriculture, TAD, AID
- Hariadene Johnson, Assistant Director, Office of Development Resources, Africa Bureau, AID
- Russell O. Olson, Chief, Agriculture Division, Technical Office, Near East Bureau, AID
- Ludwig Rudel, Health Development Officer, Office of Nutrition, TAD, AID
- Alfred D. White, Deputy Assistant Administrator, Near East Bureau, AID
- Lawrence E. McGary, PASA Coordinator, ES, USDA
- Lyle Schertz, Deputy Administrator, ERS, USDA
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- J. D. Noel, Regional Director, Catholic Relief Services
- James Storer, Special Assistant, International Affairs

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John S. Balis, Agricultural Development Officer, Latin America Bureau, AID

Irwin Hornstein, Deputy Director, Office of Nutrition, TAB, AID

Mary C. Kilgour, Research Evaluation Officer, Office of Rural Development,  
TAB, AID

Woodrow W. Leake, Agricultural Development Office, Africa Bureau, AID

C. W. Carlson, Assistant Administrator, ARS, USDA

Kenneth R. Farrell, Deputy Administrator, ERS, USDA

Clare I. Harris, Deputy Administrator, CSRS, USDA

Lowell S. Hardin, Program Officer, International Division, Ford Foundation

N. Osteriso, Director, Office of Sea Grants, NOAA

**APPENDIX F**

**Provisional Guidelines and Procedures**

U. S. UNIVERSITY PARTICIPATION IN TITLE XII PROGRAMS  
Provisional Guidelines and Procedures<sup>1</sup>

The Title XII Amendment to the Foreign Assistance Act mandates a substantial expansion in the involvement of U. S. universities in food, nutrition and agricultural development programs in the developing nations. The amendment emphasizes the mobilization of the scientific talents of the U. S. agricultural research community to resolve priority problems hindering progress of the rural poor. It also emphasizes increased U. S. university participation in the creation of national systems of agricultural education, extension, research and other services essential to rural development. The legislation identifies U. S. land-grant and sea-grant colleges and other agricultural institutions having demonstrable capacity in education, research and extension as the institutions best qualified for these purposes. This indicates a need for innovative forms of university involvement including long-term commitment, expansion of capacity and appropriate association of the large and small and the internationally experienced and inexperienced institutions.

The Title XII Amendment authorized the creation of a Board for International Food and Agricultural Development and such subordinate units as the Board might require in the discharge of its several duties and responsibilities. The Board participates with the Agency for International Development in formulating policies, identifying priority problems and carrying out the planning, design, implementation and evaluation of Title XII programs.

The Board meets regularly with the principal administrative officers of the Agency in carrying out the objectives of the legislation. To assist in this process, the Board has created subordinate units including a Joint Research Committee, a Joint Committee on Agricultural Development and a professional staff.

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1) This set of provisional guidelines and procedures is designed to provide guidance to the U. S. university community during its early participation in Title XII programs. It does not treat nor is it intended to define participation in these programs by other institutions such as the USDA, NOAA and the private agricultural sector.

The Board and AID have established provisional guidelines and operational procedures to facilitate effective participation of U.S. universities in Title XII activities. These will be modified through time to assure maximum impact on the food, nutrition and development problems of the poor nations.

Opportunities for University Participation  
in Title XII Programs

Food and nutrition activities constitute a major part of the total U.S. development assistance program which, under the "new directions" from Congress, has as its primary focus reaching the largest possible portions of the poor majority with programs that will enhance their benefits from and participation in increased productivity.<sup>2</sup> The Board and the Agency have agreed on the scope of food and nutrition research and development activities to be conducted under Title XII. It constitutes much of the total food and nutrition component and emphasizes the needs of the rural poor. In recent years, U.S. resources for food, nutrition and related agricultural development programs have increased substantially. This provides a substantial spectrum of potential activities in which eligible universities and others might wish to become involved.

Agricultural Development Program Planning

Agricultural development assistance programs must be tailored to the specific needs of particular countries or regions. This requires indepth knowledge of the problems confronting the rural and related sectors of these nations. The assistance program must be based on a sound strategy for U.S. participation and a well-conceived and integrated program of activities in which the U.S. has particular expertise. Continuous study of each country and careful program and project planning are prerequisites to success.

