PROGRAM REVIEW

JULY 1961

IICA

EXECUTIVE OFFICES - OFFICIAL RELATIONS

PROGRAM REVIEW

PRELIMINARY REPORT OF THE SURVEY TEAMS

RECOMMENDATIONS OF THE REVIEW PANEL

INTER-AMERICAN INSTITUTE OF AGRICULTURAL SCIENCES OF THE O.A.S.
OFFICE OF THE DIRECTOR GENERAL - SAN JOSE, COSTA RICA JULY 1961

Inter-American Institute of Agricultural Sciences of the OAS

REVIEW PANEL

Byron T. Shaw, Chairman
Administrator, Agricultural
Research Service
U.S. Department of Agriculture
Washington 25, D.C., U.S.A.

Rogelio Coto Monge, Secretary
Assistant to the Director General
for Official Relations
Inter-American Institute of
Agricultural Sciences of the O.A.S.

Earl Jones, Assistant Secretary
Associate Extensionist, Department
of Economics and Social Sciences
Tropical Center for Research and
Graduate Training
Inter-American Institute of
Agricultural Sciences of the O.A.S.

REVIEW TEAMS

Biological Sciences

Gordon Havord, Chairman
Director, Tropical Center for
Research and Graduate Training
Inter-American Institute of
Agricultural Sciences of the O.A.S.

Carlos Arnaldo Krug
Agricultural Officer, Tropical
Crops, Food and Agriculture Organization of the United Nations
Regional Office for Latin America
Rio de Janeiro, Brazil

Damon Boynton, Dean
Graduate School, Cornell University
Ithaca, New York, U.S.A.

Social Sciences

José D. Marull, Chairman
Assistant for Programs
Office of the Director General
Inter-American Institute
of Agricultural Sciences
of the O.A.S.

Antonio Perez García
Vice Director, Extension Service
University of Puerto Rico
Rio Piedras, Puerto Rico

T. Lynn Smith
Graduate Research Professor
University of Florida
Gainesville, Florida, U.S.A.

RP/Doc. No. 10-Ing.
7/3/61

BRIEF EXPLANATION

The Inter-American Institute of Agricultural Sciences of the OAS began its operations in 1944. This was the beginning of the development process which has generated valuable experiences. When the Board of Directors elected a new Director in May, 1960 the new Director decided to carry out an over-all review of the programs based on the experiences accumulated, with the purpose of setting up guide-lines to be followed by the institution during the coming decade. The Ford and Rockefeller Foundations generously consented to help finance the expenses of the review.

The Director appointed two Review Teams, one for the Biological Sciences and one for the Social Sciences, each one made up of three members. Between May 15 and June 30, 1961, these Teams travelled and collected data and impressions, with which they prepared a report for the Director General. The Director then invited a group of distinguished personalities, both from the United States and Latin America, to review this report and make the pertinent recommendations. The Review Panel met in San José, Costa Rica, on July 3rd, 4th and 5th, 1961, under the chairmanship of Dr. Byron T. Shaw, Administrator of the Research Department of the United States Department of Agriculture and United States Representative on the Technical Advisory Council of the Institute. This report covers this first phase of the Program Review.

Once this first phase is concluded, the Director will request the opinions of high formers officials of the Institute, members of the staff and members of the Technical Advisory Council, on the report of the Review Teams and the recommendations of the Review Panel. Once these consultations are completed, the Director General will make the pertinent administrative decisions in order to put said recommendations into effect, after consulting the Board of Directors of the Institute whenever necessary.

TABLE OF CONTENTS

BACKGROUND

RP/Doc. No. 8-Ing.
6/30/61

PROGRAM REVIEW

Team Surveys: May 15 - June 30, 1961
Panel Review: July 3, 4 and 5, 1961

Situation

Since the inauguration of its research and graduate training program at Turrialba in 1946 and of its national level short-course training program of Project 39 in 1951, the Institute has accumulated considerable experience in assisting the Latin American countries to improve their agricultural economy through research and education. Partial studies have been made that throw light on the situation existing in Latin America in specific fields and the steps proposed to help them solve their problems.

Among these have been studies of the communications facilities; the bilateral cooperative programs in coffee, cacao, pastures and extension; the role of sociology; the needs for textbooks and teaching materials; and the development of the abilities of the national institutions to offer graduate training in the Temperate Zone. The Technical Advisory Council of the Institute, the Administrative Committee, the Advisory Board of the Scientific Communications Service and the Institute staff itself have developed over the years a body of ideas and plans for carrying out agricultural programs in Latin America in cooperation with national institutions.

The time has come to review this experience, appraise its significance, and suggest lines of work and methods of action most capable of producing an impact in the fulfilment of the functions of the Institute in the future.

Objetives

To make an objetive review of the accomplishments and program of the Institute and to advise the Director as to:

a) Lines of work to be emphasized in the immediate future to produce the greatest impact with the resources available.

b) Proposed priorities for the various programs or methods suggested to determine priorities.

c) Further studies to be carried out in greater detail to plan programs properly.

d) Methods of operation likely to produce the best results.

e) Trends in the development of agriculture and rural life and lines of work anticipated for the Institute in the future.

Appendix A contains the tentative questions the Director General of the Institute will ask the two Review Teams. These questions will be revised between now and the time the teams start their surveys. The same questions will guide the discussions of the Review Panel.

Procedure

Two Survey Teams and a Review Panel will be organized. The teams, of three members each (a prominent Latin American, a prominent United States scientist, and an experienced Institute staff member) will review independently but concurrently the Institute programs in the biological and the social sciences. They will spend about a week in Costa Rica planning the review and will then visit about eight countries to obtain the benefit of ideas expressed by prominent nationals as to their needs and the ways in which the Institute could assist the country programs.

Upon completion of the field visits, the two teams will return to Costa Rica to discuss their ideas further with the staff and write separate preliminary reports.

The two reports will be discussed in detail by the teams with a special Review Panel to be convened in Costa Rica. The Review Panel will be made up of a group of prominent persons representing different fields and points of view and all already well acquainted with the agricultural situation in Latin America. Staff members of IAIAS will be called to advise as needed.

The Review Panel will be free to make its own recommendations to the Director General and the teams will be free to incorporate into their final reports whatever ideas are discussed by the Panel.

Tentative Time Table

It is planned to conduct the team surveys from May 15 to June 30, 1961, and to hold the Panel on July 3, 4, and 5, 1961.

Cost

The cost is estimated as follows:

Biological Sciences Team

Circle airplane ticket for three members at $800 each	$2,400	
Per diem for three members, 60 days at $12	2,160	
Local travel	100	
Sub-total		$4,660

(Carried from previous page)		$ 4,660
Social Sciences Team (same expense as the other team)		4,660
Review Panel		
Average airplane ticket for 18 persons at $350 each	$6,300	
Per diem, 5 days at $12 for 18 persons	1,080	
Sub-total		7,380
TOTAL		$16,700

It is assumed that salaries of the Team members will be contributed by their own institutions. If this is not the case, the approximate additional cost will be as follows:

Consultation fees four persons for 60 days at $30 per day	$ 7,200
GRAND TOTAL	$23,900

The Institute will contribute the secretarial expenses, supplies, local transportation, and incidental expenses. Some of the agencies may pay for the travel of their own staff members selected for the Review Panel, in such cases the Institute will cover directly their expenses for room. Tentative agreement of financial aid has been reached with the Rockefeller and Ford Foundations.

Participants

Around fifteen prominent Latin American and United States agricultural leaders have been invited to be members of the Review Panel. The persons proposed were selected after consultation with staff members of IAIAS and outside persons. They are all experienced persons already acquainted with Latin America, the Institute and international programs. They will be asked to serve in a personal capacity, not as official representatives of their agencies although it is hoped that their agencies will contribute with their salaries. In the selection of the Survey Teams and the Review Panel care has been taken to achieve an adequate balance of disciplines and points of view. The curriculum vitae of the persons chosen will be added later.

APPENDIX A

TENTATIVE QUESTIONS THAT WILL BE ASKED BY THE DIRECTOR GENERAL OF IAIAS

I. Biological Sciences Team

1. The broad purposes of the Institute, as stipulated in Article II of the 1944 Convention are "to encourage and advance the development of the agricultural sciences in the American Republics through research, teaching and extension activities in the theory and practice of agriculture and related arts and sciences." This article remains unchanged in the Protocol of Amendment to the Convention as it gives broad latitude to develop programs. In practice, of course, these broad purposes have been narrowed down to more specific objetives. Although no formal statement of specific objectives has been prepared, two sociologists of the Department of Economics and Social Sciences of the Turrialba Center proposed in a report on visits to the Zones in 1957, a tentative classification of objetives.

   QUESTION: What would you say should be the specific objetives of the Institute in the next decade?

2. It has been said that setting up a separate Center for the Applied Social Sciences will create a harmful divorce between the biological and the social sciences. This, of course, is a real danger and such a divorce must be prevented if it is decided to organize a separate Social Sciences Center.

   QUESTION: What would you propose doing to give a greater impulse to the applied social sciences to help the Latin American countries, through research and graduate training, solve their increasingly critical problems in the land reform, credit, marketing, community development, farm management, education and so forth?

3. The funds available will always be insufficient to render to the countries all the services they will continue requesting from the Institute. It will be necessary, therefore, to decide what lines of work should be emphasized and what priorities should be assigned to the various programs.

   QUESTION: What lines of work should be emphasized in the immediate future to produce the greatest impact with the resources available? What priorities do you propose for the various programs or what methods do you suggest to determine priorities?

4. Over the years the Institute has offered to the countries services in research, education, and consultation. The Technical Advisory Council and other authorities have recommended that the Institute pay increasing attention to graduate training as its main function. Research, of course, is an essential tool to offer graduate training. Consultation trips to the countries seem to be an effective follow-up service to our graduates and gives the professors an opportunity to see first hand the problems of the countries and assist them with down-to-earth solutions to solve them.

   QUESTION: Would you agree that graduate training should have first priority in the program of the Institute? If so, how should our graduate training programs be organized both through the Graduate School of the Turrialba Center and utilizing the facilities of the other units of the Institute outside Turrialba and of the national institutions -including those in the United States- along the lines proposed by the Southern Zone (Plan Vallega) or by some alternative means?

5. The research work of the Institute resembled at first the experimental work of a national station: production of new varieties of crops adopted to the environmental conditions of Turrialba and so forth. Gradually some features were introduced to broaden the scope of the research program and extend its applicability by means of cooperative projects with national institutions, greater emphasis on basic studies, and so forth. However, the research is still very largely localized, and has limited application.

   QUESTION: What should be done to broaden the scope of the research program of the Institute and widen its applicability? What should be the comparative emphasis on basic research, cooperative regional research and research for training purposes?

6. As the research and graduate training program was developed at Turrialba it was organized under four main areas: plants (fitotecnia); animals (zootecnia); forests (dasonomía); and human beings (economía y ciencias sociales; comunicaciones). A fifth area, matter and power (engineering) was discontinued several years ago for lack of funds.

   Last year, the Nuclear Energy Program and the Inter-American Cacao Center, which had been operating autonomously, handling special grant programs, under the Plant Industry Department, were raised to the category of separate departments, but responsibility for the coordination of the research and graduate training programs in the plant sciences remained in the

Department of Plant Industry. The main programs of the Department have dealt with the improvement of coffee, cacao and corn, rice diseases; and native Andean food plants.

Because of budgetary limitations, the Department of Animal Industry has been concerned only with beef and dairy animals and, more recently, pastures management.

The Department of Renewable Resources began as a Service, became a Department later on, and has worked mainly in forestry and ecological land use.

The Department of Economics and Social Sciences absorbed several years ago the activities of a separate "Extension Service" the handled mainly a vocational education program under a special grant; its main activity in the last few years has been a research and graduate training program in extension education (including home economics and rural youth), but in the past it offered also limited research and graduate training in farm management, community development, and the diffusion processes.

The Scientific Communications Service began with scientific documentation services that were transferred last year to the Library. Later on, a comprehensive program in extension information was added under a special grant that has been the main activity of the Service. It has handled also the publications of the Institute and, on a very limited scale, the public information work, a function that was recently ascribed to the Office of the Director General in San José.

The Library has always operated as an autonomous unit reporting directly to the Director with the rank of a department. Last year, when the documentation services were transferred to the Library, it became the Library and Documentation Service.

It has been proposed to establish a separate Social Sciences Center on the basis of the present Department of Economics and Social Sciences and the Scientific Communications Service.

From time to time the question has come up: Should the work of the Turrialba Center continue to be organized under subject matter areas, as it is organized now, or should it be organized instead under disciplines such as genetics, pathology, soils and so forth? Any organizational plan for the Turrialba Center should, of course, be flexible enough to absorb expanded functions and programs.

QUESTION: Assuming that the social sciences are organized under a separate Center and the rest of the activities remain with the Turrialba Center, what organizational structure would you recommend?

QUESTION: What basic policy lines would you recommend to incorporate gradually the restricted accounts into the regular program and handle new restricted accounts and special programs in the future?

9. To render its services to the member countries, the Institute has developed various methods of operation. For example, it carries out research, trains people, advises institutions in the member countries, exchanges information through meetings and publications and so forth.

QUESTION: Which of these or other methods of operation are likely to produce the best results?

10. Agriculture in Latin America is developing rapidly and the critical areas are changing. The programs of the Institute must be developed in function of the situation and trends in Latin America.

QUESTION: What trends do you consider most important in the development of agriculture and rural life in Latin America and what lines of work do you anticipate the Institute should be engaged in during the next decade? What further studies should be carried out in greater detail to plan programs properly?

II. SOCIAL SCIENCES TEAM

1. The broad purposes of the Institute, as stipulated in Article II of the 1944 Convention are "to encourage and advance the development of the agricultural sciences in the American Republics through research, teaching and extension activities in the theory and practice of agriculture and related arts and sciences." This article remains unchanged in the Protocol of Amendment to the Convention as it gives broad latitude to develop programs. In practice, of course, these broad purposes have been narrowed down to more specific objetives. Although no formal statement of specific objectives has been prepared, two sociologists of the Department of Economics and Social Sciences of the Turrialba Center proposed in a report on visits to the Zones in 1957, a tentative classification of objetives.

QUESTION: What would you say should be the specific objetives of the Institute in the next decade?

2. In order to give a greater impulse to the applied social sciences to help the Latin American countries, through research and graduate training, to solve their increasingly critical problems in land reform, credit marketing, community development, farm management, communications, education and so forth, it will be

necessary to strengthen considerably the work of the Institute in these areas. In the past, this work has been carried out mainly by:

a) The Department of Economics and Social Sciences of the Turrialba Center, which absorbed several years ago the activities of a separate "Extension Service" that handled mainly a vocational education program under a special grant. The main activity of the Department in the last few years has been a research and graduate training program in extension education (including home economics and rural youth), but in the past it also offered limited research and graduate training in farm management, community development, and the diffusion processes.

b) The Scientific Communications Service (SIC) of the Turrialba Center, which began with scientific documentation services that were transferred last year to the Library. Later on, a comprehensive program in extension information was added under a special grant that has been the main activity of the Service. SIC has also handled the publications of the Institute and, on a very limited scale, the public information work, a function that was recently ascribed to the Office of the Director General in San José.

c) The Regional Offices, under Project 39, have offered short course training and have conducted limited field research in agricultural economics, extension education and home economics, and information.

One solution proposed to make it possible for the Institute to render adequate services to the countries in these areas in which the demand is growing constantly, has been to organize a separate Applied Social Sciences Center, in San José. An interdepartmental committee of the Department of Economics and Social Sciences and the Scientific Communications Service has submitted a report on the proposed Social Sciences Center that has provoked considerable comments among the staff, some in favor of the idea, some against it. Further discussion is still required, particularly in regard to the production services, the technical information services, and the place of home economics.

QUESTION: Would you recommend setting up a separate Applied Social Sciences Center or expanding instead the departmental work in these areas at the Turrialba Center? If you favor the idea of setting up a Social Sciences Center, what functions should it have? What should be its structure? What should be done to assure close coordination between the social and the biological sciences? Where should

it be located? How should it be related to the Regional Offices and other Centers of the Institute, as well as to other agencies such as FAO and FLACSO?

3. The funds available will always be insufficient to render to the countries all the services they will continue requesting from the Institute. It will be necessary, therefore, to decide what lines of work should be emphasized and what priorities should be assigned to the various programs.

QUESTION: What lines of work should be emphasized in the immediate future to produce the greatest impact with the resources available? What priorities do you propose for the various programs or what methods do you suggest to determine priorities?

4. Over the years the Institute has offered to the countries services in research, education, and consultation. The Technical Advisory Council and other authorities have recommended that the Institute pay increasing attention to graduate training as its main function. Research, of course, is an essential tool to offer graduate training. Consultation trips to the countries seem to be an effective follow-up service to our graduates and give the professors an opportunity to see first hand the problems of the countries and assist them with down-to-earth solutions to solve them.

QUESTION: Would you agree that graduate training should have first priority in the program of the Institute? If so, how should our graduate training program be organized both through the Social Sciences Center and utilizing the facilities of other units of the Institute and of the national and international agencies offering training in these fields, including those in the United States?

5. As mentioned above, the Institute has carried out only a limited amount of research in the social sciences. The Department of Economics and Social Sciences at Turrialba concentrated its resources for a decade in sociological research on community development, in cooperation with a prominent university in the United States, but the work was not carried out in other countries. It also did some coffee farm management research, in cooperation with a national institution in Colombia, and a population transplanting project in Bolivia. In recent years, the research has been concentrated on the diffusion processes, development of skills for rural living, and evaluation of programs. The Project 39 Regional Offices have carried out several farm management and economic land use studies particularly in the development area of San Ramón, Uruguay, where outstanding work has been done. It has been suggested, however,

that greater emphasis be placed on research studies involving the active cooperation of national institutions.

QUESTION: What should be done to broaden the scope of the research programs of the Institute in the applied social sciences and widen its applicability? What type of studies should have priority during the next decade?

6. In the past, the Regional Offices reported to the Director of Project 39 rather than to the Director of the Institute and the Director of the Institute was at the same time Director at Turrialba. The Turrialba Center, in fact, took up most of the time of the Director. For these and other reasons, the Project 39 Zone Offices operated as autonomous units both technically and administratively and, with few exceptions such as in the fields of agricultural economics and forestry, there was little interrelationship among the specialists in given fields both within the zones and between the zones and the Turrialba Center. To correct this situation, it has been proposed to establish close horizontal coordination by disciplines among the specialists assigned to the various units of the Institute while retaining the vertical administrative authority and autonomy of the regional and center directors. At the annual meeting of the Regional Directors held in Costa Rica in August, 1960, a discussion was held on this based on a report prepared by three staff members designated by the Director General as future program supervisors or coordinators if such a plan is adopted.

QUESTION: What would you recommend to promote a horizontal articulation by disciplines while retaining the vertical administrative authority of the regional and Center directors, with particular reference to the proposed Applied Social Sciences Center?

7. Only about 25% of the total budget from the Institute is financed from the quotas paid by the member countries of the Institute. The rest comes from agreements, contracts and grants from various agencies and foundations. The largest outside amounts are contributed by the Technical Cooperation Program of the Organization of American States to carry out the operations of Project 39 and from the United States International Cooperation Administration to carry out the regional services to the United States Operations Missions in Latin America. Last December, the United Nations Special Fund approved a large grant of US$4,000,000 to increase the training capacity of the Institute and expand its research and consultation services over the next five years.

Although the Institute would never have developed as it has without these outside contracts and grants, the high percentage

of the budget stemming from restricted funds has made the operations of the Institute highly complex and has been a barrier to sound intermediate and long range planning. It is hoped that the member countries will agree to finance an increasingly higher percentage of the total budget from regular quota funds. It is expected that over the next five years the Institute will incorporate these services into its regular program and budget. However, in the future we will continue to have grants, contracts, and agreements to develop new programs and render special services.

QUESTION: What basic policy lines would you recommend to incorporate gradually the restricted accounts into the regular program and handle new restricted accounts and special programs in the future?

8. To render its services to the member countries, the Institute has developed various methods of operation. For example, it carries out research, trains people, advises institutions in the member countries, exchanges information through meetings and publications and so forth.

QUESTION: Which of these or other methods of operation are likely to produce the best results?