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2) In this regard, Section 302 of Public Law 94-161 amends Section 103 of the Foreign Assistance Act of 1961 by adding subsection (c) which reads "Assistance provided under this section shall be used primarily for activities which are specifically designed to increase the productivity and income of the rural poor, through such means as creation and strengthening of local institutions linked to the regional and national levels; organization of a system of financial institutions which provide both savings and credit services to the poor; stimulation of small, labor-intensive enterprises in rural towns; improvement of marketing facilities and systems; expansion of local or small-scale rural infrastructure and utilities such as farm-to-market roads, and improvement, energy, and storage facilities; establishment of more equitable and more secure land tenure arrangements; and creation and strengthening of systems to provide other services and supplies needed by farmers, such as extension, research, training, fertilizer, water, and improved seed, in ways which assure access to them by small farmers."

U.S. universities have considerable expertise which might be brought to bear on the critical process of planning country programs. Title XII will provide opportunity for U.S. universities to cooperate with host countries and AID Missions in the agricultural development program planning process. Such cooperative work will include comprehensive studies of the rural and related sectors, determination of priority research and development needs and elaboration of the AID country assistance program. Universities involved in the agricultural development program planning process might also participate in the identification, design and execution of specific projects.

#### Agricultural Development Assistance

Title XII offers greatly expanded opportunities for U.S. universities to cooperate with developing nations in agricultural development activities. These activities should be consistent with the "new directions." Specific types of involvement will vary from country to country; however, the spectrum of potential involvements includes:

- (1) participating in programs designed to assure integrated systems of agricultural education, research and extension;
- (2) strengthening educational institutions essential to the development and sustained growth of agriculture;
- (3) expanding the capacity of national agricultural research institutions and systems;
- (4) creating or strengthening national agricultural extension institutions and systems;
- (5) developing or strengthening delivery systems for other services requisite to the modernization of rural areas;
- (6) assisting in the establishment of adequate internal capacity for agricultural sector, program and policy analysis and planning;
- (7) providing professional advisory services for the design, implementation and evaluation of agricultural development programs and projects in host countries;
- (8) conducting project research on problems relevant to specific developing countries.

Title XII places heavy emphasis on activities designed to strengthen internal institutions essential to increase agricultural productivity in the LDC's. While the needs of each country in this respect will be somewhat unique, there is one aspect which deserves special mention. This is the widespread need for the creation of extension education systems which will effectively provide farmers and others in rural areas technical and other types of information and services essential to increased agricultural production, income and standards of living.

### Education and Training Programs

The necessity of expanding the supply of appropriately trained agriculturalists in the developing nations is recognized in the Title XII Amendment. U.S. universities will have opportunity to participate in expanded and improved international education and training programs integrated with Title XII research and technical assistance activities. These may include:

- (1) academic degree programs,
- (2) non-degree academic programs,
- (3) specialized training programs offered in the U.S. and abroad.

Opportunities for including U.S. educators, scientists and young agriculturalists in Title XII programs, abroad and in the United States, will exist. The specific procedures to accomplish these goals are being developed.

### Research on Priority Problems

Lack of useful knowledge and information about a wide range of technical, economic, social, political, organizational and institutional problems constitutes a major barrier to the solution of food, nutrition and rural development problems. Research capacity in the developing nations and in the international research institutions, while expanding, remains inadequate in light of the massive agricultural problems which exist. If these problems are to be resolved in an acceptable period of time, an increased proportion of the massive scientific capacity existing in U.S. agricultural, fisheries and related research institutions must be mobilized and brought to bear on increasing the productive capacity of the rural poor and assuring a more equitable distribution of the benefits of production to the rural poor.

The above facts are explicitly recognized in the Title XII Amendment. Programs to be implemented under Title XII will provide expanded opportunities for the U.S. agricultural research community to participate. This participation will include a variety of research endeavors designed to provide the knowledge base required for the solution of key agricultural problems in the developing nations. Types of possible research involvements include:

- (1) collaborative research support programs linking U.S. universities, developing nation and/or international research institutions to work on physical, biological, economic, social, organizational, institutional and policy problems of mutual interest and significance;

- (2) project research on problems affecting a cross-section of developing nations which may include adaptive or problem-solving research in developing countries in cooperation with host country institutions and cooperative research with the USDA, international agricultural research centers and similar institutions in problem areas where significant complements and mutual benefits exist.

#### General Guidelines for U. S. Universities

The successful implementation of the Title XII program will necessitate forging new relationships among eligible U. S. universities, AID, the Board, host country institutions and international organizations. General guidelines and provisional operational procedures designed to facilitate the establishment of these relationships follow:

- (1) The objective of the Title XII program is to assist the developing nations to achieve more rapidly increased food production, improved human nutrition and broad participatory agricultural development. This objective will be sought through greater involvement of the U. S. agricultural education, research and extension community in relevant research and development programs. Many such involvements, though designed primarily to assist the developing countries, may also be beneficial to participating universities and U. S. agriculture.

- (2) The agricultural development process tends to be long term in nature. Universities desiring to participate should be prepared to make long-term commitments. The Title XII program will be structured to facilitate continuing involvement over time.

- (3) Interested universities should carefully assess their international interests and capacities before committing themselves to participation in Title XII activities.

- (4) Excellence in performance will require objective matching of university interests and talents with Title XII projects and programs. To this end, it will be necessary for universities to provide specific information regarding their particular interests and special capabilities.

- (5) Various configurations of universities and other institutions may be required in the conduct of the Title XII program -- individual institutions;

general purpose consortia; special purpose consortia; and university arrangements with the USDA, non-eligible universities, private business firms, foreign institutions or international institutions. These institutional arrangements should take into full consideration complements among the relative strengths of cooperating members.

(6) University initiative in Title XII activities is encouraged. Such initiatives will be most effective when taken through and with the assistance of mechanisms and procedures established by the Board and AID.

(7) Universities have many valuable ideas relative to research and development activities which would contribute to the attainment of the food, nutrition and development objectives of Title XII. All such ideas will be welcomed. However, resource limitations and program priorities will not permit the development and implementation of all such ideas. To avoid undue investment by universities in the preparation of formal proposals, early informal consultation with the Board and AID on program ideas is strongly encouraged.

(8) The success of the Title XII program will depend upon the degree to which universities will be able to mobilize and deploy essential human and other resources. The Board and AID are committed to creating a set of conditions which will facilitate resource mobilization by universities selected for Title XII programs. Universities will need to examine their internal policies and practices to assure an environment conducive to faculty participation. University interaction with the Board, its subordinate entities and AID on these important matters is strongly encouraged.

#### Operational Guidelines

The Board is developing a roster of U. S. universities eligible for participation in Title XII programs. This roster, along with information provided by the universities on their international interests and capabilities, will be utilized in identifying universities for participation in specific Title XII activities.

The most effective procedures for involving U. S. universities in Title XII programs will evolve with experience and continuing study by the Board, the joint committees and AID. Provisional operational guidelines

have been developed to facilitate early program initiation. The provisional guidelines envision the joint committees playing a central role in guiding universities into the most productive and satisfying types of participation. The Joint Committee on Agricultural Development (JCAD) will focus primarily on agricultural development program planning and development assistance projects within the agriculturally developing nations. The Joint Research Committee (JRC) will concern itself primarily with U. S. university involvement in the world-wide agricultural research network in scientific endeavors having high payoff potential in the developing nations.

Provisional operational guidelines are outlined below for:

- (1) Agricultural Development Program Planning
- (2) Agricultural Development Assistance
- (3) Research on Priority Problems

#### Agricultural Development Program Planning

(1) The Board has directed the Joint Committee on Agricultural Development (JCAD) to develop and maintain a current list of developing countries in which U. S. university participation in the agricultural development program planning process would be valuable. This list will be developed from information provided by the AID regional bureaus and other sources as appropriate.