9. Plans are under way to start this year the operations of the Latin American Agricultural Credit Center. The new Center will offer graduate and short-term training, will hold technical seminars, and will do research in the field. As decided by the OAS in Washington, on the basis of a meeting held in Mexico two years ago, the Center will operate in cooperation with the National College of Agriculture of Mexico, Chapingo. Last year, a new project was proposed by the Institute to the Technical Cooperation Program of the OAS on agrarian reform studies and training. It was proposed to expand the facilities already available in Project 39 and to work in cooperation with FAO, FLACSO and other agencies. It is obvious that these new programs should be closely tied in with the proposed Applied Social Sciences Center.

QUESTION: What should the relationships between these centers, the proposed Applied Social Sciences Center and the other units of the Institute as well as with the national and international agencies, including the Pan American Union and the Inter-American Development Bank?

10. Agriculture in Latin America is developing rapidly and the critical areas are changing. The programs of the Institute must be developed in function of the situation and trends in Latin America.

QUESTION: What trends do you consider most important in the development of agriculture and rural life in Latin America and what lines of work do you anticipate the Institute should be engaged in during the next decade? What further studies should be carried out in greater detail to plan programs properly?

PARTICIPANTS

RP/Doc. No. 14-Ing.
7/5/61

SURVEY TEAMS

Biological Sciences Team

Gordon Havord, Chairman
Director Tropical Center for Research and Graduate Training
Inter-American Institute of Agricultural Sciences of the OAS
Turrialba, Costa Rica

Damon Boynton
Dean, Graduate School
Cornell University
Ithaca, New York, U.S.A.

Carlos Arnaldo Krug
Former Director of the Institute of Agronomy, Campinas, Brazil
Agricultural Officer, Tropical Crops
Food & Agriculture Organization of the United Nations
Regional Office for Latin America
Rio de Janeiro, Brazil

Applied Social Sciences Team

José D. Marull, Chairman
Assistant for Programs, Office of the Director General
Inter-American Institute of Agricultural Sciences of the OAS
San Jose, Costa Rica

Antonio Pérez García
Vice-Director, Extension Service
University of Puerto Rico
Rio Piedras, Puerto Rico

T. Lynn Smith
Graduate Research Professor
University of Florida
Gainesville, Florida, U.S.A.

REVIEW PANEL*

Byron T. Shaw, Chairman
Administrator, Agricultural Research Service
U. S. Department of Agriculture
Washington D.C., U.S.A.
(Representative of the United States to the Technical Advisory Council of IAIAS)

José Irineu Cabral
Executive Director, Brazilian Association of Agricultural Credit & Rural Aid (ABCAR) and Co-Director of its Agricultural Technical Office (Brazil-United States) - ETA
Rio de Janeiro, Brazil

---

* - The following persons were also invited to serve on the Review Panel but due to unforseen circumstances were unable to do so: Wanderbilt Duarte de Barros, Former Director of Plant Industry, Ministry of Agriculture, Rio de Janeiro, Brazil; Javier Becerra, President, Agrarian University, La Molina, Peru; Rafael García Mata, Sub-Secretary of Agriculture & Livestock, Buenos Aires, Argentina; V.L. Harper, Assistant Head for Research, Forestry Service, U.S. Department of Agriculture, Washington D.C., U.S.A.; James Jensen, Provost, Iowa State University, Ames, Iowa, U.S.A.; Mario Lewy Van Séveren, Former Co-Director, Agricultural Cooperative Service (SCASA), Ministry of Agriculture, San Salvador, El Salvador (Representative to the Technical Advisory Council of IAIAS); Jesús Patiño Navarrete, Sub-Secretary of Agriculture, Ministry of Agriculture & Livestock, Mexico D.F., Mexicó; Wayne Reitz, President, University of Florida, Gainesville, Florida, U.S.A. (Former Chairman, Administrative Committee of IAIAS); J.R. Rigney, Head, Institute of Experimental Statistics, North Carolina State University, Raleigh N.C., U.S.A.; Theodore Schultz, Head of the Department of Economics, University of Chicago, Chicago, Illinois, U.S.A.

Ricardo Hepp
Former Minister of Agriculture of Chile
Coordinator for Southern Zone in Chile
Inter-American Institute of
Agricultural Sciences of the OAS
Santiago, Chile

R. L. Lovvorn
Director of Research
North Carolina State University
Raleigh, North Carolina, U.S.A.

Frances MacKinnon
Regional Home Economics Officer
Food & Agriculture Organization of the
United Nations
Regional Office for Latin America
Santiago, Chile

Arthur Mosher
Executive Director
Council for Economic & Cultural
Development
New York, N.Y., U.S.A.

W. M. Myers
Head, Department of Agronomy & Plant
Genetics
University of Minnesota
St. Paul, Minnesota, U.S.A.

Ralph W. Phillips
Director of International Organization
Affairs
Foreign Agricultural Service
U. S. Department of Agriculture
Washington, D.C., U.S.A.

Ralph R. Shaw
Former Dean, Graduate School of
Library Sciences
Rutgers - The State University
New Brunswick, New Jersey, U.S.A.
(Former Chairman of the Scientific
Communications Advisory Board of
IAIAS)

Fernando Suárez de Castro
Former Director General
Ministry of Agriculture & Livestock
of Colombia
Technical Director, Coffee Research
Institute of El Salvador (ISIC)
Santa Tecla, El Salvador

Lino Vicarioli
Director General of Agriculture and
Livestock
Ministry of Agriculture & Livestock
San Jose, Costa Rica
(Representative of Costa Rica to the
Technical Advisory Council of IAIAS)

ADMINISTRATIVE REVIEW TEAM*

Don L. Shurtleff, Chairman
Executive Officer and Treasurer
Office of the General Director
Inter-American Institute of
Agricultural Sciences of the OAS
San Jose, Costa Rica

John M. Costello
District Supervisor
Management Service Division
Ernst and Ernst
St. Louis, Missouri, U.S.A.

Charles P. Miller
Organization and Methods Officer
Office of the General Secretary
Organization of American States
Pan American Union
Washington D.C., U.S.A.

---

* - Under study. Will be published latter.

OFICIAL OBSERVERS

American Cocoa Research Institute

Ernest P. Imle
Director of Research
American Cocoa Research Institute
Washington D.C., U.S.A.

American International Association for Economic & Social Development

John R. Camp
Vice-President, American International Association for Economic & Social Development
Caracas, Venezuela

Food & Agriculture Organization of the United Nations

Adolfo Alarcón
Assistant Regional Representative for Latin America (Northern Zone)
F. A. O.
Mexico D. F., Mexico

W. E. Keepper
Dean, College of Agriculture
University of Southern Illinois, U.S.A.
Education & Research Consultant
Agricultural & Administrative Education Division
Rural Institutions & Services Division
F. A. O.
Rome, Italy

Ford Foundation

Paul Pearson
Sciences & Engineering Program
New York, N.Y., U.S.A.

International Cooperation Administration

William H. Cowgill
Food & Agriculture Office
International Cooperation Administration
Washington D.C., U.S.A.

Wyman R. Stone
Director, USOM/Mission in Costa Rica
San Jose, Costa Rica

Rockefeller Foundation

Richard Bradfield
Agricultural Advisor of the Rockefeller Foundation
Professor of Soil Technology
College of Agriculture
Cornell University
Ithaca, New York, U.S.A.

William I. Myers
Agricultural Advisor of the Rockefeller Foundation
Former Dean, College of Agriculture
Cornell University
Ithaca, New York, U.S.A.

United Nations Special Fund

A. H. MacKenzie
Regional Representative for Central America
Technical Administration Board
United Nations
San Salvador, El Salvador

OFFICE OF THE DIRECTOR GENERAL

Armando Samper
Director General
Inter-American Institute of
Agricultural Sciences of the OAS
San Jose, Costa Rica

REGIONAL OFFICES

Enrique Blair
Deputy Director for the
Andean Zone
Lima, Peru

Manuel Elgueta
Director for the
Southern Zone
Montevideo, Uruguay

José A. Torres
Director for the Northern Zone
San Jose, Costa Rica
(temporarily)

TROPICAL CENTER FOR RESEARCH & GRADUATE TRAINING

Turrialba, Costa Rica

Jorge León
Acting Director
Head, Plant Industry Department

Jorge de Alba
Head, Animal Industry Department

Gerardo Budowski
Head, Renewable Resources Department

Robin L. Cuany
Acting Head
Nuclear Energy Department

Fernando del Río
Acting Head, Economics & Social
Sciences Department

Karel A. Hallebeek
Head, Administrative Services

Olga Lendvayova
Acting Head, Library & Documentation
Service

Jorge Soria
Deputy Head
Cacao Center

Roger A. Wolcott
Head, Scientific Communications
Service

ASSOCIATED PROGRAMS

Schuyler Bradt
Director, Inter-American Popular
Information Program (PIIP)
San Jose, Costa Rica

Howard E. Law
Director, Inter-American Rural
Youth Program (PIJR)
San Jose, Costa Rica

NOTE: The following organizations were invited to send observers, but were unable to do so: Office of the Secretary General of the Organization of American States (Pan American Union); UNESCO; the Kellogg Foundation and the University of Costa Rica.

AGENDA

RP/Doc. No. 6-Eng.
Revised 2
7/5/61

PROGRAM REVIEW

Agenda for Panel Discussion

July 3 - 5, 1961

Monday

8:00 - 9:30 AM 1. Introduction

a. Reasons for the Program Review: Armando Samper

b. Procedure used by the Social Sciences Team: José Marull

c. Procedure used by the Biological Sciences Team: Gordon Havord

d. Panel procedures: Byron T. Shaw

9:30 - 10:00 AM Break

10:00 - 12:00 M 2. Problems limiting agricultural development in Latin America

a. Team presentations: T. Lynn Smith, Carlos A. Krug

b. Comments: participants

2:00 - 3:30 PM 3. Research and graduate training

a. Within the Institute: T. Lynn Smith, Damon Boynton

b. Assistance to national institutions: José Marull, Carlos A. Krug

c. Comments: participants

d. Recommendations: Richard Bradfield, T. Lynn Smith, Damon Boynton - Chairman

3:30 - 4:00 PM Break

4:00 - 5:00 PM Continuation of point 3. Research and graduate training

5:00 - 6:00 PM 4. Main lines of research

a. Team presentations: T. Lynn Smith, Damon Boynton

b. Comments: participants

c. Recommendations: W. M. Myers, T. Lynn Smith - Chairman, Carlos A. Krug, Ernest P. Imle

Tuesday

8:00 - 9:00 AM Continuation of point 4. Main lines of research

9:00 - 10:00 AM 5. Technical assistance and consultation services

a. Team presentations: Antonio Pérez García, Gordon Havord

b. Comments: participants

c. Recommendations: Antonio Pérez García, Gordon Havord - Chairman, Lino Vicarioli, A. H. MacKenzie

10:00 - 10:30 AM Break

10:30 - 12:00 M 6. Communication services

a. Team presentations: Antonio Pérez García, Carlos A. Krug

b. Comments: participants

c. Recommendations: Antonio Pérez García, Carlos A. Krug - Chairman, Ralph R. Shaw, William H. Cowgill

2:00 - 2:30 PM 6x. Home Economics. Discussion

2:30 - 3:30 PM 7. Priority among activities

a. Suggestions: José Irineu Cabral, Fernando Suárez de Castro, W. E. Keepper, Adolfo Alarcón, Frances MacKinnon, Paul Pearson

b. Comments: participants

c. Recommendations: R. L. Lovvorn, Lawrence Witt - Chairman, Ricardo Hepp

3:30 - 4:00 PM Break

4:00 - 6:00 PM 8. Structure and methods of operation

a. Presentation: Armando Samper.

b. Comments: participants

c. Recommendations: José Marull - Chairman, Gordon Havord, John R. Camp, Wyman R. Stone, Adolfo Alarcón

Wednesday

8:00 - 9:00 AM	Continuation of point 8. Structure and methods of operation
9:00 - 10:00 AM	9. Relationships with other agencies
	a. Team presentations: José Marull, Gordon Havord
	b. Comments: participants
	c. Recommendations: Ralph W. Phillips - Chairman, Arthur Mosher, José Irineu Cabral
10:00 - 10:30 AM	Break
10:45 - 1:30 PM	10. Review of recommendations
8:00 PM	11. Closing session and reception

PRELIMINARY REPORTS OF THE REVIEW TEAMS

RP/Doc. No. 9-Ing.
7/1/61

REPORT

OF THE REVIEW TEAM IN THE BIOLOGICAL SCIENCES

Dr. Gordon Havord
Ing. Carlos A. Krug
Dr. Damon Boynton

TABLE OF CONTENTS

I. OVERALL POLICIES AND PRIORITIES FOR IAIAS

A. Background

1. Even if the resources of IAIAS are multiplied many times, they will always be small in relation to the problems confronting rural development in Latin Ameriva. It is therefore imperative that IAIAS concentrate on certain carefully selected activities by means of which it can make a sizeable impact. Otherwise, the results of its work will be insignificant, and it will have no reason to exist. At the same time, it is essential for IAIAS to preserve balance in its programs.

2. Among the many factors limiting progress in rural development in Latin America, that are most frequent and widely apparent is an extreme shortage of highly trained technical personnel. In a few countries the Agricultural Faculties of the Universities are approaching adequacy in standards of education and numerical capacity to satisfy the needs for trained agricultural technicians at the Ingeniero Agrónomo level; however, in many others the Faculties are woefully inadequate both in quality and size. No country in Latin America has yet developed postgraduate technical agricultural education to a sufficient degree, although several have made a significant beginning.

3. The improvement of the quality of technical agricultural education at the undergraduate level is a problem that must be attacked by the countries themselves; nevertheless, IAIAS can assist and stimulate this process. Postgraduate educational opportunities can be provided directly by IAIAS and at the same time the Institute can actively cooperate in the further development of these opportunities at national institutions.

4. It is paradoxical and unfortunate that some instances exist where full use is not being made of the technically trained individuals available. National institutions, government services, and especially universities, may be so under-financed that they cannot buy the services of the trained technicians available in their countries; professional personnel are often paid on a part-time basis and must seek other supplementary occupations. This is a problem which can only be solved by individual countries; a permanent solution may depend upon the access to senior positions of influende of persons who are themselves highly trained and experienced and who therefore appreciate the need for expanded technical services to agriculture. As progress is made toward the solution of this problem, as is certainly occurring in some countries, the demand for highly trained technical personnel increases enormously so that, even in countries in which today there may be apparent under-employment and lack of opportunity for agricultural technicians, a potential need for more exists.

5. There are many other factors limiting rural development in Latin America, among which might be mentioned systems of land tenure; ineffective local government and social organization; inadequate primary and secondary education; lack of means of communication; incomplete or inadequate national economic planning; limited facilities for

transportation and marketing of agricultural products; insufficient agricultural credit; paucity of research information on the best and most economic possible exploitation of crops, animals and forests; inadequate agricultural extension services; and many more. All of these are problems of such enormity and complexity, subject to such wide variability in local, national, and regional contexts, and so interlinked one with another, that IAIAS could make but a minute impression in direct attempts to solve them. But all these problems need for their solution highly trained technical personnel, which IAIAS can help to provide.

6. There is a great desire in Latin America for assistance and stimulation in the development of national educational and direct-action institutions, as distinct from concentration of these activities in international organizations.

7. The past work of IAIAS has been criticized by many for being over-concentrated at Turrialba, located in a particular ecological environment, and it has been said that this has resulted in relative over-emphasis on lowland tropical problems and consequently the Institute has been of little value to large areas of Latin America such as the "altiplano", arid areas, and the temperate zone.

8. The graduate training offered has been criticized as being at too low a level, so that the degree of Magister Agriculturae is not generally recognized elsewhere.

9. There is wide recognition of the neglect of the economic and social sciences applied to agriculture in Latin America, and of the urgent need to correct this. In the past the programs of IAIAS in these fields have been less developed than the work in some of the biological fields.

B. Recommendations

10. It is therefore recommended that IAIAS should give first priority to postgraduate education in the agricultural and related social sciences, including formal graduate training leading to a degree and intensive short courses on specific subjects. The Institute should develop a direct-action program of training at the postgraduate level, both in its own right and by working through national institutions. It also should stimulate and assist where possible in the improvement of undergraduate agricultural education at national universities.

11. The Institute's work in developing higher education in Latin America should be increasingly projected into the countries themselves. In the present state of development in agricultural education and related social sciences in the area, this might best be achieved in overlapping phases. The first phase would involve strengthening the Institute's present postgraduate training activities. The second phase could include three approaches: (a) direct assistance to national universities in developing their undergraduate training programs; (b) organization of informal postgraduate training through certain national institutions along the lines suggested in the "Vallega Plan"; and (c) assistance in

the development of high standards of Master of Science training at a few selected geographically well-distributed universities. The third phase would be reached when IAIAS undertook doctoral and postdoctoral training at Turrialba and assisted in its development in those national universities ready for it.

12. The development of a program of higher education does not, and should not exclude other activities. Research by professors and students is indispensable to postgraduate education. The rendering of consultation services has intrinsic direct value; in addition, it provides the staff with valuable contacts in the field and makes possible "follow-up" of ex-students with consequent improvement of teaching methods and curricula. The exchange of scientific information is an essential stimulus. All these activities are necessary extensions of the major work of higher agricultural education.

13. To create an impact in this work, IAIAS should always maintain the highest possible standards in teaching, research, consultation, and information; the Institute must be the recognized leader in its field. This requires that the intellectual environment in which the staff lives and works, salaries, housing and general conditions must be such as will attract and keep staff of the highest caliber.

14. Considerable emphasis should be given to making IAIAS and its programs, projects, plans and personnel thoroughly well-known throughout Latin America, as although IAIAS is recognized in Latin America as an entity, there is surprisingly little knowledge of what it really can offer.

II. RESEARCH AND GRADUATE TRAINING

A. Background

15. The main criticisms of the graduate training offered by IAIAS in the past have been directed at the variable levels of training, and the failure to provide experience which could be applied directly in solving the basic agricultural problems in some countries of Latin America. The first difficulty has been partly due to widely varying standards among students on admission, and both have been aggravated by the inadequacy of resources available specifically for the graduate training program. The research has suffered from lack of continuity both in the work and in personnel, and the problems have not always been well chosen.

B. Recommendations

(a) General

16. A well-integrated program of postgraduate training and research, which gives IAIAS a position of leadership in Latin America, must therefore be the first purpose of the Institute. Emphasis should be placed on basic research of broad applicability and on applied research which implements regional projects in areas in which the Institute should have a position of leadership. There should be a firm commitment by the Institute to provide the appropriate continuity of staff and facilities for the research projects that are undertaken.

(b) Formal Graduate Education

(i) Location

17. Initially, Turrialba should be the main location for research and postgraduate training in all subject matter fields covered by its programs. The general "ambiente" at Turrialba should be made more attractive for staff and postgraduate students, both by improvements in physical facilities and by the development of a stimulating atmosphere of inquiry and intellectual endeavor.

(ii) Standards of Training

18. The level of formal training should be raised to equivalence with thatrequired for the Master of Science degree in the established graduate schools of the United States and the minimum length of the period of study should be increased to 18 or 24 months as appropriate. When this is done, the degree of Master of Science should be adopted.

(iii) Cooperation with Universities

19. Close cooperation should be established with the Faculty of Agronomy and other Faculties of the University of Costa Rica. This should facilitate both the remedial training of postgraduate students in basic subject matters and advanced formal training in

subjects not offered at Turrialba, and assistance to the University of Costa Rica in the development of its educational programs.

20. Cooperation with universities in the United States, Europe and elsewhere in the development of research projects and the training of graduate students should be systematically fostered, perhaps with the assistance of an inter-university advisory group. Interchange of professors and graduate students and a system of visiting professorships and studentships, as well as cooperative research projects, would be useful stimuli.

(iv) Selection of Students

21. Selection and recruitment of postgraduate students should be improved. For this purpose, systematic interviewing of applicants in their countries of origin may be shared by Turrialba and Zone staff members, so as to provide for direct evaluation of and advice to applicants before they come to IAIAS.

(v) Balance between Turrialba and the Zones

22. The strengthened and amplified programs of graduate training based at Turrialba should be accompanied by an increasing expansion of activity at the postgraduate level in the Zones. The present limited state of development of agricultural education in Latin America makes it inadvisable to attempt the development of postgraduate education away from Turrialba too rapidly. The process might best be undertaken stage by stage in overlapping "phases".

23. Phase One would require the strengthening of the Graduate School at Turrialba as outlined above.

24. In Phase Two, IAIAS should stimulate the improvement of the level of undergraduate training offered by Latin American Faculties by such activities as "refresher seminars" for professors, conferences, and direct consultation on organization, curricula, and teaching methods.

25. In addition, facilities might be developed cooperatively with certain selected national institutions, for informal in-service postgraduate training and for the carrying out of thesis research under the joint guidance of national and IAIAS professors, by postgraduate students who have received their basic course work at Turrialba. This amounts to an adaptation of the "Vallega Plan". In the Southern Zone considerable emphasis could be given to this approach at La Estanzuela.

26. Furthermore, a small number of selected strategically-located national universities might be strengthened by the allocation of IAIAS staff members to them, upon request, for varying but significant periods of time to assist in developing postgraduate education at the Master of Science level.

27. Phase Three would be reached when a fair number of Latin American universities are offering postgraduate training at the Master of Science level. IAIAS might then begin the development of doctoral work in its stronger fields at Turrialba and assist in its development in national universities.

28. The three phases are not mutually exclusive, but would overlap to a considerable degree. Concurrently IAIAS would work with other agencies in coordinating graduate education in Latin America.

(vi) The Graduate Faculty

29. The staff concerned with graduate education should be organized as a Faculty, with its appropriate academic dean, and having responsibility for its programs, standards and procedures of admission and attainment, and the granting of degrees. There should be budgetary provision for the facilities and supplies needed for the postgraduate program. Likewise the work loads of the Graduate Faculty should have due recognition.

30. Because the Graduate Faculty should have direct responsibility for its program of courses, while depending upon the department for support of the thesis research for graduate students, close cooperation should exist between the Dean of the Graduate School and the Department Heads. The participation of members of the staff in the Zones, or of the staff assigned to national institutions, in postgraduate training will require similar cooperation between the Dean of the Graduate School and the Zone Directors. New budgetary and administrative provisions may be required in order to provide effective cooperation of these kinds.

(vii) Interdisciplinary Training

31. In the development of programs of graduate students every effort should be made to provide for interdisciplinary experience. There should be interaction between social and biological sciences, and between animal and plant sciences, in the programs of graduate students. In addition, the students in these different specialities should have common living and social facilities and attend common seminars where they have opportunity to exchange ideas freely. The Graduate Faculty should attempt in all ways to overcome the natural tendency for self-isolation of the different subject-matter groups within it.

(c) Intensive Short Courses

32. The intensive short courses of IAIAS should be planned with the greatest attention to specific and continually changing regional and national needs, and be conducted in appropriate national institutions rather than at Turrialba. They should concentrate on improving the specialized knowledge of technical or professional staff of national institutions. Attention should also be given to intensive subject matter training (in "refresher" seminars) for professors of Faculties of Agriculture.

(d) The Main Lines of Research in the Biological Sciences

33. The research in these areas should deal with basic problems of agronomy, horticulture, forestry and animal husbandry in the disciplines of plant physiology, plant breeding and genetics, plant pathology, entomology, soils, animal breeding, pasture improvement and animal nutrition, and animal physiology. Animal health might be added later if funds permit. In these studies full advantage should be taken of the wide range of ecological conditions in Costa Rica as well as of the humid tropical climate of Turrialba. They could furthermore deal with specific problems of tropical crops, i.e. research on the South American Leaf Blight of Rubber and testing for the resistance to this disease; organization of plant exploration expeditions and establishment and expansion of germplasm collections, etc. Agricultural engineering might best be concentrated at La Molina, where also research might be conducted on plant-soil-water relations in the arid coastal area of Peru. The program at La Estanzuela should initially be limited to animal production (pastures, nutrition, physiology, breeding and possibly health), cereal crop improvement, and soil fertility as it applies to the last two.

34. Considering the great need in Latin America to solve a multitude of scientific problems directly related to agricultural production, IAIAS staff members should also engage in research work independent of postgraduate training, provided that sufficient funds are made available to permit this without weakening the educational activities.

35. Much of this work could perhaps best be carried out on a regional basis, with the active participation of the Regional Offices, through regional uniformity trials, regional breeding projects, etc. In addition to such crops as coffee and cacao, special emphasis should be given to food crops, forage crops, plant and animal nutrition.

36. To carry out these activities, a considerable expansion of the technical staff and facilities over and above that needed for the graduate education program alone would be necessary, both at headquarters and in the Regional Offices.

(e) Fellowships

37. IAIAS might assist the International Institute of Education, OAS, ICA and other organizations in screening applicants for fellowships for study at institutions within and outside Latin America.

38. IAIAS should attempt to establish uniform standards for fellowship aid at Turrialba. To the extent possible, sponsoring agencies sending students to IAIAS should be expected to conform to these standards.

39. IAIAS should control and administer a sizeable fellowship fund of its own for study at the Institute, to which interested organizations may contribute.

(f) Outside Financial Support

40. It is to be expected that IAIAS will continue to receive essential support for graduate training and research in the form of restricted funds whose requirements do not conform entirely to the organizational pattern of the Institute. Such support should be accepted only under the condition that the staff become members of existing departments and that the graduate training and research projects contribute directly to the on-going programs of training of the Graduate School and research of the departments. This does not mean that such accounts (e.g., those of the Cacao Center or the Nuclear Energy Program) are not also properly identified separately, but rather that they must be sufficiently flexible to permit incorporation of their components into the organizational pattern of the Institute. Acceptance of special funds for the conduct of research in the area of biology and the selection of research projects should be limited to the main lines enumerated above, unless there is a prior commitment and new implementation for an extension of the responsibilities of the Institute.

(g) The Cooperative Development of Programs within Disciplines

41. At present, subject matter specialists in the Zone Offices and those assigned to national institutions are isolated administratively from their colleagues in other Zones and at Turrialba. It seems desirable for them to be technically associated with the appropriate department at Turrialba and to be in close communication with it. Thus there will be mutual contributions to each other's activities by Turrialba and the Zones. This "horizontal" integration of the staff in the Zones and the Turrialba staff would also provide opportunity for the appointment of Zone staff to the Graduate Faculty for the purpose of directing thesis research and offering certain courses.

42. In this way the Department Head at Turrialba would be recognized as the technical coordinator of all the work of IAIAS in fields covered by his Department. However, Department Heads might frequently wish to delegate this responsibility to qualified members of the Department, or, with the agreement of the Zone Director, to a member of the Zone staff. This coordinating activity would be entirely at the technical level, and would in no way interfere with administrative responsibility at Turrialba and in the Zones.

III. CONSULTANT SERVICES AND DIRECT ASSISTANCE TO NATIONAL INSTITUTIONS

A. Background

43. This action refers to visits by technical staff of IAIAS to countries to advise and assist on the solution of particular problems in research, education, extension, rural development, etc. Direct cooperation with educational institutes and the assignment of IAIAS staff to them for varying periods of time in order to teach in or to aid in developing graduate training and research programs has been dealt with in Section II.

44. There is little doubt that the consultant services rendered by IAIAS, especially made possible through the ICA Contract and Project 39, have been highly valuable, and should be continued. However, the relatively "water-tight" organization of the ICA Contract, Project 39, and the Cacao Center has tended to lead to some lack of coordination in consultant services and less than full efficiency in the use of available resources. In some cases the absence of staff on consultation trips has seriously interfered with teaching and research activities, to the detriment of students' training; and in others suitably qualified and available staff have not been utilized. There has been reluctance to refuse requests because of higher priority commitments; and in the case of the ICA Contract consultation work has necessarily taken the highest priority.

B. Recommendations

45. All senior technical staff should be available for consultation services and opportunities for this type of work should, as far as possible, be given to all senior staff from time to time since this is beneficial to their work in the ways already mentioned in Section I.

46. Requests for consultation and direct technical assistance should be routed through the Regional Office Directors, who could consider whether the service is best rendered by IAIAS or another agency (ICA, FAO, UNESCO, CEPAL, etc.). The best qualified staff of IAIAS available for the particular request would then be assigned either from the regional staff or from Turrialba or another Zone. The availability of staff should be determined in regard to teaching and research commitments, so that there is not undue interference with teaching and the supervision of students in the Graduate School and short courses. It should be a special responsibility of the Program Office of the Dirección General to stimulate the most efficient use of the total resources of IAIAS in this field.

47. Normally a consultant activity should not last more than one month, exceptionally two. From time to time suitably qualified staff who have reached a stage where the resultant broadening of their experience would be beneficial, may be made available for up to 2 years, to work directly with national institutions either on a leave of absence or reimbursable basis.

48. IAIAS will continue to find it desirable from time to time to invite outstanding scientists to serve as temporary consultants to countries or to its own research and teaching programs.

IV. SCIENTIFIC INFORMATION SERVICES

A. Background

49. Many and varied opinions have been expressed regarding the scientific information services of IAIAS (referring here to the activities rather than to the Department known as SIC). These have ranged from highly complimentary to highly critical of some of the publications. It has often been said that the work of IAIAS is not well known in Latin America.

50. So far, because of the sources of financial support, the work of SIC has been heavily biased towards communication in agricultural extension and in extension education. Less attention has been paid to the interchange of information in the fields of scientific research, particularly in biology, and to the training of scientists in communication techniques.

51. It has been suggested that an expansion of work on applied social sciences should be built on the present Scientific Communications Service and the Department of Economics and Social Sciences. However, there seems no a priori reason for associating the activities of IAIAS in scientific information more closely with either the social or biological fields.

B. Recommendations

52. The work of IAIAS in scientific information is highly important; it should receive greater support from the regular budget of the Institute than at present in order to establish it as an integral part of the program, with continuing outside support for expanding specific activities (e.g. ADECO, the series of Manuals and Texts).

53. There should be greater relative emphasis on the services in the biological sciences.

54. The unit in charge of scientific information services should serve the entire Institute, including Turrialba and the Regional Offices, and should be responsible directly to the Director General.

55. The scientific information services should be responsible for translating, editing, publishing and distributing publications originating from the various units of IAIAS. The responsibility for subject matter in these publications should rest with the appropriate technical units of the Institute. Editorial and production services under special contracts should also be undertaken.

56. The scientific information services should disseminate information on the activities of the Institute to official organizations and to the public. It is recommended that a regular "Information Bulletin" be published, giving full information on all activities of the Institute, not only reporting completed activities but also announcing courses, meetings, seminars, and other activities well in advance. This bulletin should be distributed regularly very widely, to

individual technicians and professors as well as to institutions, and officials and government departments.

57. Staff members should offer courses in the Graduate School in such subjects as communication in extension, and technical writing, and to participate in short courses on these subjects and others such as visual aids, radio and other communication media. They should also be encouraged to undertake research in these fields.

58. The following are specific recommendations on some of the current activities in the field of scientific information:

a. Journal "Turrialba" and "Comunicaciones Científicas Agrícolas": An Inter-American Journal of Agriculture of a very high technical standard is needed. Coordination should be sought with the probable proposals in this regard of the Rockefeller Foundation, the V Latin American Meeting of Agronomy and a possible link with the proposed Latin American Society of Agronomists. "Comunicaciones Científicas Agrícolas" should be limited to brief reports of recent results obtained in research and could be combined with a number of leading review articles, and incorporated into "Turrialba". This journal might also be adapted to the needs and proposals which may be developed by the above-mentioned organizations.

b. Abstracts: The "Bibliographical Supplement to Turrialba" should be discontinued. Although there is apparently some interest in abstracts in Spanish, the majority opinion seems to be that technicians capable of profiting from abstracts must be able to read English anyway. The expense and staff that would be necessary to produce thoroughly good abstracts in Spanish are far too great to justify this as an IAIAS activity in relation to other needs in Latin America. On the other hand, a need is felt for better abstracting of current Latin American literature. IAIAS might explore arrangements with one or more of the large world abstracting agencies to actively cooperate to improve this situation.

c. Annual Report: IAIAS should publish an annual technical report, covering all its activities.

d. Manuals and Texts in Spanish: This valuable project should be continued, with emphasis on the preparation of new basic texts for use in universities. Translations of existing texts should receive less emphasis as this is largely covered by RTAC (Mexico) and commercially.

e. "Extensión en las Americas": Should continue.

f. Publications by Staff Members: More encouragement should be given to publication of research results in scientific journals, and in technical bulletins of IAIAS in the case of longer publications.

g. Technical Conferences: IAIAS should continue to participate in the organization of these conferences, but care should be taken to avoid undue interference with teaching activities, and duplication of the work of other organizations (e.g., FAO).

h. The Library and Documentation Service: Should be strengthened and located at Turrialba but serve the entire Institute. The photocopy and microfilm services should continue, and be operated by the Library. Bibliographical lists such as those on cacao, coffee and corn should continue as funds permit.

i. Short Courses: The Basic Communication Courses and the ADECO activity should continue, but should preferably be offered regionally through the Zone Offices.

V. WORK IN AGRICULTURAL ECONOMICS AND SOCIAL SCIENCES APPLIED TO AGRICULTURE

A. Background

59. There is an important need for expansion of the activities of IAIAS in the areas of agricultural economics and social sciences applied to agriculture, with particular emphasis on graduate training.

B. Recommendations

60. The work of IAIAS in these fields should be markedly strengthened. The size and rate of increase must depend on the availability of financial support and of highly qualified personnel.

61. The staff concerned with these subjects should continue to be members of a department or departments within the Turrialba organization for research and graduate education, and of the Regional Offices. This is essential in order to make possible a unified graduate educational program in which there are maximal opportunities for cooperation of staff and interdisciplinary training of graduate students, across the biological and social sciences, not only in formal course work, research and seminars but also through extra-curricular activities.

VI. STRUCTURE OF IAIAS

A. Background

62. It is generally recognized that changes should be made in the present structure of IAIAS to facilitate the implementation of its research and educational program. Several Departments are the outcome of specific outside grants, as, for instance, the Cacao Center and the Nuclear Energy Department. The structure and organization are unbalanced. Economic and Social Sciences are weakly developed and in both the social and the biological fields important disciplines are lacking.

63. There is no suitable, internal Advisory Body to assist in policy matters and help solving overall technical and administration problems and executive functions are sometimes too concentrated. For example, all administrative, research and educational activities at Turrialba are at present the overall responsibility of one single individual.

64. There is a strong tendency towards great independence among the individual Departments, which has a detrimental effect on the overall efficiency of the Institute. Through an improved structure and organization, better coordination and stronger cooperation among Departments should be enhanced.

65. The location of the main base of operations at Turrialba has been criticized as in many ways unsatisfactory, and the suggestion has been made to establish the main operational base of the Institute near San José or another cultural center in Latin America, in close proximity to a university, retaining Turrialba exclusively as an experimental station.

B. Recommendations

66. As a considerable expansion of activities is expected to occur which will require strengthening both the headquarters and the Regional Offices, and a gradual absorption into its regular program of presently more or less independent units, a reorganization of the structure of IAIAS seems indispensable.

(a) The Office of the Director General

67. The location of the Director General's Office in San José seems advantageous but its separation presents the danger of overemphasizing bureaucratic activities; this must be avoided, having always in mind the scientific and educational character of the Institute.

68. The Office of the Director General should include his Assistants for technical and administrative affairs (to be kept at a minimum number), a Legal Advisor and an Officer responsible for scientific information services. An adequate Office of IAIAS in Washington seems essential and would serve as liaison between the Director General and OAS and other cooperating agencies.

(b) Turrialba

69. Turrialba should continue to be considered as the operational base of IAIAS for the research and educational activities in all fields. With the improvements in roads, communications and basic services that have been made and are in prospect, the location of Turrialba is not a serious limitation to the potentialities for postgraduate training and research programs. On the contrary, with appropriate enlargement of present facilities, together with such changes in internal policies as may be needed to improve the "ambiente", the location seems entirely satisfactory.

70. Directly responsible to the Director General for the overall administration of the Turrialba Campus would be a "Director of Agricultural Research and Education". He would have two main collaborators, a Dean of the Graduate School and an "Associate Director of Research", besides one or more Coordinators, dealing with Short Courses, the Fellowship Program and a Program of Assistance to National Faculties of Agronomy (these functions could perhaps as well be performed in the Office of the Director General). Also the Library would be attached to his Office.

71. Under the Director of Research and Education five large Departments should at present be established, which would constitute the real core of IAIAS: Economics and Social Sciences, Basic Sciences, Plant Industry, Animal Industry and Forestry. Basic Sciences would include the laboratories of soils, climatology, genetics, atomic energy, botany, plant pathology, entomology, etc., dealing with the basic disciplines many of which are of specific interest to some or all of the other four Departments.

72. The remaining four Departments would, according to the size of the program, either be subdivided into a number of sections or, for the time being, comprise groups of specialists each devoted to a specific field of activity.

73. The Nuclear Energy Project would be located, without change of its present set-up, in the Atomic Energy Laboratory of the Department of Basic Sciences and the Inter-American Cacao Center could become part of the Plant Industry Department.

74. All farm operations would be a single undertaking, whose Administrator would report directly to the Director of Research and Education. There would also be the necessary administrative and accounting offices.

75. A Faculty Board should be established, to act as a general advisory group to the Director and as a forum for ample discussions on matters of interest to the Turrialba Campus.

(c) Regional Offices

76. With the gradual absorption of Project 39, the existing Regional Offices become the official representatives of IAIAS in the three regions (Northern, Andean and Southern). Their Directors should remain directly under the Director General.

77. Under the new organization, their functions should be considerably amplified and their technical staff strengthened in order to develop the programs outlined in earlier sections. They would be responsible for all IAIAS activities in the countries and in national institutions. As soon as sufficient resources are available, a fourth Regional Office should be established in Brazil. Meanwhile, a regrouping of countries of the three existing regions might be advisable, possibly leading to the relocation of one or more of the Zone Offices.

VII. RELATIONSHIPS WITH OTHER AGENCIES

78. IAIAS has received considerable support from various national and international organizations. Without this cooperation, the Institute might not have survived. It is hoped that this cooperation will continue and be considerably expanded in the future.

79. The broad aims of both FAO and IAIAS are identical, i.e., to speed up the agricultural development of their member countries to improve the standard of living of their populations. It would therefore be highly advisable to strengthen still further the cooperation among them, to the point that in each country or region, joint and well-coordinated programs could be implemented. In certain specific fields, as agricultural education, plant exploration, establishment of germplasm collections, close integration would be particularly desirable.

80. With the recent approval of a UN Special Fund Project for IAIAS, the cooperation with FAO will be considerably expanded. Future joint FAO/OAS agricultural conferences, as the last in Mexico, will also substantially contribute towards this end.

81. Other UN Agencies of interest to IAIAS would be mainly UNESCO and WMO. It would be worthwhile to explore the possibilities of establishing future collaboration with them.

82. Although the intention to absorb at least part of the staff and facilities currently financially dependent upon ACRI, ICA, and AEC into the regular program of the Institute is supported, it is felt that these agencies could helpfully continue to contribute financially in order to strengthen work of joint interest. In the case of ICA, it is particularly hoped that this most valuable assistance to IAIAS should continue to be offered and that an even better mechanism can be worked out to make most efficient use of the assistance.

83. It should be of particular interest to IAIAS to maintain and considerably expand the valuable cooperation of the Rockefeller, Ford, Kellogg and other Foundations, which, like IAIAS, are primarily interested in the improvement of standards of research and education.

84. It would seem to be conducive to more efficient operation if all outside financial contributions, whether for specific purposes or for general improvements, were deposited in a Special Fund of IAIAS, which could be handled with a greater degree of independence than hitherto. This would facilitate, among other things, the standardization of salaries and allowances and thus contribute to the maintenance of improved morale among staff and students.

85. Finally, one should not lose sight of the fact that, although IAIAS expects to receive a considerable increase of its regular budget, continuous and substantial outside financial assistance would greatly increase the efficiency of its work, and hasten progress towards the solution of the manifold and diverse problems the Institute is called upon to face.