(2) The JCAD will develop and maintain a list of U. S. universities or consortia having relevant expertise and interest in participating in agricultural development program planning. From this list, the JCAD will recommend a small number of universities or consortia which it believes best qualified to conduct the work in a particular country. In developing this short list, the JCAD will attempt to broaden the base of university participation by combining, where appropriate, experienced and inexperienced and small and large institutions. To the maximum extent feasible, the JCAD will ensure that all interested universities are advised of the opportunity in order to make their interest known. The short list of recommended universities, with appropriate institutional evaluations, will be presented to AID for final selection. The Board will periodically review the universities recommended for participation and those selected by AID.

(3) The university or consortium selected will conduct the required studies and analyses in the country and elsewhere as required. This will be done in cooperation with appropriate host country institutions, the cognizant AID regional bureau.

(4) The Board, through the JCAD and its staff, may wish to participate more directly in the programming process. In order to gain first-hand experience in the programming system overseas, and to observe the performance of U. S. universities in the field, members of the Board, the JCAD or designated experts may wish to observe or participate, as appropriate, in project design, development, review, approval and evaluation. This direct feedback on the programming system and university performance will be valuable to the Board, the JCAD and individual universities in their deliberations on how to improve the effectiveness of the agricultural development program for the rural poor in developing countries.

#### Agricultural Development Assistance

(1) The Board has directed the Joint Committee on Agricultural Development (JCAD), through staff and direct participation in the AID programming and other processes, to identify a country-by-country agenda of high payoff development programs and projects in the conduct of which U. S. universities would have comparative advantage.

(2) The JCAD will develop and maintain a list of U. S. universities or consortia having relevant expertise and interest in participating in agricultural development assistance activities. From this list, the JCAD will recommend a small number of universities or consortia which it believes best qualified to conduct the work associated with a particular country project or program. In developing this short list, the JCAD will attempt to broaden the base of university participation by combining, where appropriate, experienced and inexperienced and small and large institutions. To the maximum extent feasible, the JCAD will ensure that all interested universities are advised of the opportunity in order to make their interest known. The short list of recommended universities, with appropriate institutional evaluations, will be presented to AID for final selection. The Board will periodically review the universities recommended for participation and those selected by AID.

(3) The university or consortium selected will conduct a project planning exercise, cooperatively with the AID country mission and appropriate host country institutions, to design a detailed project proposal.

(4) The project proposal will be submitted by the AID mission to AID/W, where it will be reviewed. The JCAD or its staff may participate in the AID review and approval process. The BIFAD may wish to select certain projects for continuous monitoring, evaluation and study by JCAD as a means of determining project effectiveness and identifying methodological and procedural improvements.

Initial Title XII Country Activities. In order to assure early involvement of universities in Title XII country programs, the Board and AID have agreed to identify a number of initial country activities. Some will consist of university participation in the agricultural development assistance planning process in selected countries; others in the planning and implementation of already identified country projects.

The Joint Committee on Agricultural Development in cooperation with AID regional bureaus, will identify countries (at least one in each geographic region) where there is urgent need for a new or revised agricultural sector assessment. The JCAD will recommend to AID a short list of universities or consortia to be considered for participation in each agricultural sector assessment. Universities or consortia selected will conduct the assessment in collaboration with the AID mission and relevant host country institutions. It is anticipated that the U. S. institutions will remain involved and contribute to the further development of the program in that country over a period of years. This continuing involvement may include the conduct of research and technical assistance projects in that country.

The JCAD, in cooperation with AID regional bureaus, will also select a group of country projects which are consistent with the Title XII principles. These projects may include priority country projects in the early stages of development, ongoing projects which would benefit from university participation or the evaluation and revision of Title XII-type activities. Again, the JCAD will recommend a short list of interested universities to be considered for participation in each project selected. Participating

universities will initiate work at the earliest possible date. It is anticipated that this will involve a detailed analysis of the project needs, development of a project proposal and subsequent implementation by the involved university.

In addition to getting important work under way, these initial Title XII country program experiences will provide a basis for the Board, AID and the JCAD to make needed adjustments in the provisional operational procedures.