A P P E N D I X

BIOLOGICAL SCIENCES TEAM

List of Institutions and Offices Visited

May - June, 1961

COSTA RICA

Ministerio de Agricultura y Ganadería

Universidad de Costa Rica
- Facultad de Agronomía
  - Estación Experimental Agrícola
- Escuela de Ciencias Económicas y Sociales

Instituto Interamericano de Ciencias Agrícolas
- All Departments and Services

MEXICO

Instituto Nacional de Investigaciones Agrícolas (INIA)

Rockefeller Foundation

Secretaría General de Agricultura

Escuela Nacional de Agricultura, Chapingo

Departamento de Enseñanza Agrícola, Secretaría de Educación Pública

Instituto Tecnológico y de Estudios Superiores de Monterrey
- Escuela de Agricultura y de Ganadería

FAO Latin American Regional Office (Northern Zone)

BRAZIL

State of São Paulo

Campinas

Instituto Agronômico
- Estação Experimental Central

Piracicaba

Escola Superior de Agricultura "Luiz de Queiroz"

São Paulo

Secretaria da Agricultura

Instituto Biologico

Departamento de Produção Animal

Rio de Janeiro

Ministry of Agriculture

Departamento Nacional de Produção Vegetal

Centro Nacional de Ensino e Pesquisas Agronomicas (CNEPA)

Faculdade de Agronomia

Instituto de Ecologia e Experimentação

FAO Latin American Regional Office (Eastern Zone)

Associação Brasileira de Credito e Assistencia Rural (ABCAR)

Escritorio Tecnico de Agricultura (ETA)

ARGENTINA

Ministerio de Agricultura

Instituto Nacional de Tecnología Agropecuaria (INTA)

Headquarters in Buenos Aires

Centro Nacional de Investigaciones Agropecuarias, Castellar

Instituto de Fitotecnia

Departamento de Especialización

Centro Regional (Pampeano) de Investigaciones Agropecuarias, Pergamino

Comisión Nacional de Administración del Fondo de Apoyo al Desarrollo Económico (CAFADE)

Ministerio de Relaciones Exteriores

Dirección de Organismos Internacionales

Facultad de Agronomía y Veterinaria de Buenos Aires

Administración Nacional de Bosques

URUGUAY

Southern Zone Regional Office of IAIAS

Ministerio de Ganadería y Agricultura

Instituto Fitotécnico y Semillero Nacional "Dr. Alberto Boerger" en "La Estanzuela", Departamento Colonia

Dirección de Parques Nacionales

"San Ramón" Demonstration Area

Facultad de Agronomía, Montevideo

PERU

Ministerio de Agricultura

Andean Zone Regional Office of IAIAS

Servicio de Investigación y Promoción Agraria (SIPA)

Universidad Agraria (La Molina)

Facultad de Agronomía

ACKNOWLEDGEMENT

The Members of the Team wish to record their appreciation for the sympathetic reception accorded them and for the facilities generously provided by the officials of the institutions and offices visited, and by the Director General and staff of IAIAS.

RP/Doc. No. 7-Ing.
6/28/61

REPORT

OF REVIEW TEAM IN SOCIAL SCIENCES

Dr. José Marull (Chairman)
Dr. T. Lynn Smith
Ing. Antonio Pérez-García

A. Introduction

1. This report examines in a condensed form the activities of the Inter-American Institute of Agricultural Sciences from the standpoint of the social sciences. It is divided into five parts, namely:

   a. An inventory of the main agricultural development needs and problems of the Latin American nations (Section B).

   b. A discussion of the extent to which these needs and problems fall within the scope of the IAIAS (C).

   c. An outline of the type of structure and the operations that seem best suited to the IAIAS (D,E).

   d. An analysis of the role of social sciences in the IAIAS (F).

   e. A list of suggested research projects in the social sciences (G).

2. The report has been prepared with full realization that the Latin American countries must meet the urgent need to accelerate economic and social development if they want to preserve and strengthen individual liberties in a democratic form of life. It has also been borne in mind that agriculture requires particular attention in this respect since it offers the main source of livelihood for the Latin American population. Furthermore, this population is increasingly dissatisfied and it is growing at an explosive pace.

3. Moreover, we feel that the IAIAS must meet the challenge of helping the agriculture of the Latin American nations fulfill adequately its multiple roles of feeding the people, supplying raw materials to domestic industries, offering a market for other sectors of the economy, and exporting in sufficient quantities to render possible the purchase of manufactured consumer goods as well as capital goods.

B. Main Agricultural Development Needs and Problems Found in Latin American Nations

4. The needs listed in this section fall into two categories:

   a. Those clearly felt and expressed by large numbers of the officials and others who were interviewed, and

   b. Those mentioned occasionally in the interviews and which, upon reflection, the members of the team are unanimous in considering to be highly important.

5. In the first category the following may be listed:

   a. More and better trained personnel. This is especially acute in the fields of agricultural economics, rural sociology, and agricultural extension work, including home demonstration work.

   b. More adequate financial support for national agricultural institutions and agencies (Ministries of Agriculture, Agricultural Colleges, Agricultural Credit Agencies, etc.).

   c. Desire that IAIAS and other international organizations give strong backing locally to national programs and activities.

   d. Expansion and integration of agricultural research, extension work and teaching activities.

   e. Desire that the IAIAS provide personnel to help staff and other services to help carry on national programs.

   f. The wish for assistance in the solution of a variety of problems that best can be described as a need for more effective management of institutions, organizations, farms, etc.

   g. Necessity of improving the lot of the rural workers and their families. This includes education, health, housing, diet, wages, land reform, and community development.

   h. The need for improved systems of marketing and agricultural credit.

   i. The need for some international agency, such as the IAIAS, to assemble, collate, and make available data and information on a variety of problems which many of the nations have in common, such as those of volcanic soils, irrigation, drainage, and range and pasture management.

j. Desire that available research findings be presented in such a form that they may readily and immediately be applied in the solution of local problems.

6. The second category of needs includes the following:

a. Need for acute concern about present debility of local governmental units and activities.

b. Need for much greater opportunities for agricultural education at the secondary level.

c. Need for fuller understanding of the nature and philosophy of agricultural extension work and for a fuller appreciation of the contributions that extension can make in economic and social development programs. (Mere graduation with the degree of Ingeniero Agrónomo is not adequate preparation for an extension worker).

d. Need for an appreciation of hard and skilled work on the part of all elements in a society in order to bring about economic and social development.

e. Need to transform the educational institutions into the type which are controlled by their faculties and which stress professional and technological training and self discipline on the part of the students.

f. Need to develop, in Latin American institutions, graduate training programs for large numbers of specialists in all of the sciences related to agriculture.

g. Need for well planned and balanced national agricultural policies based upon detailed knowledge of local resources and problems.

h. Need for stronger and better organized Ministries of Agriculture, Colleges of Agriculture, Extension Services and national research agencies.

C. <u>Spheres of Action</u>

7. There are many aspects of modern agricultural research, teaching, and extension which a considerable number of the American nations are unable to provide adequately. This means that activities by international institutions such as IAIAS are essential and that they are likely to continue to be so throughout the coming decade. However, the variations from country to country are great and the rate of change is so varied that an international agency must have a program that is flexible, dynamic and constantly subject to modification.

8. In-so-far as the IAIAS is concerned it should give priority to those activities which are needed by the maximum number of countries and which most of the countries themselves are unable to carry on adequately. In rendering such services to the countries their distribution should adhere closely to the relative sizes and needs of the rural populations.

9. Constant evaluation and reappraisal of activities and projects should be maintained in order to insure that the IAIAS programs and projects always are those that are beneficial to the majority of the nations concerned. In its activities the Institute should always give preference to the types of projects which emphasize the improvement of methodology; the standardization of terms, units, procedures, forms, analytical devices, classifications, etc.; the exchanges of procedures and results; and professional contacts among those working in the same field.

10. In its relationships with other international agencies the IAIAS per force must adjust its activities so as to prevent undesirable duplication. Within the OAS, however, the IAIAS should have primary responsibility for all activities related to agriculture, including the awarding of graduate fellowships, the selection and assignment of visiting professors, the organization and conduct of professional meetings, the preparation of factual statements pertaining to agriculture for presentation at agricultural conferences, etc.

11. In comparison with the past, the IAIAS should limit more narrowly the scope of its programs and activities. It should make no attempt to solve all possible problems, but it should stress those which give the greatest prospect of having substantial impact upon agricultural development throughout Latin America, and it should avoid those which merely scatter the efforts of its limited personnel.

12. The IAIAS has done well to place great emphasis on teaching and training and this emphasis should be maintained in the future. However, it is imperative that the level of instruction be raised. Indeed the IAIAS should confine its teaching efforts to graduate instruction and the level of this graduate work should be equal to that in the best graduate schools in existence. Even the short courses which may be organized should be conducted strictly at the graduate level. As soon as adequate graduate instruction is available in the universities of the respective countries, the personnel of the IAIAS should transfer their activities to other neglected fields.

13. The research activities of members of the staff of the IAIAS have contributed heavily in its graduate training program. As graduate work is expanded and improved there will be need for corresponding enlargement of research activities in all fields, including those of agricultural economics, rural sociology, agricultural extension methods, and home demonstration work.

Furthermore, the Institute must undertake more research projects of the kind that can contribute directly in national plans for social and economic development.

14. Some programs of the Institute to date have endeavored to assist in the improvement of agricultural extension work in various countries. However, the present status of agricultural extension activities in Latin America is quite unsatisfactory. Therefore much attention should be given, during the next ten years, to discovering ways and means of helping the countries to improve and expand further extension work in agriculture and home economics. Much can be accomplished through a better selection and placement of personnel. However, many of the workers also need more basic training in the application of the principles and philosophy of extension work and community development, so that they can perform in a manner that will create the necessary good will among the public and give extension work the prestige needed to insure its success.

D. Structure

15. The problem of determining the best structural organization for the Institute is a very complex and difficult one. Among the factors which contribute to the perplexity of the problem are the following:

a. The extreme heterogeneity (climatically, socially, demographically, economically, agriculturally, topographically, politically, educationally, culturally, etc.) of the twenty Latin American countries.

b. The enormous area involved and the tremendous distances which separate the various countries from one another.

c. Scarcity of transportation and communication facilities that link (or fail to link) the various countries together.

d. The individualistic and nationalistic tendencies which prevail in the various countries.

e. The unequal development in the respective nations of the various institutions and sciences related to agriculture.

16. The Institute was never designed originally to operate in the manner it is now functioning nor to perform the heterogeneous activities that have been thrust upon it.

17. In view of these realities it would appear that a coherent decentralization is the only structural form that promises an adequate solution to its problems.

18. In this report we do not propose any complete outline for the structure of the Institute, but we do wish to present three specific proposals:

    a. The Office of the Director should be located at a point which is (i) near the center of population of Latin America, and (ii) in a city which is linked by direct airline services with all parts of the Americas. The center of population is located approximately at Cuzco, Peru, and Lima is the only place in this general area with the necessary transportation facilities. Therefore we recommend that the Director General's Office be established in Lima.

    b. The Turrialba-San José unit should be retained and in addition it should serve as Regional Office for the Northern Zone. In the San José part of this unit the Social Sciences should be developed until they are at parity with the Biological Sciences.

    c. The Montevideo-La Estanzuela unit should be developed to serve the temperate zone to a degree of equality with the Turrialba-San José unit, and it likewise should have the social science activities developed to parity with the biological sciences.

19. Implicit in the three recommendations just stated is the absorption of the personnel and functions of the Zones by the Turrialba-San José and Montevideo-La Estanzuela units.

E. Functions and Operation

20. The Institute should devote the majority of its efforts and funds to international programs for which it itself is primarily responsible. A substantial secondary effort, however, should be assigned to the work of improving and strengthening specific institutions and programs of particular nations. This is to say that the Institute's programs of teaching, research, and extension education should be formulated by the members of its staff, but they should take into account the problems and needs of all parts of Latin America. They also should be of the type that lend themselves fully to cooperation between the Institute and the various countries. In selected cases the personnel of the Institute should also be prepared to cooperate with specific nations in particular projects that are of prime national importance to one or more of the latter.

21. As indicated above, training at the graduate level should be the primary function of the Institute in the decade ahead. This should be complemented, however, with research projects of the type designed to enrich teaching to the maximum and with studies that will contribute as much as possible to the improvement of agricultural extension, community development and other action programs. Furthermore, members of the

Institute's staff should be prepared to devote substantial portions of their time to service in advisory capacities in connection with the programs and plans of the various national agencies.

F. Status and Role of the Social Sciences in the Institute

22. In the past the social sciences have played modest roles in the work of the IAIAS. This weakness has been closely paralleled by the slight importance given them in the Ministries of Agriculture, Colleges of Agriculture, and other agencies of the various Latin American governments. Nowadays, however, there appears to be what practically amounts to panic on the part of those responsible for the various agricultural institutions. Suddenly they are faced with tremendous problems of social and economic adjustment and change, such as those of agrarian reform, with which they seem to be almost entirely unprepared to deal.

23. It seems obvious that the Institute must raise the social sciences to a parity with the biological sciences in its plans and programs. In agricultural economics, rural sociology, and the entire field of agricultural education, it is imperative that those employed by the Institute be of the very highest quality. They all must be highly intelligent, thoroughly trained, experienced, and devoted to the cause of international service. It would be very unsafe to consider mere possession of a Ph. D. degree in one of the fields as adequate qualification for a position.

24. In order to maintain the type of personnel required, advancement and remuneration must depend upon professional competency in the field of specialization. Above all it should not be necessary for the specialist to leave the fields of teaching and research for that of administration in order to achieve some of the highest and best paid positions in the Institute. By following a policy of advancement and salary raises that will allow those engaged in teaching and research to occupy positions at the top of the scale, the Institute can serve as an example for national institutions throughout Latin America.

25. In all of the social and economic research projects undertaken by the Institute, including those connected with M.S. and Ph.D. programs of the graduate students, the primary concern should be with those that have direct bearing on the current social and economic problems of the various countries. Special care should be given to studies in farm management and marketing, both at the firm level. All of the social scientists should make sure that the general frames of reference they are using give adequate attention to the social institutions as they are found in the Latin American countries.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

26. In agricultural extension and home demonstration work it is essential that general principles and recommendations be highly adapted to local possibilities and needs. For example, recommended menus should make use of locally produced foods; and the planning of kitchens and other domestic facilities should be done so as to correct local deficiencies. The Institute must also seek to promote throughout the various countries an understanding of the fact that an ordinary graduate from an agricultural college is not yet prepared to do extension work. He still needs a grounding in extension philosophy, an appreciation of the economic dimensions of his own activities, and a deep concern with the personal development and general well being of the people with whom he works. Both agricultural and home demonstration workers must be thoroughly convinced that the farm family as a whole is the unit with which they should work.

G. Suggested Research Projects

27. The following research projects in social sciences are suggested:

1) Delineation and description of rural social areas in Latin America (a. characteristics of the population; b. patterns of man-land relationships; c. systems of agriculture; d. levels and standards of living; e. community-neighborhood structure; f. class systems; g. principal social institutions; h. cooperation and other social processes).

2) Delineation and description of types of farming areas in Latin America (a. land use and crop and livestock combinations; b. tenure; c. farm practices; d. size of operations; e. labor availability, use, and efficiency; f. farm machinery; g. farm capital and credit; h. marketing of products; and, i. farm inputs).

3) Current social and economic changes in Latin American agriculture and rural life, with projections until 1975.

4) Completion of inventories and analysis of agricultural extension organization and programs in Latin America.

5) Studies of rural population changes at the local level (municipio, cantón, partido, comuna, etc.), including migration from the farm and its effects upon the agricultural economy.

6) Studies of the factors that obstruct social and economic development in Latin America. (Among the factors needing study probably are the following: a. inadequate farm credit institutions; b. lack of agricultural education at the secondary level; c. debility of local government; d. rudimentary marketing systems; e. obsolete agrarian structure;

f. the class system; g. low level of technology; h. inadequate knowledge of natural resources).

7) Economic and social studies of changing land use practices through settlement, resettlement, and colonization.

8) Comparative studies of the efficiency of production of farming units of various sizes (small farms, family-sized farms, plantations, ranches).

9) Inventories of production in various parts of Latin America from the standpoints of self-sufficiency of the farm family, production for the domestic market, and production for export.

10) A study of the intellectual development of Latin American farmers: needs, obstacles, and possibilities. (Agricultural education, inculcation of managerial skills in former agricultural laborers, preparation to farm by those who have inherited small portions of large estates, adoption and retention of new agricultural practices, elimination of pre-capitalistic mentality).

11) Studies of vertical integration.

12) Search for simple, reliable, and inexpensive indicators of levels and standards of living of farm families.

13) Studies of the application of economic and sociological findings in the formation of agricultural policies.

14) Evaluation studies of national institutions and their programs.

15) Studies of community and regional planning and action.

16) Studies of the adequacy of prevailing systems of land surveys and titles, and of measures for their improvement.

RECOMMENDATIONS OF THE REVIEW PANEL

RP/Doc. No. 1-Ing.
6/22/61

SIGNIFICANCE OF THE OVER-ALL PROGRAM REVIEW

Armando Samper
Director General

We are very grateful indeed to the members of the two Program Review Teams and of the Review Panel for taking time out from your heavy responsibilities and obligations to render this important service to the Institute and to the Americas.

You have already received the statement we prepared on January 30, in which we explained the reasons that moved us to carry out an over-all review of the Institute's program. In it we have outlined the specific objectives we seek and we have described the plan adopted. The document also contains a preliminary list of ten questions that we hope to clarify as a result of the program review. These questions are, of course, subject to whatever modifications you may wish to introduce.

We sought advice from many and considered the situation carefully before deciding to have two teams instead of a single one. Although there was the danger, with two teams, of arbitrarily separating the "biological" sciences from the "social" sciences, we expect, by organizing two teams, to have gained in depth in the study of specific situations. Also there was the advantage that we could leave open the possibility of presenting alternate solutions. The two teams, however, have worked simultaneously and have had ample opportunity to exchange ideas and discuss jointly whatever aspects of the program they chose to handle together.

Two main forces contribute to the planning of the programs of the Institute: the opinions of the spokesmen of the member countries, based on the idea they have of their own needs; and the opinions of the Institute spokesmen, based on the member countries' needs, as seen by Institute specialists. In the past, the opinions of the staff have prevailed, mainly because our Board of Directors was made up of the Ambassadors to the OAS who, although distinguished statesmen in their own right, had not dealt directly with the agricultural problems of their respective countries. When the Protocol of Amendment to our Convention is ratified by all the member countries and the representatives of the Governments on the Board of Directors are high technical officials of the Ministries of Agriculture, the reverse will probably be true after some time. In order for the Institute to be of real service to the American States and to render them efficient services, it will be necessary to maintain an adequate balance between these two forces. The over-all program review we are carrying out will be the foundation on which we hope to base our balance in the future.

During the Institute's fifteen years of operation, a "philosophy" has developed as to the functions and work methods of the institution. For example, we have chosen to help the member countries solve their own

problems indirectly by training their specialized professional personnel at the graduate level. We are assisting them in strengthening their own research, education and rural service institutions rather than rendering them direct technical assistance. Now we want to pause in order to analyze our experiences objectively, with the help of non-staff members who are well familiarized with the problems of Latin America and with the program of the Institute. Thus we hope to consolidate what has proven to be effective, discard what turns out to be weak, and introduce new ideas.

In the past years the rhythm of development of the Latin American countries has accelerated. The need to reshape and strengthen inter-American agencies to better meet the growing needs of the member countries has become evident. Particularly during the past few months, the representatives of the Governments have made concrete proposals on the restructuring of the Institute. They have done this in recent inter-American high level meetings such as the Fifth Inter-American Agricultural Conference and the Third Session of the Committee of 21. Several of these proposals have coincided with the points of view of the Director General of the Institute. The time has come to analyze these recommendations with selective criteria in order to provide the Director General and the new Board of Directors with guidelines for planning the expansion of the Institute's program.

The urgency of the review and the limitation of resources and tools available made it unfeasible to carry out a formal and exhaustive study of all the needs of the countries and of the Institute's services. We were not satisfied that a formal survey was the best way to review the program of an institution which, in order to efficiently serve the needs of the member countries, must anticipate those needs at all times. For this reason, we chose instead to carry out a review based on the opinions of persons whose authority stems from wide experience, sound judgment and intimate knowledge of the problems involved.

We did not set up the two review teams with persons with narrow specializations in the various branches of the agricultural sciences. Instead we chose persons of mature and sound judgment, capable of understanding fully the interrelationship between problems and disciplines and of analyzing the situations from broad points of view. We purposely included on each of the teams a high-level Institute official with a solid technical background and intimate knowledge of our programs. Each of them, will in the future, have executive responsibility in planning and carrying out our programs. Thus we hope to facilitate the work of the teams and share responsiblity for their recommendations in order to make sure they lead to an effective plan of action.

The first phase of the program review started with the survey the two Review Teams made between May 15 and June 30. It will end with the round table discussions of the Review Panel. The teams had a week to plan their work programs, including the country visits; nearly five weeks to begin developing and sorting out their ideas as they visited

a few key countries; and two weeks to draft their reports to the Director General. The team reports are the basic discussion documents of the Review Panel. During that time the teams consulted freely with the technical and executive personnel, both of the Institute and of the institutions visited in the member countries. Although their reports are their own and express their own ideas, they have the authenticity of ideas matured in ample consultation with representative elements of the two leading forces that lead to the preparation of our programs.

We left entirely to the judgment of the teams the selection of the methods and means to carry out their work, both during their visits to the countries, and in the preparation of their report. We left the teams free to submit two separate reports with different conclusions; or to submit a single report with a joint statement followed by separate section under the responsibility of each team. We did suggest that in either case they prepare summary reports with concrete proposals instead of attempting to make an exhaustive and extensive analysis.

The team reports are now being submitted by the Director General to a critical review by a panel made up of 15 leading authorities in the agricultural sciences, both from Latin America and from the United States. The panel will review these reports to arrive at its own conclusions and make its own recommendations to the Director General of the Institute. Since the Review Panel is larger, it has a broader base to compensate for the unavoidable limitation of disciplines represented on the teams. Among others, it includes specialists in home economics, forestry, animal husbandry, and communications. To broaden its base even further, the Panel has the advice of the executive and technical personnel of the Institute and of distinguished official observers from several international organizations, foundations and agencies with which we maintain close working relations. The Panel's discussions, therefore, will take place on the light of what other agencies such as FAO, Point Four, and the foundations are doing. Thus we hope to avoid duplication and dispersion of efforts in our own programs.

We are also leaving it up to the chairman and members of the Review Panel to decide on the scope and form of the recommendations to the Director General of the Institute. The Review Teams will have the choice of revising their reports or making a supplementary statement in the light of the discussions, if they wish to do so.

The second phase of the review will start when the Director General receives the final reports of the two teams and the recommendations of the Review Panel. These documents will be sent for further advice to former high officials of the Institute and to the Governments' representatives on the Technical Advisory Council. When their opinions are received, the Director General will take the action necessary to put the recommendations into practice, with prior approval of the Institute's Board of Directors when required.

We do not expect you, of course, to cover all aspects of the Institure's program. For example, because of the special characteristics of the home economics program, we are convening a meeting of the

Institute's home economists, which will take place immediately following the panel review, to discuss in more detail the future home economics program. We hope, however, that the Review Teams and the Review Panel will leave recommendations concerning the importance of homw economics in Latin America and in relation to the other programs of the Institute. If possible, we would like to have your ideas as to the place of home economics within the structure of the Institute.

Similarly, it may very well be that you may wish to recommend carrying out more detailed studies concerning particular aspects of our program, such as the Graduate School, the publications policy, the communications services and the plan to establish cooperative research and graduate training programs with the institutions of the member countries. If such is the case, it would be advisable to point out the importance of the problem, single out the particular issues that require clarification, and, if possible, suggest ways and means for carrying out such further studies.

We assumed that the review teams would want to consult some written reference materials, such as the annual reports of the Institute, the plans of the Director General's Office, and the recommendations of the Technical Advisory Council. The latter, we told them, were of particular importance. In making your recommendations you will no doubt bear in mind the conclusions of the high level inter-American conferences held in recent years, at which specific recommendations were made concerning the Institute, such as the Inter-American Committee of Presidential Representatives (Washington, 1957), the Fifth Inter-American Agricultural Conference (Mexico, 1960), and the Third Meeting of the Committee of 21 (Bogotá, 1960).

We also suggested to the teams that they keep in mind some special studies made in the past, such as the survey of the scientific communications facilities in Latin America (Shaw, Samper and Gropp), the situation of higher agricultural education in Latin America (Chaparro), the place of sociology in the Project 39 program (Moe and Alers), the possibility of establishing nuclei for research and advanced education within the institutions of the member countries, to be used by other countries under a regional plan (Vallega), the reports of the Agricultural Mission of the Special Fund of the United Nations (Hutchinson, Chaparro and Gutiérrez) and similar studies.

We suggested to the teams, however, that they should not attempt to make an exhaustive bibliographic review of all such material nor try to point out in detail the advantages and desadvantages of each of the recommendations made. Rather, we suggested using them only as guidelines and reference material. It was made clear to the teams that we wanted them to feel free to disagree with any ideas advanced by the Director General.

Over the years we have come to believe that the programs of an institution such as ours resemble a tree with a trunk as its axis, roots as anchorage, and leaves to give it vitality and growth. It seems necessary for our programs — at Turrialba, in the Southern Zone and in the social sciences as they apply to agriculture — to have

trunks of their own, made up of our own specialists, big enough to provide strong axes; to have them rooted in the needs of the countries; and to have them branch out in the institutions of the member countries. The greatest controversies concerning our programs have centered around such a simple yet intricate structure. Our greatest flaws have occurred when we have tried to have trunks without roots and branches (as in the early days of Turrialba), or branches and roots without strong trunks (as has been the case with our regional offices).

We do not expect you to draw up specific programs for the coming years, much less to concern yourselves with the means for obtaining the resources to finance the programs. Rather, we anticipate that you will analyze the needs, programs, methods and structures at a sufficiently high level to give us a broad enough view of our programs. At the same time, we expect you to keep in mind the resources limitations that all institutions have. Some of the needs of the countries are now only dormant expectations that will not turn into action programs for some time, thus limiting the scope of our present programs. In addition, our program plans will be limited by the scarcity of well-trained personnel; the insufficient financial resources; the inadequate sense of the solidarity of all people, and the inability of some of the institutions in the member countries to provide the quality, autonomy and continuity required to provide regional services.

Because of these limitations the assignment of priorities becomes essential. The needs of the countries are practically unlimited. Their demands for services are very large. Initiatives and proposals abound. We hope that the program review will give us adequate guidelines to limit our services to the most important and urgent needs of the majority of member countries. Your specific recommendations as to what are the most pressing problems and what priorities should be assigned to the programs will facilitate considerably the decisions to be made by the administration.

We suggested, arbitrarily, that you look ahead a full decade. By this we mean that we hope you will make a dynamic analysis instead of a static one. Latin America is restless and wants progress. We are in a period of rapid change -- social, economic and political change. The Institute, like all other institutions, will have to change too. It is not illogical to estimate that in a not too distant future Latin America will need to train, at the graduate level, around one thousand professionals in the agricultural sciences considered in a broad sense -- in agronomy, animal husbandry, agricultural engineering, home economics, agricultural economics, rural sociology, public administration, education, communications and related fields. We say a thousand professionals because at the outset we will need about 500, who will, in turn, generate an immediate need for another 500. The actual figure is unimportant. What is important is to realize that the future agricultural development of Latin America will require a heavy investment in professional capital. And that if the Institute relies exclusively on its own Graduate School, it will be in a position to prepare only a small fraction of the professionals needed. A bold new approach will have to be taken, perhaps through a plan to expand considerably the centers of the Institute itself, while developing simultaneously some 20 or 30 cooperative nuclei in institutions of the member countries.

In the forthcoming evolution we must anticipate the needs of the countries. We must be prepared for such an evolution. It would be appropriate, therefore, for you to give us some definite guidance for the gradual integration to the regular program of the Institute of the various programs now financed with special funds. Your recommendations as to the policy we should follow in the future concerning special grants and programs will be very useful too. Last year, Sir Joseph Hutchinson, Head of the Latin American Agricultural Mission of the United Nations Special Fund, accurately described one of our major plights when he said that the Institute was a very small dog with many large tails. It seems advisable to tell our member countries that we need their support in order to have one strong dog without so many tails.

Simultaneously with the program review we have started and administrative review. The Executive Officer in the Director General's Office is in charge of this review with the advice of the Organization and Methods Officer of the Office of the Secretary General of the OAS and a management services specialist of the United States firm of Ernst. and Ernst.. The Administrative Review Team seeks two main objectives: a) to analyze the administrative, budgetary, and financial policies and procedures to establish efficient decentralized administrative systems with adequate controls; and b) to establish the framework and guidelines for a job evaluation program and review the personal policies and procedures to give a tool to the Administration of the Institute for the improvement of the personnel program. We are greately indebted to the management services firm of Ernst and Ernst and to the Secretariat of the OAS for lending us the services of two authorities in this area.

We express our deep appreciation to the members of the two Review Teams, who have devoted all their energies to an intensive effort to produce the two excellent reports on which the discussions of this Review Panel will be based.

RECOMMENDATIONS OF THE REVIEW PANEL ON

FACTORS LIMITING AGRICULTURAL DEVELOPMENT IN LATIN AMERICA

Item 2

The Panel considers it to be urgently necessary to promote, in all the Latin American countries, a clear awareness of the seriousness of the agricultural problems which affect them and of the need for tackling them vigorously.

With this criterion, it recommends action aimed at emphasizing the importance of planning realistic, long range, stable agrarian policies.

It also believes that in developing such policies, it is fundamental that national agricultural budgets be increased, and that technicians' salaried be raised, in order to prevent them from being transferred to purely administrative jobs and in order to ensure their stability.

REVIEW PANEL RECOMMENDATIONS ON

RESEARCH AND GRADUATE TRAINING

Item 3

1. A well-integrated and balanced program of postgraduate training and research in all of the sciences related with agriculture should be the first priority of the IAIAS. The primary objective of this program should be to provide well trained specialists for teaching, research and public services in the various countries.

   (Implicit in this recommendation is the thought that special consideration should be given to the development of graduate training in agricultural economics, rural sociology, extension methods, home economics and agricultural engineering).

2. This IAIAS program should encompass three kinds of activity:

   a) formal postgraduate training and research

   b) cooperation with other institutions in research and postgraduate training

   c) conduct of special courses and seminars, and of consultant and research services, which give direct aid to institutions concerned with agriculture in the various countries.

   All three kinds of activity should be expanded in the coming decade.

3. The formal postgraduate training of IAIAS should be carried out under a single graduate faculty in one or more locations, which takes responsibility for its program, standards, procedures and the granting of degrees.

   The minimum requirements for the Master of Science degree should be equivalent to that required in the universities of the United States. Experience gained in the continuing research programs of the faculty should be coupled with such subject matter training as is appropriate to the needs of each graduate student. Every effort should be made to provide interdisciplinary experience and to bring the students in different specialties together so that they have opportunities to exchange ideas freely.

4. Cooperation should be fostered with the faculties and technical personnel of other institutions in Latin America for the purpose of mutual assistance in the training of graduate students and in research. The services of IAIAS should also be made available to assist in the development and administration of coordinated programs for improvement of higher education in Latin America.

Cooperation with universities in the United States, Europe and elsewhere should also be fostered systematically, as it may provide new opportunities in the development of research projects, the training of students, and the exchange of professional staff.

5. The IAIAS should stimulate the improvement of the level of undergraduate training in national institutions, by such activities as subject matter seminars for professors, conferences on problems and policies in higher education, and direct consultation on organization, curricula and teaching methods. Intensive courses in subject matter for professional personnel of national institutions should continue to be an important part of the informal postgraduate training provided by IAIAS.

6. The Institute must keep very much in mind the convenience of tying the selection both of students and of subject matters to important and definite programs, preferably of inter-American character, which are already well underway in the member countries.

REVIEW PANEL RECOMMENDATIONS ON

MAIN LINES OF RESEARCH

Item 4

1. In its research activities the Institute should give important recognition to projects which produce an improvement of methodology and, in the social sciences, also of standardization of terms and procedures.

2. The research projects undertaken by the Institute should include many that are of an interdisciplinary nature, and others which involve close cooperation with technical personnel of the various Latin American countries. Attention in all of them should be given to effective coordination of the research efforts both within the Institute and in the regions.

3. Research in the biological sciences, including forestry, should be further developed and expanded. Strong research programs also need to be developed concurrently in agricultural economics, rural sociology, agricultural engineering, extension education, and some areas of home economics.

4. Staff members of the Institute should be encouraged to engage in basic research projects, when these form part of an over-all program, but primary attention should be given to projects having a direct bearing on the problems with which the various countries are faced such as land reform and major pests and diseases. Stress should also be laid on research of immediate importance to extension activities.

5. We recommend that as he considers paragraph 33 of the report of the Biological Sciences group, the Director General add Biochemistry to the disciplines enumerated.

REVIEW PANEL RECOMMENDATIONS ON

DIRECT TECHNICAL ASSISTANCE AND CONSULTANT SERVICES

Item 5

1. IAIAS should continue to offer consultant services to member countries giving priority assistance in training at the postgraduate level where appropriate and at the undergraduate level, in national institutions and to specifc problems in research directly related to the fields of activity of the Institute. Technical assistance and consultation services related to agricultural development, analysis of institutional organization, etc., should continue only as far as staff and financial limitations permit without undue interference with the graduate training and research and short-course programs; such activities might include helping governments to formulate requests for technical assistance to organizations such as the Inter-American Development Bank.

2. The fullest complement of IAIAS personnel and competence should be used for technical assistance and consultation services in so far as this does not adversely affect training and research programs. Consultant services should be limited to short periods.

3. Coordination with other agencies such as FAO and the Pan American Union should be strengthened.

4. IAIAS should continue to offer intensive short courses on a regional basis, through national institutions whenever possible, as a complement to the formal graduate training and research programs. Careful studies should be undertaken in each country or region to determine those subject-matter areas in which the potential for this activity has been largely saturated and those where a need still exists. It will then be possible to determine an appropriate balance between short-courses and formal graduate training, having in mind the differing short-term and long-term needs in the different countries. Certain staff might have special but not exclusive responsibility for short courses.

REVIEW PANEL RECOMMENDATIONS ON

COMMUNICATION SERVICES

Item 6

The Review Panel, recognizing the importance of scientific communication services as a vital element in the effectiveness of IAIAS, recommends:

1. That increased support be given to it from the Institute's regular budget.

2. That publications and audiovisual communication work be expanded and that adequate attention be given to both the biological and social sciences.

3. That staff members should continue to engage in teaching and research activities and to undertake studies on the use of modern mechanical and other aids in communication procedures.

4. That an "Annual Technical Report" and a regular "Information Bulletin" be added to the publication program.

5. That studies be undertaken to decide, among other alternatives, whether "Turrialba" should be exclusively devoted to publishing results of research of broad applicability in Latin America or be exclusively devoted to review articles and brief reports on research in progress and recent results obtained in research, as done by "Comunicaciones Científicas Agrícolas," in which case the latter should be discontinued.

6. That the Bibliographic Supplement to "Turrialba" be replaced by a suitable "Index Journal," containing lists of titles in their original language and brief notes in Spanish.

7. That manuals, texts and other educational aids in Spanish continue to be prepared and published, with emphasis on the preparation of new, basic texts for use in colleges and universities.

8. That ways be found to continue the publication of "Extensión en las Américas" and increase its edition.

9. That staff members of IAIAS be encouraged to publish research results, not only in the Institute journals, but also in outside ones of high scientific standards.

10. That IAIAS should continue to organize and increase its participation in regional and international technical conferences.

11. That Library service should be further strengthened, as well as its photocopy, microfilm and information services.

12. That copying services, utilizing outside sources, whether these be collections in South or North America or elsewhere be strengthened to ensure that whatever may be needed will be obtained promptly.

13. That special attention be given to adequate publication and distribution in Latin America of the various communications services mentioned in the previous recommendations.

14. That the development of scientific exchange facilities be promoted within the countries and that the training of personnel in this field be increased.

REVIEW PANEL RECOMMENDATIONS ON

PRIORITIES AMONG ACTIVITIES

Item 7

There are innumerable dynamic, unfolding problems in the American Republics to which the IAIAS could give attention. Many of these involve food production and farm people, since the majority of the population in most of the countries gain their livelihood from agriculture. Moreover the expanding populations make substantial increases in food production necessary for maintaining life, while the demand for an improvement in the economic and social status of large masses of people make economic development an essential aspect of national policy. This in turn puts additional pressures on agricultural production and marketing institutions, since the foreign exchange to pay for the implements of development is largely derived from farm exports in most countries of the hemisphere.

To select from the many problems implied in the above statements, those most suitable for study by IAIAS requires continuous alertness and sensitivity. Moreover it is questioned whether any such technical organization is capable of dealing with a variety of short term problems in an adequate and comprehensive manner, though it is also clear that IAIAS should be prepared to contribute to the understanding and solution of many of them, and be flexible in its approach. It is also clear that the changing structure of the economy of agriculture, of rural institutions, and of government and other services related to agriculture are requiring and will continue to require a vast increase in trained manpower. National needs for trained agriculturists have doubled and tripled in a few years. Many programs of development, of economic and social betterment are seriously hindered, fail of their objectives, or are completed with great delays, because competent personnel are not available. Improvements in the quality of education and an expansion in the number of students are needed at all levels of education. IAIAS is particularly qualified to help meet these needs at the university and post-graduate level, and this is the direction of most interest to its well trained staff. Moreover it has the opportunity to develop such programs with relatively little competition from national universities, and can help such units in appropriate ways.

The IAIAS can aim at any of several levels of training: (1) A master's program second to none in the hemisphere, with doctoral programs in a number of specialities; (2) A master's program which competes favorably with most United States and European institutions; or (3) a program which includes advanced training for a significant proportion of the students for a six to twelve month period, with the better ones continuing for a second year and a degree program. The best of these, in turn, would go on to Europe and the United States for doctoral programs, well prepared for further study and with excellent competence in the requisite foreign language.

1. The panel recommends that the immediate goal be a program of the third category in the Biological Science field, and that the development be as rapid as it can be attained into the second category. At the same time efforts should be made to develop a program of the third category in the Social Sciences, an increase from the present tiny program. Even such an expansion in programs will require a substantial increase in personnel dedicated to graduate teaching and research, a concentration of effort in the Institute's program, and hard work by the staff. Obviously, within the broad categories used in this panel (to which others might be added), there will be differences in the competence of the staff and their readiness to embark upon graduate training programs. The growth and strength of the program must be closely related to the present competence and professional recognition of the individual teachers and research workers, and only gradually to new future aspirations.

   Reference is made to paragraphs 5 and 6 of the Social Science Team report, which point to many of the needs in Latin America for the products of such a graduate training center. Reference is also made to paragraph 10 of the Biological Sciences Team.

2. The panel agrees that the five functions referred to it are intimately related and, within limits, complement and strengthen each other. This is particularly true of research and graduate teaching, but consulting and technical services also aid in projecting the image of a dynamic, competent and imaginative staff. Communication services assist in bringing IAIAS to the attention of agricultural workers throughout the hemisphere, and in addition, serve to raise the level of scientific activities in the several countries. Short courses can serve the same purposes, and in addition can aid in identifying and selecting students for further programs. This is suggested in paragraph 12 of the Biological Sciences Report. Still priorities must be applied and criteria used to choose those activities which most effectively strengthen the central purpose of IAIAS.

<u>Research and Graduate Training</u>.

3. As suggested in paragraph 12 of the Social Sciences Report, this work has received much emphasis in the past. It is recommended that even more emphasis be given in the future. The panel recommends that the Director General and the other administrative officers encourage their staff to deal with significant and strategic problem areas, within the competence of present and potential staff members. Clearly the technical, economic and social problems associated with development are among those requiring major attention. Research programs should not be devised to suit the needs of training students; rather the students should be and will be attracted because they wish to learn from teachers and research workers who are dealing competently with problems important to their society, and to observe and assist in solving such questions. It will be necessary, of course, to develop a few courses and special study programs which provide a general background and methodological experience.

4. For the Southern Zone it is recommended that IAIAS assist, with deliberate and prior planning, the development of post graduate training programs in selected, clearly competent institutions of Southern South America. Different programs might be supported at each of the selected institutions.