Other Sources of Country Activity Ideas. Significant ideas for high payoff Title XII country projects involving U. S. universities may be generated in ways other than usual programming procedures. For example, institutions in AID-program countries may conceive agricultural development activities which would benefit from U. S. university participation. In such instances, the indigenous institution should, after appropriate in-country clearance, consult informally with the agricultural and other offices of the AID mission. The purpose of this consultation would be to determine the potential for their agricultural development assistance idea under the Title XII program. This would tend to avoid problems associated with expectations which cannot be fulfilled. For ideas considered worthy of additional exploration, the host country institution in cooperation with the U. S. university, if one is involved at this stage, would develop the preliminary idea for submission to the AID mission and to its own government agency which coordinates AID. These ideas may be included in the mission's forward planning system and handled in accord with normal procedures.

U. S. universities may also conceive ideas for development assistance activities which they believe would make a significant contribution to the attainment of Title XII objectives in a particular country or region. In such cases, the university should consult with the Board staff and appropriate committee. The purpose of such consultation would be to explore the Title XII potential of the development project idea. When the idea appears promising, the university may be invited to develop the idea further in collaboration with AID, the JCAD and the country or region concerned.

#### Research on Priority Problems

(1) The Board has directed the Joint Research Committee (JRC), through participation in the AID program planning and other processes, to identify a Title XII agricultural research agenda consisting of priority problems of significance to be the developing nations.

(2) The JRC will identify eligible universities having interest and capacity in each of the problem areas. In this process, the JRC will make every effort to broaden the base of U. S. university participation.

(3) The JRC will recommend a small group of universities or consortia which it considers best qualified to conduct the research. It will recommend this list of universities, with appropriate institutional evaluations, to AID for final selection.

(4) The university or consortium selected by AID will be requested to prepare a research proposal. This will be done in consultation with the relevant AID technical office.

(5) The completed research proposal will be submitted to AID and the JRC for review and recommendation.

Initial Title XII Research Programs and Projects. To assure early university participation in the Title XII research program, the Board and AID have agreed to activate several initial projects. The initial projects may involve both the new collaborative research support programs and traditional, centrally funded research projects.

With respect to the collaborative research support program, the Board and AID have charged the Joint Research Committee (JRC) with developing procedures and activating initial programs during the current fiscal year. The JRC is establishing guidelines and criteria for this purpose. It is anticipated that the JRC will identify several priority problem areas along with universities or consortia best qualified to conduct the work. It will work closely with these institutions in planning, elaborating and implementing the research programs.

Universities interested in the possibility of participating in this initial phase may so advise the JRC through the Executive Director of BIFAD.

There will be expanded opportunity for the initiation of new or revised Title XII research projects through the centrally funded AID contract research program. For the present, established procedures may be utilized by universities wishing to become involved. The JRC will participate with AID in this aspect of the Title XII research program. These experiences will contribute to the establishment of overall research priorities and modification of the programming operational procedures as necessary to increase research program effectiveness.

Other Sources of Research Ideas. It is recognized that important ideas for Title XII research programs and projects may be generated in a variety of ways. The Title XII program must be responsive to all such possibilities.

For example, scientists and research institutions in the developing nations are quite knowledgeable about significant constraints to agricultural development which will yield only to systematic research. They also can readily identify problem areas in which cooperative work with U. S. agricultural scientists would be helpful. In such areas, host country institutions should, after appropriate in-country clearances, consult informally with the AID mission to determine the Title XII potential of their research idea. Where such ideas appear promising and important, the mission will consult the appropriate AID Washington office and a preliminary proposal may be requested. Through these channels, the research idea would reach the JRC for appropriate consideration.

U. S. universities, independently or jointly with other institutions, may also identify researchable problem areas which they believe important to the attainment of Title XII objectives. Universities should consult informally with or submit brief preliminary research ideas to the BIFAD staff which will advise the university of the appropriate means to pursue the matter further. Other organizations such as the international agricultural research centers will also be sources of important ideas for Title XII research programs and projects. These ideas may be brought to the attention of the Board, AID and the JRC through the BIFAD office.

#### Submission of Ideas and Proposals

The Board and AID welcome the submission by eligible universities and others of Title XII program and project ideas and proposals for both country development activities and research. To facilitate effective response to such initiatives, the following procedures have been adopted.