Consultation and Teaching Services.

5. By and large the panel accepts the recommendations in paragraphs 45, 46, 47 of the Biological Sciences Report. An extended absence of two years for a senior staff member, however, is a policy which can seriously disrupt the educational program. The panel believes that leaves of two years to help develop national universities should be approached cautiously, and then only approved when reasonable substitutes are available. Leaves of one year, which have a substantial element of professional improvement, should be granted more readily.

6. The panel wishes to emphasize that both the individual and the administrative officers must refuse requests which are of marginal value for over-worked staff. We believe that more consideration should be given to requests by universities for short term assignments than to requests by governments, since the Institute is striving to partake more of the character of an academic institution.

7. Finally we underscore the desirability of producing suitable textbooks as a major agent of technical services. It is a major device for up-grading undergraduate education. It is a way to enhance the reputation of the teacher among his colleagues, and the prestige of the Institute. And it is a means to attract graduate students who wish to study under the man or men who wrote these textbooks.

Scientific Information Services.

8. The panel is inclined to accept the majority of the recommendations of the Biological Sciences Team, paragraphs 52 through 58, with the modification suggested by Dr. Ralph Shaw, particularly with respect to abstracts, i.e. to change them to bibliographies with one sentence descriptions. The recommendations warrant careful study. This program needs to be periodically reviewed, upgraded, and made more useful to agricultural scientists. At the same time it does not contribute as directly to teaching and research within the Institute. In plans for future development there needs to be more support for library services, but the educational program needs to be expanded first.

Short courses.

9. The panel recommends that there be reduced emphasis on short courses, and that those given be raised in level and quality.

10. It is also recommended that more effort be given to developing the short courses within and as part of a university program, so as to broaden the universities' concept of appropriate educational programs.

Criteria.

11. Finally the panel suggests that the following criteria may be helpful to the Director General and other officers of IAIAS.

    a. The IAIAS should strive to provide leadership and promote coordination of research throughout Latin America.

    b. There should be adequate support for existing programs within their framework of reference and specific goals.

    c. Every effort should be made to obtain and maintain a competent staff, including a core of distinguished scientists.

    d. The problems receiving attention should serve the area or region, be within the competence of the available staff, preferably have a significant potential impact. Through continuous review the IAIAS should be prepared to shift resources to new programs warranting attention.

    e. Research likely to be strategic to future developments should be given major attention. This means particular attention to the elimination of obstacles to agricultural development, and to work where the cost-returns ratio is likely to be greatest.

    f. Attention should also be given to significant problems not being undertaken elsewhere.

    g. The balance between the various sciences and disciplines should be determined by the needs of Latin America, and not by the historical relations within institutions in other regions.

    h. Projects which give promise of developing new methodology of general use, or of coordinated existing diverse methodologies are of particular importance.

REVIEW PANEL RECOMMENDATIONS ON

STRUCTURE AND OPERATION

Item 8

The Panel heard a report by the Director General on various proposals that have been made concerning the structure of IAIAS. The report is summarized as follows:

The following questions concerning the structure of the Institute were addressed to the Review Teams (c.f. Document 8):

1. What could be done to give great impetus to the social sciences applied through research and teaching to help the Latin American countries to solve their ever more critical problems of agrarian reform, credit, marketing, community development, farm management, education, etc.?

2. How should our graduate training program be organized through the Graduate School of the Turrialba Center and utilizing the facilities of other dependencies of the Institute outside Turrialba and of national institutions (including those of the United States) as the Southern Zone has proposed (Vallega Plan) or through other means?

3. Should a Center for the Social Sciences Applied to Rural Development be organized (and in that case, where should it be, what structure should it have, how should activities be coordinated with other units), or how should the social sciences expanded through the Turrialba and the other units of the Institute be managed? What basic structure should Turrialba have? - disciplines, programs, contracts, etc.?

4. What would you recommend to promote a horizontal articulation through disciplines, while at the same time keeping the vertical administrative authority of the regional directors and of the centers?

I feel that the two Team Reports have answered my questions adequately.

The Biological Sciences Team considered that a satisfactory structure would result from strengthening Turrialba as base of operations and reinforcing the regional staff on an increasing scale (c.f. Document 9, Paragraph 62-77).

While the Social Sciences Team went after interpreting the member countries needs in terms of structure: (c.f. Document 7, Paragraph 15-19).

Both Teams are in agreement as to the following points:

1. The need to change structure of facilitate implementation of an expanded program.

2. An uncomfortable feeling about the location and perhaps function of the Director General's Office; sound caution on keeping it small and unburocratic.

3. A concern with need to have integrated graduate education and research programs, as well as close technical coordination and cooperation within departments, among departments, and with regional offices, preventing a split between social and biological sciences. On latter different views as to how.

   Two approaches pretaken: one, having Turrialba as the operational base; the other, to have twin operational bases for Northern Zone and Temperate Zone.

   Both Teams, believe Zones should be strengthened and maintained but are rather vague as to functions of Zones and how to work them in into over-all program. One team "merges" them into a larger unit, but the degree and nature of merger not clear.

4. A condition of equilibrium should exist between various subject matters.

Now I wish to summarize Recommendations from international conferences pertaining to IAIAS structure:

Committee of Presidents' Representatives (1957)

a. Expansion of the activities of Turrialba.

b. Maintenance of the three Zone of Project 39 upon incorporating the Project into the regular program of the Institute.

c. Expansion of the activities in the Temperate Zone and creation of a Regional Center for the Temperate Zone.

d. Creation of a Regional Research Center on Banana and Cacao Diseases.

Economic Conference of Buenos Aires (1958)

Ratified the above. Emphasized maintaining Zones.

Fifth Inter-American Agricultural Conference held jointly with the FAO Regional Meeting (México, 1960)

a. Expansion of the work of the economics and agrarian policy specialists of the Department of Economic and Social Affairs of the Pan American Union and coordination with IAIAS.

b. Encourage the new Director in his task of restructuring the Institute to better adjust it to the needs of the countries.

c. Establish an Office of the Director of Research which can direct, program, consult and evaluate the areas and needs of scientific research, define the establishment of the policy of inter-American agricultural research in view of the problems which most urgently demand it, establish contact and cooperation with the already existing research centers in the countries to schedule research subjects of general interest to be carried out in coordination with these centers. That the plans for completing of graduates' training and for research be carried out in centers of the member countries which have the same level.

d. Support the project for creation of a Temperate Zone Center to offer specialized graduate training utilizing the universities and research institutes of the different countries.

e. Recognize the work of Project 39 and desire to reinforce the future functions of the project.

f. Establish an Inter-American Technical Coffee Program with FAO and using the resources of national institutions.

g. Creation of the Latin American Agricultural Credit Center, which is already included in the Technical Cooperation Program of the OAS.

Special Commission for the Formulation of New Ways of Economic Cooperation (Committee of 21)

a. Dynamism in administration in order to achieve more direct contact with the national problems.

b. Decentralization of training, utilizing the existing national institutions.

c. Organization of research and technical assistance missions

Operations Plan of the United Nations Special Fund Project

a. Strengthening of the Turrialba Graduate School

b. Creation of the Regional Center for Agricultural Engineering in Peru.

c. Partial strengthening of the Temperate Zone Center

d. Appointment of Senior Advisor for Training and Research to advise the Director of the Institute on all matters related to the research and training program of the Institute and as a liaison with FAO. Help the directors of all the units in their research and training projects.

Third Meeting of the Technical Advisory Council (Santiago, March 1958)

a. Create a Graduate School for the northern area of America.

b. Consider the possibility of using La Estanzuela as headquarters for that school.

c. Establish the Office of the Director General in San José, adding a group of specialists on call and attaching the Scientific Information Services. (This was latter approved also by the Administrative Committee).

d. Operate two training centers: one in Turrialba and the other in La Estanzuela or whichever is chosen for the Temperate Zone.

e. Maintain the Regional Offices

f. Create a Banana and Cacao Center

Sixth Meeting of the Technical Advisory Council (San José, March 1961)

a. Create a Center of Social Sciences Applied to Rural Development, preferably outside Turrialba.

b. Carry out a detailed study on the present location of the Regional Offices (Three Zones) to determine whether they are established in the countries which offer the best conditions but not change them unless a new location offers optimum conditions.

c. That the Training Centers and other future activities of the Institute be distributed among the countries composing each Zone without allowing the host country of a Zone to obtain the greatest benefits.

Summarizing, these conferences emphasized the following:

1. Need for the Institute to come closer to the member countries and utilize the national institutions. However, there is danger of centripetal force and excessive dispersion of efforts.

2. Separation of the Office of the Director General from the centers of operation.

3. Keeping the three Regional Offices, possibly four, although their location can be changed.

4. Operate two research and training centers: one in Turrialba, another in the Temperate Zone (La Estanzuela).

5. Need to coordinate closely the activities of research and training in the entire program.

6. Emphasized the need for coordination between Zones and Research and Training Centers, although it is not clear how.

- - -

Having considered the Report of the Director General, the Panel concluded that it would make no recommendation to the Director General, but instead it would provide the Director General with the views of various members in a separate statement.

REVIEW PANEL RECOMMENDATIONS ON

RELATIONSHIPS WITH OTHER AGENCIES

Item 9

In its consideration of this subject, the Review Panel recognized the basic difference between an intergovernmental institute that is designed to serve its member countries and an institute which functions within a national framework. It was clear that the task of the Institute is not to do everything itself, within its broad terms of reference, but that it has the important task of encouraging other international and national agencies to contribute to agricultural development in Latin America, and that it should cooperate with those agencies to that end. In this connection, the Institute should also encourage countries to seek assistance from other agencies whenever this is appropriate.

Certain points emerged from other items of the agenda, which led to the following recommendations:

1. In the conduct of research and graduate training, the Institute should utilize the facilities of other institutions, particularly national institutions, both to take advantage of strong departments where they exist and also to assist in strengthening those national institutions, and to take advantage of opportunities for research on thesis problems for which facilities are not available at Turrialba.

2. In certain specialized fields, the Institute should rely to a considerable extent on other regional organizations, such as INCAP (in Guatemala City) in the field of food and human nutrition, and CINVA (in Bogotá) in the field of rural housing.

3. Much of the consultation with or assitance to individual countries, aimed at fostering agricultural development in Latin America, should be left to other agencies -international, regional and bilateral- that have resources and facilites for these purposes.

In its specific consideration of the question of relationships with other agencies, the Review Panel adopted the following additional recommendations:

4. The Institute should encourage and participate in periodic and perhaps annual reviews of the programs of the various regional and international agencies that are contributing to agricultural development in Latin America, with a view to avoiding undesirable overlap and duplication and developing coordinated, mutually-supporting programs whenever feasible. Each agency would, of course, be expected to finance its own participation in such a review.

5. Recognizing fully the important contribution that outside grants and contracts have made to the development of the Institute, and the valuable contribution to agricultural knowledge that have resulted from projects so financed, the Review Panel noted the current disparity of funds from these sources as compared with those contributed by member governments and stressed the importance of increased contributions from member governments ensuring that work carried out under future grants is consistent with the overall objectives and programs of the Institute.

6. Within the OAS family, the need for closer working relationships was noted, and it was recommended:

   a. That the establishment of a liaison office at OAS headquarters in Washington be expedited, and

   b. That more effective means of coordination be worked out in regard to all overlapping interests including the handling of fellowships, the exchange of professors, the rendering of assistance to countries, and in work being undertaken in the social and economic field.

ANNEXES

RP/Doc. No. 2-Ing.
6/27/61

THE PROGRAMS OF THE AMERICAN INTERNATIONAL ASSOCIATION FOR ECONOMIC AND SOCIAL DEVELOPMENT

Schuyler Bradt
Director, PIIP

A great problem in rural Latin America is lack of knowledge about modern agriculture and elementary habits of health. The solution requires a breakthrough on a mass scale, to transmit to those who need to know, information and ideas that can change uneconomic farming practices and depressed living conditions.

Two phases of AIA's new program, the information and rural youth rojects, directly attack this problem. And in the case of the Venezuelan government program of rural development AIA is giving technical assistance to increase extension services to farmers to enable them to develop the land adequately, with more cash income and better living standards as twin goals.

In developing the 1960-65 program AIA and the agencies with which it is associating have tried to face up realistically to the dimensions of the problems. These comparisons will help to bring some of them into better focus:

The population of Latin America is about the same as that of the United States, 180 million people. The Latin American population growth rate is higher, though, and assuming a continuation of present rates the countries south of the Rio Grande will have 50 per cent more people than the U.S. in 30 years.

Yet even now food production falls short of adequately feeding the Latin American population. From the standpoint of average productivity the Latin American farmer is raising only about 25 per cent as much as his U.S. counterpart.

The planners of the 1960-65 program thus hold no illusions that the activities being undertaken will propel the mass of Latin America's rural population into prosperity. They are confident, however, that the longer-term results of their programs and others supported by the Latin American nations, by the United States government, by inter-American and United Nations agencies, and by private organizations, will bring in the years ahead a richer, healthier and longer life to millions of Latin American people.

Now for an examination of the programs in which AIA is participating:

MASS COMMUNICATIONS

Estimates indicate Latin America has no more than 2,500 professional extension workers in agriculture and home economics - about one

to every 45,000 of rural population. The figures demonstrate the tremendous shortage of skilled men and women to assist in closing the gap between knowledge and its application. For the foreseeable future we must rely on mass communications methods for the spread of information.

Information specialists are being trained in the arts of preparing and distributing information about crop and livestock raising, soils, nutrition, hygiene - virtually everything bearing on up-to-date farming and home improvement practices. The specialists will serve in their own countries as directors and editors of information programs in health, agriculture and education agencies, and, in addition, will train extension and other field workers in basic mass communications techniques.

The plans for 1960-65 provide for large-scale expansion of mass communications training initiated by the AIA-sponsored Inter-American Popular Information Program (PIIP). Courses drawing students from throughout Latin America have been conducted at the Inter-American Institute of Agricultural Sciences, at Turrialba, Costa Rica, in cooperation with that OAS agency. A third partner is the U.S. government through the ICA. This hemisphere-wide program was developed from the successful operation of CIDEA (the "Consejo Informativo de Educación Alimenticia") and an agricultural program in Venezuela.

Under the new program PIIP courses will be given at a regional center in Montevideo in cooperation with the IAIAS and ICA.

A fundamental problem in undertaking information programs among the mass of rural or urban people in Latin America is lack of basic knowledge of communications habits and techniques.

AIA is tackling this problem through a 3-way cooperative project with IAIAS and the College of General Communication Arts, Michigan State University. The fields of study are:

1. Communicating with illiterates.

2. Development of methods of teaching literacy.

3. Communicating with new literates.

4. The development of the process of diffusion of information as related to the acceptance of new ideas through mass media.

RURAL YOUTH

The rural youth program offers the means for a frontal attack on the problems of poor health, lack of sanitation and primitive agricultural practices.

The program for 1960-65 aims at a massive increase in the number, and membership, of youth clubs of the 4-H type, and to achieve this it will be necessary to increase greatly the number of both professional and voluntary adult leaders. Fortunately, clubs on this model already

exist in most Latin American countries. AIA has intimate experience with those it has worked with in two countries: the 4-S of Brazil and the 5-V of Venezuela.

The program is a joint venture with the Inter-American Institute of Agricultural Sciences in Costa Rica. Its main elements are:

1. Organization of special training courses for professional and voluntary youth club and project leaders. The number of boys and girls who can be taught better farming techniques and the homemaking arts is directly related to the number of trained leaders.

2. Preparation of printed materials, such as handbooks for leaders and handbooks for project - "how-to" publications on poultry raising, soil conservation, dressmaking, etc.

3. Establishment of a supply service to distribute these and other materials at cost or gratis.

4. Creation of a Latin American award and recognition program for outstanding achievements by youth clubs, individual members and professional and voluntary leaders.

5. Publication of a magazine covering rural youth club activities in Latin American countries. Coupled with this will be a publicity program servicing newspapers, magazines and radio and TV stations.

6. Cooperation with national and international agencies in organizing youth club associations and expanding activities of existing organizations.

The Inter-American regional training centers planned for Uruguay and Brazil will facilitate the rural youth program along with the mass communications training program.

PROGRAMS IN BRAZIL AND VENEZUELA

Here, in the briefest terms, are the major activities of the Brazilian and Venezuelan organizations in which the American International Association for Economic and Social Development has played an important role:

1. Direct work with farmers and their families to increase their cash income and upgrade their living and health standards.

2. Health, nutrition and agricultural information programs reaching the population on a mass scale.

3. Training of technicians for agricultural extension, credit, farm mechanization, community centers and mass communication programs.

a. Training of teachers for industrial and trade schools.

b. Surveys of agricultural and other resources.

c. Through IBEC Research Institute, AIA is engaged in basic agricultural research.

RP/Doc. No. 3-Ing.
6/27/61

PROGRAM OF THE AMERICAN COCOA RESEARCH INSTITUTE IN LATIN AMERICA

Ernest P. Imle
Director of Research

Importance of Cacao

Theobroma cacao is native to the Western Hemisphere. However, of more than one million tons of beans produced in the 1959-60 crop year, some 62% came from West Africa, about 36% from the Western Hemisphere, and about 2% from Asia and Oceania.

Tropical America's 36% is even more important than the figures indicate since it includes the better flavor grades of beans. The crop is produced in some sixteen tropical American countries and is of prime economic importance to several. Its importance in U.S. - Latin American trade is attested by the U.S. annual consumption of about 250,000 tons of cacao beans.

Crop Problems

The crop, historically and to the present, has been produced predominantly by small, independent holders, who have not had the benefits of modern producers' associations or of government research. Thus they have lacked many of the advantages which have helped other crop industries to advance technologically.

The lowland, wet tropical areas, best suited for cacao, are at the same time those areas where climate, isolation, and other factors have not favored an advanced production industry. Rather wide fluctuations in world production have occurred as uncontrolled pests and diseases have added their effects to those of climatic factors.

From 1944 to 1959 there was a consistent annual underproduction of cacao beans, and as a consequence a disappointingly slow upward trend in consumption as well as some loss of earlier market to competing and substitute materials. It was clear that improvements in production efficiency AND IN total production had to be made if the tropical countries were to avoid losing a large part of their important market for a fine, natural food and a popular flavor product.

ACRI's Objectives

The U.S. cocoa and chocolate industry, long concerned over this unsatisfactory state of advancement of cacao production technology, has since 1947 sought to render assistance through the operations of the American Cocoa Research Institute (ACRI). This represents a rather

unique effort on the part of an industry which produces none of its raw product but buys it all in the world market.

ACRI is a non-profit organization supported by the U.S. chocolate manufacturers, and spends its funds to foster research, training, and dissemination of information that will lead to increased efficiency in production of good-quality cacao beans. Its efforts have been concentrated in the Western Hemisphere. ACRI's work has been directed toward a solution of the grower's technical problems.

ACRI's Program of Work

ACRI has chosen to encourage and give substantial financial support to work which will improve production of existing cacao, develop higher yielding, disease-resistant seeds and plants for new and replacement plantings, and to train men at all levels in cacao improvement. By providing research grants for special work in promising locations, ACRI is able to get maximum results from the available research resources and to look across national boundaries in tackling regional problems.

Rather than establish a separate cacao research facility, ACRI has, up to now, worked through the grant-in-aid system. ACRI's assistance is proving effective in a good many cases, is always well received, and lays the foundation for better relations between producing and consuming countries.

Sixteen Western Hemisphere countries have significant cacao production and all have problems, many of them similar. Many problems can be effectively investigated by working through an agency which has an international approach. One such agency, with which ACRI has collaborated for over 13 years, is the Organization of American States (OAS).

Examples of Work

1. An annual grant to the Inter-American Institute of Agricultural Sciences at Turrialba, Costa Rica (an organism of the OAS), to pay salaries of a cacao research staff. Work here includes plant breeding, disease and pest control, soils and plant nutrition, and special training courses.

2. Grants to several U.S. universities for research by Latin American students in Entomology, plant nutrition and physiology, leading to cacao improvement.

3. Establishment of graduate and undergraduate training fellowships at several institutions in Latin America.

4. Sponsorship of special projects of short-term character, such as research on new and undescribed diseases, such as Cushion

Gall and New Leaf Disorder, to determine whether they constitute an economic threat to the grower.

5. Planning, encouragement, and assistance for exploration for new and useful germ plasm from wild areas and in early centers of cultivation.

6. Assistance to taxonomic studies leading to a Monograph of the genus Theobroma.

7. Support for development of safe, quarantine and comprehensive germ plasm collections, such as the one being developed by USDA and ACRI at Mayagüez, Puerto Rico.

8. Grants for studies on cacao pollen preservation and transport, on clone compatibilities, and on development of hybrid cacao.

9. Assistance to programs for regional testing in Latin American countries of hybrid seedling progeny from major breeding programs in Trinidad, Ecuador, and Costa Rica.

10. Exchanges of scientific personnel between research stations in the Western Hemisphere and with research centers in West Africa.

It is hoped that some degree of continued support for cacao research and betterment will be provided by the U.S. chocolate industry if a proportionate share of the costs of such work is forthcoming from those agencies and governments which have the responsibility for agricultural research.

FAO IN LATIN AMERICA

The Regional Office

FAO's work has been decentralized, so that to a certain extent the Regional Office is in charge of all kinds of activities in Latin America. This Office is headed by a Regional Representative (Dr. Hernán Santa Cruz) who, as Deputy Director General of FAO, has his headquarters in Santiago, Chile. He is assisted in his tasks by three Deputy Regional Representatives:

Mr. Jean H. Moser, stationed in Santiago, Chile, who attends to Western South America. Mr. René Gachot, stationed in Rio de Janeiro, who covers Eastern South America. Ing. Adolfo Alarcón M., stationed in Mexico City, who is in charge of the northern part of Latin America.

FAO's activities in the region can be classified as activities referring to the ordinary program and technical assistance activities. Nevertheless, the tendency is to integrate both programs as much as possible, mainly as concerns the Regional Representatives and the headquarters staff.

Ordinary Program

The activities of FAO regarding its ordinary program are carried out by the headquarters staff through occasional travel, but above all by the technical officers posted in the Regional Offices. They are attached to the three sub-regional offices, from where they travel frequently throughout the zone for which they are responsible. The following divisions presently have technical officers at the offices indicated:

Chile - Nutrition, 3; Fishing, 1; Information, 1; Agriculture, 1; Forestry and Forest Products, 3; Livestock, 2; Economics, 6.

Brazil - Fishing, 1; Information, 1; Agriculture, 1; Forestry, 1.

Mexico - Nutrition, 1; Agriculture, 1; Veterinarian, 1; Information, 2.

The work of these technicians posted in Latin America varies widely, ranging from school garden programs, carried out with agricultural and nutrition officers; to consultation to governments on fish marketing problems, for which the Fishing Division Officers are responsible; to making people realize the importance of agriculture for their own wellbeing (Information Officers).

Technical Assistance Program

FAO has sent some 600 experts to Latin America since the Expanded Technical Assistance Program began in 1951. Of these, 450 have already completed their duties, after remaining in the region for periods of

varied duration (some have stayed one month; others, 9 years) and 150 are at present still lending their services in the field. During the remainder of this year some 50 technicians will finish their work and be replaced by as many more in different fields of specialization.

Chile is the country which has received the most experts (84), followed by Brazil (66), and Mexico (56). The Dominican Republic and Panama, with three experts each, are the countries that have received the fewest (see Table I).

When a technical assistance mission is made up of a large number of experts, one of them is designated FAO Representative in that country; he is in charge of relations between FAO and the country government and of the administrative matters which arise from the experts' presence in the country. He must also carry out his own technical assignment. In some cases, the Representative of the Technical Assistance Board takes care of these administrative tasks.

In view of the fact that there are 20 countries in the region and that their interest in developing the respective agriculture is widely varied, the types of experts requested differ considerably. In the Amazons, large missions have been in charge of making the forest inventory and investigating the possibility of exploiting forest products to the maximim. At the same time, other experts of the mission were responsible for encouraging livestock production, as well as rice and other foods. In Argentina and Uruguay, interest has centered around pasture improvement. In Mexico, forestry, livestock and pastures have been the main fields of activity, although specialists in other branches have also been working in that country.

All the countries have shown interest in agricultural statistics, both current and related to agricultural and livestock censuses. FAO's growing interest in rural welfare programs has created a favorable atmosphere for the work of many experts in extension, home economics, nutrition and subjects related to land tenure.

Fellowships

Since 1951 some 300 fellowships have been granted to Latin Americans within the framework of the Expanded Technical Assistance Program. At the same time Latin America has received, for study in different countries, some 170 recipients of fellowships from other places (see Table II).

Cooperation with Government Groups

Perhaps the oldest case of cooperation with a group of governments is the technical assistance provided by FAO to CICLA (later called OIRSA) - an organization created by the Central American countries to combat the locust and also, later on, to implant quarantine legislation and get underway the corresponding services to prevent the introduction of plant and animal diseases and plagues.

Cooperation with Other Organizations

FAO cooperated with UNESCO and other sister organizations in CREFAL, providing experts in agriculture, home economics and rural cooperation.

In the Andean countries FAO has also been cooperating with other organizations and governments in improving the level of living of the Indians.

A joint division of FAO and CEPAL takes care of work which is of interest to both. It consists of 3 members from each organization's staff and has its headquarters in Santiago, Chile. This unit, for example, has carried out a study of great interest, such as is the coffee study in El Salvador, Colombia and the State of Sao Paulo, Brazil.

With headquarters in the Mexican Sub-Regional Office, another group of technical assistance experts cooperated with CEPAL in studies which are underway to advise the Central American governments on their economic integration.

United Nations Special Fund

The creation of the United Nations Special Fund has meant additional work for many FAO regional officers, who have been advising the governments on projects they were interested in carrying out. Later on they have had to contribute to the evaluation of the same projects, after which they closely follow their execution.

Among the activities of this nature that are already underway are the Fishing Research Institutes in Peru and Ecuador; a forest inventory of Mexico; a reconnaissance of the San Francisco Valley in Brazil; the beginning of operations of the Brazilian forestry school; etc.

TABLE I

COUNTRY	EXPERTS		
	Mission accomplished	In the field	Will arrive
Argentina	19	3	-
Bolivia	13	5	-
Brazil	45	21	1
Chile	72	12	15
Colombia	27	7	3
Costa Rica	14	11	3
Cuba	3	2	1
Dominican Republic	3	-	-
Ecuador	35	10	6
El Salvador	17	9	2
Guatemala	20	11	3
Haiti	16	3	2
Honduras	20	6	-
Mexico	47	9	5
Nicaragua	23	14	4
Panama	2	1	-
Paraguay	16	3	3
Peru	11	6	3
Uruguay	23	3	5
Venezuela	19	5	7
Total	445	141	63

RP/Doc. No. 5-Ing.
6/29/61

THE ROCKEFELLER FOUNDATION AGRICULTURAL PROGRAM IN LATIN AMERICA

The Rockefeller Foundation program in the agricultural sciences is designed to help the people of the world, and especially those in the technologically less advanced sections of it, improve their nutrition by growing more food. To bring annual rates of increase in agricultural production to figures higher than the rates of population increase is generally recognized as perhaps the second most compelling challenge mankind faces in the next few decades.

The problem of feeding an "exploding population" was foreseen by some leader in public affairs and public health several decades ago. Among those who realized it especially well were officials of The Rockefeller Foundation who had long been intimately acquainted with public health and population trends in this country and abroad. They realized that the primitive agricultural systems characteristic of many countries could not possibly support the increased populations which would result from lower mortality rates in association with continued high birth rates.

In 1941 the Foundation explored the agricultural problems in a neighboring country, Mexico, where the population was already expanding rapidly, and where the Foundation had worked in public health since 1919. In 1943 the Mexican government and the Foundation inaugurated a cooperative effort in agricultural improvement which was initially implemented by a one-man mission. From this has grown the present agricultural program of the Foundation.

Mexico during the last ten years has enjoyed an average annual increase in agricultural production of 7%, a period when the population was growing at an annual rate of about 3%. The report of the Food and Agriculture Organization of the United Nations, from which these figures are taken, also indicates that the rate of increase in agricultural production in Mexico is among the highest in the world. Naturally no one program or organization can assume sole credit for this achievement, but the improved plant materials and production practices, and the qualified agronomists developed through cooperative research and training have played a significant role in making the advance possible.

The plan of cooperation developed in Mexico has since been extended to three other countries, and from it have evolved hemisphere-wide cooperative projects for the improvement of corn and wheat and a worldwide program of rice improvement. Though relatively small both in staff and financing, this plan, designed to study and solve agricultural production problems where they exist, has furnished a solid base for development of agricultural technology oriented to the requirements of the host country.

The Foundation's program consists of three interrelated centers of emphasis. The phrase "centers of emphasis" is used deliberately to

stress the fact that the three principal activities are interrelated and each contributes to the objective of the whole program.

The operating units are the first center of emphasis. In these, Foundation staff members reside in the country concerned to lead research projects for the improvement of locally important food crops and methods for their production, and to train young scientists in the philosophy and methods of agricultural experimentation. Through cooperative financing they are provided with the necessary facilities such as experiment stations, laboratories, libraries, and transport[illegible]. These staff members enter technical assistance on a career basis and become proficient in the local language.

The second center of emphasis is a scholarship and fellowship program flexible enough to start where the local educational system leave off and with a ceiling high enough to carry through to the doctoral and postdoctoral levels. Though most intensively employed in those countries where operating units are located, the award of scholarships and fellowships is by no means limited to them.

The third center of emphasis is the provision of funds to selected institutions in support of research and training. In countries where agricultural technology is less advanced, these grants are characteristically directed toward strengthening local institutions. In more advanced countries, the grants are chiefly made to support research in fundamental principles, in the hope that the results may eventually be of international value [illegible] with [illegible] [illegible].

As the operating units have been the center of all activities in the Latin American countries in which they have been established they will be described in more detail.

The Operating Units

In Mexico, through a course of cooperative experimentation and evaluation, the pattern of procedures was worked out which underlies the agricultural improvement projects in this and the other countries where operating units are located.

The concept of a jointly supported and jointly staffed research and training unit emerged early from the discussions between representatives of the Government of Mexico and The Rockefeller Foundation. The Office of Special Studies, created within the Ministry of Agriculture to implement the plan, began operation in Mexico in 1943.

By invitation from the Government of Colombia, an Office of Special Investigations was set up in the Ministry of Agriculture of that country in 1950. A similar invitation extended by the Government of Chile led to the establishment of an Office of Special Studies in the Chilean Ministry of Agriculture in 1955. The Indian Agricultural Program, begun in 1956, does not have a "special office" title but it operates in general in the same way as the Latin American programs, in cooperation with the Ministry of Food and Agriculture, the Indian Council for Agricultural Research, and the several state governments.

The staffs of the Latin American offices consist of scientists assigned from its own personnel by The Rockefeller Foundation, scientists of the country concerned at both junior and senior grades assigned by the ministries, and visiting scientific aides provided usually by the Foundation. In India the Foundation staff members have positions in the Post Graduate School of the Indian Agricultural Research Institute and in the crop improvement schemes of the Indian Council for Agricultural Research. Resident Foundation staff members in Mexico number 16, in Colombia 16, in Chile 4, and in India 10.

Both the Foundation and the governments contribute to the budgets of the Latin American offices and to the Indian program. For 1959 the Foundation appropriated $233,970 for its share in Mexico; $203,150 in Colombia; $156,100 in Chile; and $209.960 in India. For 1960 the figures were: México, $275,850; Colombia $192,350; Chile $173,750; and India, $255,585. These amounts are exclusive of Foundation staff salaries. In each instance the contribution of the Foundation is less than half the total budgets of the offices and of the Indian programs, and the proportion of the Foundation's share to the totals has been decreasing steadily as the governments assume more and more of the financial responsibility.

Each of the offices operates a number of experiment stations and directs the scientific work in a number of others. In Mexico the Office of Special Studies has headquarters in Mexico City, central laboratories and an experiment station at Chapingo in the Valley of Mexico and regional stations for the tropics, for the high altitudes, for the intermediate altitudes, and for irrigated agriculture in the dry northwest, and a range management station in the northern plains. In Colombia the Office of Special Investigations has headquarters in Bogotá and conducts research on and helps administer all the federal experiment stations, 13 in number. In Chile the Office of Special Studies in Santiago directs and administers two experiment stations of the federal government and cooperates with the work of the stations connected with the country's four universities. In India the program staff members direct the technical aspects of the scheme for the improvement of maize at 16 locations and for the improvement of sorghum and millets at 10 locations.

In all the countries the research and training are directed toward increased production of the food crops basic to the local diets. Export and plantation crops have been dealt with only incidentally. The work in Mexico began with investigations leading to the improvement of corn, wheat, and beans. Supporting studies in soil science, entomology, and plant pathology were soon added and a library started. Through the years new sections were created for work with additional crops, until now most of the important cereals, vegetables, potatoes, and forages are under systematic investigation. Sections on agricultural economics and agricultural information were inaugurated more recently.

In Colombia the original programs dealt with corn and wheat; soil science and plant protection represented the first expansion of the cooperative effort, and intensive study of the potato, more important for food than the cereals in the high altitudes, was soon begun. Today the research sections in the Office of Special Investigations cover all the important grains, including rice.

Wheat improvement was the initial project established in the Chilean program; the forage grasses and legumes came next. In India two crops are being investigated - maize, and the sorghums and millets. Corn is still planted on a limited acreage in India today but has not been fully exploited as a food and feed crop. Sorghum and the millets represent the main food of some 35% of the Indian population.

As will be evident from the foregoing account, all four programs began with chief emphasis on foods derived from plants. Corn in various forms is still the chief reliance of some 60% to 65% of the population of Latin America, supplemented by wheat bread in urban areas and by potatoes where they can be grown. For the improvement of the quality of the diet in these countries, however, the production of animal proteins must be greatly increased. When grain harvests are insufficient even to meet the demands for human food, and adequate small-animal industry is impossible, and range cattle production remains at a primitive level. As grain production is increased in countries like Mexico and Colombia, more grain can be used for feeding animals, especially the small animals such as poultry. Reflecting this trend, the Latin American programs are now moving into the field of animal production. (A slightly modified excerpt from the 1959 Annual Report on the Agriculture Program of the Rockefeller Foundation). These have now been supplemented by sections dealing directly with animals: poultry production, including both management and disease control in Mexico, and poultry and dairy and beef animals in Colombia. It is probable that increasing proportions of these programs will in the future be devoted to the improvement of diets through encouraging the production of animal proteins.

In all of the cooperative projects, emphasis is placed on bringing about improvements in both plant and animal production in the minimum of time. The collection and evaluation of locally grown varieties and the study of introduced varieties frequently result in the isolation of varieties superior to those commonly grown. In Mexico, superior corn, wheat, and bean varieties were soon selected from local and introduced materials and released for use by farmers, and several introduced alfalfa and grass varieties proved adequate for prompt recommendation. The corn collections initiated in Mexico and Colombia focused attention on the need for building up germ plasm banks for this important crop of the Americas, as a basis for more advanced breeding and as a resource for the improvement of corn in other countries.

Breeding programs for the production of higher-yielding varieties with better disease and pest resistance began concurrently with the collection phase but naturally took longer to reach the stage of commercial release. Both in Mexico and Colombia two plant generations can be grown in a single year, in convenient locations, because of the sharp climatic differences due to different altitudes. This has helped to reduce the time required to develop new hybrid and synthetic corn varieties and improved varieties of wheat and other crops.

Interdisciplinary cooperation has been stressed from the first in all the programs. In primitive agriculture, poor soils, plant diseases, insect pests, weed competition, wasteful cultural practices, and losses in transportation and storage, no less than inferior seed, limit the

net food productivity level. Similar handicaps limit poultry and animal production. The breeding and selection of superior varieties has always gone hand in hand with investigations of soil problems, disease and pest control, and management or cultural practices, so that the information accumulated combines attention to a major portion of the factors necessary for maximum yield and quality.

The operating units are concerned primarily with research and principal emphasis is placed on applied studies directed toward the improvement of the quantity and quality of the chief food crops. A certain amount of demonstration and farmer education has inevitably been associated with the investigative efforts. In regional adaptation trials, for instance, thousands of plots have been planted on the land of private farmers. At all the experiment stations demonstration plots are regularly grown for the benefit of visitors, and all the stations feature one or more annual open-house field days when farmers and the general public are invited to see the work in progress. These field days have been increasingly popular and attendance figures of up to 3,000 are now commonplace.

Extension work, as such, has not been included within the scope of the operating programs. The Foundation does not have the requisite manpower and also, the task of persuading farmers to adopt improved practices is usually best done by their fellow nationals. To aid the extension activities in Mexico the Office of Special Studies has had for several years an agricultural information service to assist in demonstrating how research results can be translated into terms which extension agents can easily convey to farmers. The information is adapted to all the chief media-bulletins, circulars, and newspapers, radio and television features. Recently a highly successful series of 16 mm movies, in color and with sound, was launched. The Foundation has also given technical direction and financial support to a pilot extension experiment in the State of Mexico.

Similarly the work of increasing the seed of new varieties to commercial quantities is the province of agencies established by the governments for this purpose. In Mexico the increase and distribution of corn seed is the responsibility of the National Maize Commission and that of other crops is handled within the Ministry of Agriculture. In Colombia seed increase and distribution is handled by the Caja de Crédito Agrario, Industrial y Minero, the national agricultural credit bank, with branches in all the important agricultural regions. In Chile and India improved seed distribution systems are being planned.

RP/Doc. No. 11-Ing.
7/3/61

THE UNITED NATIONS SPECIAL FUND

Origin and Purpose

Formation of Special Fund

In the autum of 1958, the United Nations General Assembly, keenly aware that an important area of economic assistance was inadequately served by existing machinery, created the United Nations Special Fund. The Special Fund came into existance on January 1, 1959.

Importance of Pre-Investment Activities

The over-all aim of the Special Fund is to raise production and productivity. This cannot be achieved without adequate investment, but adequate and profitable investment can be assured only if the necessary preparatory work has been carried out. The Special Fund grants money to assist in the performance of such essential "pre-investment" work.

Curiously enough, certain of the advanced industrial countries, perhaps through over-familiarity with the role of pre-investment activities, and many of the under-developed countries, perhaps through inexperience, have not sufficiently recognized the vital importance of pre-investment work in the economic development of low-income countries. Because of this neglect, there has in some cases been a woeful waste of scarce capital and foreign assistance and, in many cases, further capital for development has been discouraged rather than attracted.

Spheres of Activity

The Special Fund is authorized to make its grants to less-developed countries on a reimbursable basis but has not yet done so. It is thus not a lending agency but aims to serve all institutions that have funds to invest in development in the low-income countries. The Special Fund itself does not usually engage in field operations. It subcontracts the execution of approved projects to the United Nations and certain of its specialized agencies. It is also empowered to contract for the services of other agencies, private firms or individual experts.

The Special Fund assists projects in three specific fields:

SURVEY AND FEASIBILITY STUDIES - to reveal wealth-producing potentialities, for instance of land which might be put into production by irrigation, of rivers to produce electricity, of mineral deposits, and of marine resources.

APPLIED RESEARCH - to find new uses for local materials and products.

MANPOWER TRAINING AND TECHNICAL EDUCATION - to develop vocational and technical skills for a fuller utilization of the human resources of under-developed countries, and thereby the fuller development of natural resources.

At the end of May 1961 the Special Fund has assigned $ 131 million to assist 157 projects in 62 countries and territories. The total value of the project assisted, including government counterpart contributions, amounts to $ 304 million. Of the 157 projects mentioned above, 46 are in The Americas, totalling $ 38,652,500.

Criteria for Assistance

Project Requirements

These criteria represent several departures from practices generally applied in economic assistance programmes. They include an unusually high degree of selectivity, a very heavy contribution by recipient Governments to the cost of projects, and the assumption by those Governments of firm and relatively long-term obligations for the success and follow-up of projects. These exceptional standards are in part responses to limitations in the financial resources of the Special Fund. But they also reflect the strong belief of the Governing Council and the Managing Director that Special Fund assistance can produce effective results only where the leaders and people of a country are determined to help themselves.