Ideas and preliminary proposals should be submitted to:

Dr. D. Woods Thomas, Executive Director  
Board for International Food and Agricultural Development  
Agency for International Development  
Washington, D. C. 20523

Unsolicited formal proposals should be submitted to:

Dr. Erven J. Long, Technical Assistance Bureau  
Agency for International Development  
Washington, D. C. 20523

APPENDIX G

Questions and Answers About University  
Participation In Title XII Programs

Questions and Answers about University Participation  
in  
Title XII Programs\*

A central purpose of the Title XII Amendment is to accomplish broader and more effective involvement of eligible U. S. universities in the effort to increase the supply of food and to enhance the well-being of the poor majorities in less-developed countries. The Amendment envisions the Agency for International Development and eligible universities working together in a spirit of partnership to assist developing countries in their efforts to resolve agricultural and rural development problems. The legislation provides for the creation of the Board for International Food and Agricultural Development (BIFAD) with subordinate committees and staff. The Board is charged with participating actively in formulating policy, defining problems and carrying out planning, design, implementation and evaluation of activities coming within the scope of Title XII. The Board participates in establishing policies and procedures for involving university resources more effectively in these activities.

Although there are still policies to be evolved and numerous decisions to be made before a broad new university and AID attack on world food problems is a reality, distinct progress has been made. BIFAD working closely with AID leadership has been attempting to clarify aspects of Title XII and to put the broad purposes of the Amendment into operational terms and new programs.

A major step in the work of the BIFAD has been the establishment of two joint committees. The Joint Research Committee is composed of 20 representatives from the universities, AID, USDA, NOAA and the private agricultural sector. The Joint Committee on Agricultural Development is composed of 22 representatives from universities, AID, USDA, NOAA and private agricultural and voluntary agencies.

There are some questions raised by university leaders which we can now respond to in the hope that we can be helpful to the many committed and interested universities. However, BIFAD and AID are still actively pursuing some of these same subjects. Since the subcommittees and staff for Title XII are just now becoming active, our responses must, of necessity, be considered somewhat tentative.

*Question 1. Which institutions are eligible for participation under Title XII?*

All land-grant (1860 and 1890) and sea-grant institutions plus others judged by the Board as having demonstrable capacity and experience in the combined areas of teaching, research and extension related to food and nutrition programs. Eligibility means an institution can take on responsibilities under a Title XII project and may receive support to strengthen its ability to perform well in the pursuit of Title XII development assistance goals.

\*Prepared by the Board For International Food and Agricultural Development (BIFAD)

*Question 2. What should a university do to demonstrate eligibility if it is not in an automatically eligible category?*

It should submit responses to a questionnaire which is being distributed by the NASULGC and other academic associations on behalf of the Board. Contact the Title XII program office or the BIFAD staff at AID, Washington, D. C., if you have not yet received the questionnaire.

*Question 3. Will all eligible universities, internationally experienced and inexperienced, have an equal chance at participating? Will proof of competence be required?*

All will have a chance to participate and will be encouraged to do so within the range of the needs abroad, the institution's commitment, the variety of its competence and its demonstrated ability to perform. Interested universities should carefully assess their fundamental interests and capacities to participate in the several aspects of Title XII. The results of such assessments will vary widely from institution to institution. Given the breadth of agricultural research, development and educational activities included in the scope of Title XII, there will be no lack of opportunity for involvement. Excellence in performance will require objective matching of university interests and capacities with Title XII projects and programs.

*Question 4. Will long-range and ample funding be available to strengthen the U.S. universities' capacity to perform well internationally? Will Title XII provide new funds for the campus infrastructure, for new staff and special training programs?*

The objective of the Title XII program is one of assisting the developing nations to achieve more rapidly increased food production, improved human nutrition and broadly participatory agricultural development. While participating universities will gain much in educational, scientific or scholarly expertise, such must be recognized as ancillary to the basic objective.

It is envisaged that long-term funding will be available under Title XII so that universities can gear up for long-term tasks internationally. Although such funds are not yet included or budgeted, the Board has stressed that such funding should be available in ways which strengthen the participating university so that it can participate without sacrificing quality on campus. Exactly how this is to be done is still under discussion by the Board and AID, but it is clearly a part of the Title XII intent.

*Question 5. Should eligible universities now be forming consortia to be active under Title XII? Do those which are a part of an ongoing consortium have an advantage?*

There will be a major role for individual institutions, but there will also be a role for consortia under Title XII. Some Title XII programs

may best be conducted through cooperative arrangements among universities and/or other organizations. When such consortia are created, they should be formed for specific rather than general purposes, taking into consideration the complementary strengths of member institutions. Long-established consortia that have the capacity to participate in Title XII activities are naturally eligible for involvement.

*Question 6. Can non-eligible universities participate in Title XII programs? Can they participate in other AID food and nutrition programs?*

Yes. Non-eligible universities, if they belong to a consortium including eligible universities, may thereby participate. Also, they may participate as a sub-contractor of an eligible institution. There is no barrier to such institutions continuing to be involved in agricultural, food and nutrition programs under Sec. 103 of the AID act.

*Question 7. Will existing AID agriculture and nutrition projects continue or will they all be subsumed under Title XII?*

AID is an ongoing operating agency and its normal work continues as Title XII procedures and new, innovative approaches are worked out. Many eligible universities are now participating in research, training and technical assistance projects under AID contracts. These all fall under the purposes of Title XII and are within the broad review process in which BIFAD is now engaged. As the new approach takes shape and gathers momentum, university and BIFAD participation will increase noticeably at various stages of program planning and development, as well as at project execution. The modes and instruments of participation will change, and a broader range of institutional talent will be encouraged to make commitments to meet the food and agriculture needs of developing countries.

*Question 8. How should a university inform BIFAD or AID about special interests or strengths which may exist at the university? How should the university inform AID and BIFAD about special opportunities to expand food production which exists in the developing countries?*

The questionnaire which is being circulated is one device. Correspondence directed to BIFAD staff is another. However, two things should be noted. First, the subcommittees are just beginning to operate. They will offer a means of expressing views on priority interests and opportunities. There will be specific requests for such information and meetings at which such views can be expressed. Secondly, there is an ongoing AID program process through which views on program opportunities and priorities can be expressed abroad by local leaders.

While university initiative in Title XII activities will be stressed, such initiatives will be most effective when taken through with the assistance of mechanisms and procedures established by AID and BIFAD. A draft set of guidelines for universities has been prepared and will soon be adopted by BIFAD.

*Question 9. What should a university with definite interest in Title XII programs now be doing to prepare itself for effective participation?*

The university should have a campus point of contact for Title XII programs -- an individual or committee chairperson who can be easily contacted by BIFAD staff and who can keep alert to developments. It should clarify internally those strengths which it wishes to mobilize for Title XII programs. In the process, it should sharpen its views internally regarding institutional commitment and regarding what type and level of Title XII strengthening assistance would be most effective to enable the university to perform well and over the long term in LDCs.

*Question 10. How will decisions be made regarding assignment of specific projects and responsibilities to individual U.S. universities or consortia?*

The specific processes are yet to be established by AID with active BIFAD participation. Subcommittee judgments -- the Joint Research Committee and the Joint Committee on Agricultural Development -- will be taken fully into account and universities will have ample opportunity to express views. The LDC participants will, of course, also enter strongly into the determination.

*Question 11. Is there now or will there be a separate Title XII budget?*

There is not now a separate budget above and beyond the existing authorized and appropriated funds for AID food and agriculture programs. Title XII funds are not, at present, specifically set aside. Title XII projects will be funded from a category of support in AID's budget totalling about \$118 million in FY '77. As Title XII gathers momentum, there may be an attempt in the budget process to earmark a specific portion for new Title XII initiatives.

*Question 12. Should universities involve faculty members who are not directly in agricultural teaching, research and extension in Title XII program development?*

Yes. Able persons who can contribute in fields related to nutrition, fisheries and aquaculture, and animal production are clearly to be involved insofar as these relate to famine prevention and improved food supply. There are also committed and able persons in the social sciences who should be encouraged to contribute to effective Title XII projects.

**APPENDIX H**

**Planning and Program Committee**

## Planning and Program Committee

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