The Special Fund concentrates on relatively large projects, generally requiring at least $ 250,000 from the Special Fund, and projects it assists average three and one-half years duration. Due consideration is given to the urgency of the needs of the requesting countries and to achieving a broad geographical distribution of projects.

The Special Fund assists only schemes likely to contribute substantially to an under-developed country's economic growth. It insists that projects it approves fall within the framework of a consistent economic policy and are effectively coordinated with related national, multilateral and bilateral programmes.

Project requirements can be illustrated by examples in the major fields of Special Fund activity.

Selection of Surveys

In resource surveys preference is given to projects which should lead to early results and have the widest possible impact in advancing the economic, social or technical development of the countries concerned, in particular by facilitating new capital investment. The Special Fund does not conduct general natural resource surveys, but concentrates on those where preliminary investigations have provided sufficient promise to warrant an intensive survey to clarify doubt that exists whether to make an investment. Once that doubt is clarified, Special Fund assistance ceases. The answer may be negative,

thereby saving scarce funds for investment in more productive projects. Or the results may show possibilities for fruitful investment and increased productivity. The Special Fund expects the governmental department concerned to be capable of effective participation in the project and to be competent and determined to pursue the further action the survey results would require.

Selection of Training and Technical Education Projects

Special Fund assistance to training projects concentrates on training local vocational instructors and on the advanced training of students in technology. In the vocational field the Special Fund assists in training craft instructors, developing agricultural extension leaders and training manpower in other skills. It educates technicians to become engineers, architects, agronomists, foremen and supervisory personnel. The Special Fund has not assisted projects of mass education on the elementary or high school levels, or sponsored education in the liberal arts.

Selection of Research Projects

The Special Fund is prepared to help finance certain institutions for applied research which will contribute to greater production and investment. To qualify for Special Fund assistance a research institute must engage in such activities as the development of improved manufacturing techniques, the design of new equipment, better use of raw materials, and market development. Further, the Special Fund expects that research results will be put to use, e.g., that financing will be available to permit follow-up action by governmental agencies and private entrepreneurs. In research as well as training assistance is furnished for a limited period and on a diminishing scale.

A few examples of projects in Latin America, assisted by the Special Fund in the field of agriculture, livestock or or soil surveys, forestry, etc., are given below:

BOLIVIA - Agricultural Training

Special Fund allocation:	$ 336,500	69.1 %
Government contribution, equivalent of:	150,000	30.9 %
Total Project Cost:	$ 486,500	100.0 %
Duration:	Three years	
Executing Agency:	Food and Agriculture Organization	

Purpose: To improve the level of agricultural training particularly in the highlands (by strengthening the Agricultural Faculty of the University of Cochabamba and the Practical Agricultural School).

Method: The Special Fund will provide experts as instructors in agronomy, animal husbandry, soil analysis, hydrology and entomology, and train counterpart personnel to continue the teaching after the end of Special Fund assistance; it will also provide fellowships for training nationals abroad as well as equipment for the laboratories and the experimental station.

BRAZIL - Survey of the San Francisco River Basin

Special Fund allocation:	$ 974,200	49.7 %
Government contribution, equivalent of:	990,000	50.3 %
Total Project Cost:	$ 1,964,200	100.0 %
Duration:	Five years	
Executing Agency:	Food and Agriculture Organization	

Purpose: To determine the physical and economic feasibility of introducing large-scale irrigation in the semi-arid zone of north-eastern Brazil.

Method: The Special Fund will assist in surveying about 60,000 square kilometres by providing equipment, instruments, and experts in the following fields: water development and management; groundwater and engineering geology; riverflow measurements; soils survey and classification; land-use and farm management; design and operation of farm irrigation and drainage systems; irrigation agronomy; agricultural economics; livestock.

COLOMBIA - Soil Survey of the Northern Part of the Llanos Orientales

Special Fund allocation:	$ 370,500	53.8 %
Government contribution, equivalent of:	317,800	46.2 %
Total Project Cost:	$ 688,300	100.0 %
Duration:	Three years	
Executing Agency:	Food and Agriculture Organization	

Purpose: To determine the soil capabilities and land use possibilities of the northern part of the Llanos Orientales covering an area of approximately 168,804 square kilometres. The results of this survey will help the Government in its efforts to develop this area.

Method: The Special Fund will assist in taking aerial photographs, producing land-use maps from the aerial photographs, and by field surveys of soils and agricultural potentialities. Training of nationals during the survey will permit them to carry on similar surveys independently.

ECUADOR - Pre-Colonization Survey

Special Fund allocation:	$ 148,300	52.3 %
Government contribution, equivalent of:	135,000	47.7 %
Total Project Cost:	$ 283,300	100.0 %
Duration	Two to three years	
Executing Agency:	Food and Agriculture Organization	

Purpose: To determine the suitability for settlement in the temperate region of the inner-Andean valleys and in the intermediate area between the highlands and the coast.

Method: The Special Fund will provide experts and some equipment to assist local personnel in the surveys of soil quality, water availability, suitable crops and other technical and economic factors and

will provide the Government with a necessary planning base for colonization. Personnel from teams doing similar studies in Bolivia and Peru will participate in this project.

MEXICO - National Forestry Inventory

Special Fund allocation:	$ 417,900	28.6 %
Government contribution, equivalent of:	$ 1,044,000	71.4 %
Total Project Cost:	$ 1,461,900	100.0 %

Duration: Four years

Executing Agency: Food and Agriculture Organization

Purpose: To assist in the survey of the forest resources of Mexico, and to study inventory methods for tropical forest - to provide a guide to the best means for the full utilization and good management of these resources.

Method: The Special Fund will help in carrying out an aerial survey on which ground surveys will be based. It will also provide additional equipment for a photogrammetric laboratory and for extensive mapping and ground survey work.

RP/Doc. No. 12-Ing.
7/3/61

GENERAL SECRETARIAT OF THE ORGANIZATION OF AMERICAN STATES

Principal Activities in the Fields of Agriculture and Rural Life

The OAS General Secretariat has a limited number of specific programs dealing with aspects of agriculture or rural life. However, since the activities in the economic and social fields are based in large part on the guide lines contained in the Act of Bogotá, several other programs have a decided orientation toward the rural sector. In addition, a number of general support activities, especially the OAS Fellowship Program, the Direct Technical Assistance Program, and the Visiting Professorship Program, make a considerable contribution to the development of agriculture and the improvement of rural life in Latin America.

A. Programs in the Department of Economic Affairs

1. Basic Products. The objective is to provide IA-ECOSOC and OAS member states studies and reports on basic products as a basis for the promotion of market stabilization policies of principal Latin American export products. Two types of activities are foreseen:

   a. A study on long-term trends in production, consumption and trade of the most important primary products as a basis for considering stabilization and trade expansion programs;

   b. A number of studies on specific primary products, including an examination of the implications of alternative stabilization systems and their cost.

2. Agricultural Economics. On the basis of preliminary research on a hemisphere-wide scale, and later, more detailed, regional or national studies, to propose policy recommendation on measures to: increase production and productivity in agriculture; introduce necessary reforms in social aspects of agriculture, including particularly land tenure; improve living conditions of farmers and agricultural workers; reform the institutional base for such policy measures. This activity will be undertaken as follows:

   a. Hold a meeting of experts to plan the preliminary research required, defining the contents and methodology required.

   b. Collection, systematization and processing of available information, and conducting field work through special missions to obtain data not now extant.

c. Preparation of conclusions and recommendations by the expert group.

d. Planning and execution of specific studies, usually on a national scale, to advise member states on policies and measures to be adopted.

B. Programs in the Department of Social Affairs

1. Housing. As part of the activities of the OAS General Secretariat in conducting studies in depth on specific problems, to be financed by a portion of the Fund for Social Development, a survey of housing in Latin America is being initiated. The housing survey, contemplating both urban and rural situations, is designed to produce factual information from all countries not only of a statistical nature, but also analytical data to demonstrate the quantitative and qualitative nature of the housing problem in Latin America. In addition, the study will contain an analysis of the financial resources required, of the building materials industry needed to support a large-scale program, and of the institution base essential to an adequate housing activity in each country. A preliminary statement of terms of reference of the survey, prepared by the OAS General Secretariat, will be reviewed and further considered by a technical advisory committee to be convoked at CINVA in Bogotá during August-September, 1961. There will follow research and field work activities in each country, assembling of data, and writing of the report. The study, at least in its principal aspects, should be completed by the 1962 meeting of IA-ECOSOC.

The activities of the Inter-American Housing and Planning Center (CINVA), as a part of the OAS General Secretariat, are concentrated on training and research related to training. During the regular nine-months course each year, some 60 specialists are trained in low-cost housing techniques, many of these relating to rural problems. In addition, each year three separate rural housing seminars of three months' duration are offered. A new program of aided self-help housing intended principally for rural situations, is being developed.

2. Rural Studies. Activities in this field are designed to make available reliable, up-to-date information on the social aspects of Latin America's rural sector, and are carried out as a part of the General Secretariat's approach to problems of rural progress and agrarian reform. Close coordination is maintained with the Department of Economic Affairs, especially in the agrarian reform program.

A compilation and analysis of available but widely scattered data on the social structure of rural Latin America has been initiated. Combining field work with scientific analysis and presentation, the study is a prerequisite both to governmental planning and social change concomitant to rural betterments and to the OAS Secretariat's planning of technical assistance and other action programs.

A study on rural social mobility will focus on basic factors determining horizontal and vertical mobility in rural Latin American areas. These factors include the effects of increasing urbanization; the demographic pressures on available land resources induced by population increases; the rigidity of social structure; and the influence of industry and technology.

In view of the scarcity of rural sociologists with advanced training, a two-year, postgraduate course is being developed. It is to be given at an established Latin American university, whose sociology department would be reinforced by visiting professors. Students would attend on fellowships. The project is to be initiated during 1962, depending on the availability of funds from the OAS Program of Technical Cooperation or other sources.

3. Cooperatives. Activities in the field of cooperatives are at this time being directed toward their contribution to the economic and social advancement of Latin America, especially in the rural sector.

A substantial study on the positive role of various types of agricultural cooperatives in agrarian reform programs has been initiated, and will include an analysis of the pertinent experiences of similar cooperatives in Mexico, India, Israel and Italy.

Two distinct training programs in cooperatives are being proposed for initiation during 1962. (a) An inter-American course on agricultural cooperatives, to prepare a group of leaders and technicians from national institutions directly connected with rural development. The three months' course would be organized on a regional basis and would train a total of approximately 500 persons during a period of six years. It would be given at established specialized institutions, reinforced by visiting professors, with students attending on fellowships. (b) An inter-American course on rural electrification cooperatives, to prepare a group of some 300 specialists over a period of six years. This course would take into account experiences in rural electrification in Chile, the United States, and those more recently developed activities in the northeast of Brazil. Each three months' course would be organized on a regional basis, attached to an established institution, and provided with visiting professors. Students would attend on fellowships.

The initiation of both training projects depends on the availability of funds from the OAS Program of Technical Cooperation. Other sources of partial support are likely.

4. Social Security. Of the activities in social security, only those relating to rural development are mentioned. Because of the need to extend the benefits of social security to the widest possible sectors of the population, a study has been initiated to analyze and evaluate the methods being used in Latin America

and in other parts of the world to provide adequate social security coverage to rural populations. It will stress administrative simplicity and coordination of social security programs, taking into account the various kinds of rural employment and conditions.

5. Community Development and Social Welfare. These activities are intended to highlight the role and contribution of community and social welfare programs to the general social and economic progress of Latin America, with particular reference to the rural sector. Among the specific programs, the following are particularly of interest.

A study is being undertaken to register the experiences of various countries in extending social services to rural areas and small communities, evaluate these experiences as part of a community development approach to the solution of special rural social problems, and recommend measures of a practical nature.

Two training programs also have a relation to rural problems. For the past four years and Inter-American Course in Social Welfare Administration has been conducted in Buenos Aires. In each annual nine-month course it trains a group of 26 high-level specialists in aspects of the planning and administration of national welfare programs. Another training activity being proposed for initiation in fiscal year 1963 is an inter-American course in community development. The nine-month course would be organized on a regional basis to prepare approximately 100 specialists in the techniques and methods of community development with emphasis on rural areas.

C. Programs in the Department of Statistics

The great majority of the activities carried out by the Department of Statistics relate directly to the programs of social and economic development of the OAS member states, and have a specific relationship to the rural sector of Latin America. As examples, there should be mentioned the 1960 Census of the Americas, the evaluation of the population and housing census, and the new series América en Cifras.

D. Programs in the Department of Technical Cooperation

Reference has already been made in several instances to projects in specific fields which are carried out by the OAS General Secretariat as a cooperating agency in the OAS Program of Technical Cooperation. The Department coordinates the projects which are the responsibility of the OAS Secretariat, and in addition serves as the executive secretariat of that Program. The Department also is responsible for the administration of a number of activities which to a considerable degree relate to rural conditions in Latin America.

In this category there should be mentioned the OAS Fellowship Program, making available to more than 500 students annually an opportunity to acquire advanced, specialized training; the OAS Visiting Professorship Program, recently initiated, which sends visiting professors to universities for periods from 3 months to one year, in those specialties most required by the receiving universities; and the Direct Technical Assistance Program which, upon the request of member states, furnishes short-term missions of an advisory nature (a notable example is the mission to Honduras on questions of land reform).

E. Programs of a General Nature

1. Annual Report on Economic and Social Development of Latin American Countries.

The OAS General Secretariat, beginning with 1962, will present each year an annual report on developments in the social and economic field, highlighting accomplishments and indicating such deficiencies as may exist. A system of collecting data for the report has been established, and information received in raw form will be analyzed, additional research undertaken, and final writing performed at headquarters.

2. Survey of Rural Development in Latin America

As part of the responsibility of the OAS General Secretariat derived from the Act of Bogotá and to be financed with a portion of the Fund for Social Development, an extensive survey of economic and social conditions in rural Latin America is to be undertaken. Both economic and social phenomena will be given equal consideration. It is the purpose of the survey to indicate possibilities of adequate programs of land reform within the context of economic and social progress.

RP/Doc. No. 13 Ing.
7/5/61

THE FORD FOUNDATION PROGRAM IN LATIN AMERICA

Dr. Paul Pearson

The Ford Foundation Program in Latin America was implemented less than three years ago. Consequently, it is premature to speak of positive accomplishments. With limited funds for the program it was decided to initially concentrate its efforts in a few countries rather than spread them over the entire continent.

The Foundation activities have been primarily in the field of higher education, in Brazil, Argentina, Chile, Colombia and the Caribbean area. It is hoped that the economy of these countries can be improved by strengthening the educational systems and improving their resources of trained manpower. Attention is focused on institutions pioneering improvements in the organization and methods of higher education -for example the modernization of curricula and the integration of research and training program within a modern university departmental structure.

A grant was made to the University of Concepción, Chile to help in establishing modern departments of biology, chemistry, physics and mathematics within a single integrated faculty of science. Grants have been made to other institutions to strengthen the social sciences, training in government and business, in engineering, to develop library resources and a center of animal nutrition.

In Brazil a grant was made to help implement a United Nations Special Fund survey of opportunities for large-scale irrigation of the Sao Francisco River Basin. Moreover, recently a major grant to the American International Association for Economic and Social Development will help establish an Animal Nutrition Center of the Government of Sao Paulo. Thirdly, a recent grant to improve undergraduate economics teaching at the University of Rio Grande do Sul contained support for research in agricultural economics.

The Foundation does not operate a fellowship program on an individual basis. However, it does support graduate and postdoctoral training related directly to the over-all development of regions. This is done through grants to appropriate national organizations such as the National Councils for Scientific and Technical Investigations or National Research Councils. The responsibility for selecting recipients for support, the areas for which advanced training is most urgently needed then rests with the national organizations. Likewise, the national organizations have the responsibility for providing guidance in selecting the university where advanced studies may be most effectively pursued.

Grants have been made to support regional and inter-American conferences and studies. Among these might be mentioned a grant to FAO

for the Second Latin American Seminar on Land Problems, and a grant for the Eleventh International Conference on Agricultural Economics. Late this year a conference will be held on mathematics education at Bogota with participants from various OAS countries. It is hoped that out of this conference will come plans for strengthening mathematics education which can be implemented with modification by various countries.

As funds are available the Foundation hopes to extend its activities to other countries in a way that will improve the general economy and standards of living.

RP/Doc. No. 15-Ing.
7/5/61

NOTE ON THE SOCIAL SCIENCES IN THE PROGRAM OF IAIAS

Dr. A. T. Mosher

A. Considerations

1. I am convinced that fully half of the obstacles to agricultural development in Latin America lie in the field of economic and cultural problems and obstacles, and it seems clear from our discussions that member countries want IAIAS to help with these.

2. In view of the above, I believe that the parity asked for by the social sciences is both justified and urgent, not after five years but within two years.

3. I suggest that this parity should be in the number of IAIAS professional staff employed in research and teaching in the biological and in the social sciences.

4. There is a difference in the facilities required by the biological sciences and the social sciences. Whereas the biological sciences require laboratories, greenhouses, elaborate equipment, libraries, and experimental fields and livestock, the social sciences require only tables, pencils, calculating machines, and a good library. The laboratories of the social sciences are farms, villages, and governmental institutions.

5. This means that activities in the social sciences have greater mobility. It would be feasible to make an intensive effort in the social sciences in one place for three to five years, then move to another part of the continent to concentrate in another location.

6. Because of the diversities of culture, degrees of commercialization of agriculture, etc., in Latin America, research in the social sciences is needed at widely scattered points in the continent; it cannot satisfactorily be conducted in any one country.

7. Unlike the biological sciences, the social sciences have, at the post-graduate level, no existing undergraduate curricula on which to build. In any training, therefore, the social sciences must either:

   a. Concentrate for an initial period on undergraduate education,

   or

   b. Give simultaneous attention in the early years to both undergraduate and graduate training.

8. Agricultural economics and extension education need to be intimately related to research in applied agriculture, in the biological fields and in agricultural engineering. Agricultural economics can also benefit from close association with a number of courses normally taught in general economics. Rural sociology is less dependent on the fields of agricultural technology but has many elements in common with general sociology. All rural social sciences need close collaboration with psychology and cultural anthropology.

9. Consequently, agricultural economics is best taught in colleges of agriculture. All rural social sciences benefit by being parts of, or adjacent to, general universities.

10. Training in the biological sciences applied to agriculture needs agricultural economics to aid in applying economics tests to proposed practices. This need may be less apparent at Turrialba because the biological departments there have no immediate extension responsibility in the surrounding countryside, but students receiving graduate training there will not be operating in such isolation, so it is imperative that their graduate training include introduction to the application of economic tests to suggested practices. Since many of these graduates will be engaged in, or should work with, extension services, they also need some rural sociology and extension education.

B. Recommendations

1. That the staff of IAIAS in the social sciences be quickly raised, in number of professional staff, to parity with the staff in the biological sciences.

   a. Because of the slight need of the social sciences for fixed physical resources, it is suggested that the heart of the IAIAS program in the social sciences not be a central institute but a high-quality staff of adequate size.

2. That this staff be divided into three teams, operating roughly in the three present zones of Latin America with five responsibilities:

   a. Research on urgent problems in which assistants-in-training, whether students or employed assistants, take an active part.

   b. Helping national institutions strengthen undergraduate courses in the social sciences.

   c. Concentrating particularly on helping one national institution develop graduate training.

d. Encouraging member countries to increase their requests to private, bi-lateral, and other multi-lateral agencies for help in tackling the economic and cultural problems of rural development, both in research and in undergraduate and graduate teaching.

e. Continuing the present role with respect to the activities of Project 39.

Because of the smaller necessary investment in physical facilities and because of its portability, it would be feasible for the Institute, in this part of its program, to begin by helping to strengthen national institutions at both the undergraduate and the graduate level, rather than by tying its major activities either to Turrialba - San José or to Montevideo - La Estanzuela.

It would be feasible to have intensive programs at two or three centers in different parts of Latin America simultaneously, and it would be feasible after concentrating at certain institutions for a few years to move these intensive programs to other institutions.

3. Turrialba needs the social sciences but there is no point in locating these activities there unless other departments use them. Therefore, if Turrialba recognizes its need to be one of the centers for intensive effort in the social sciences, it should first provide tangible evidence of this by agreeing:

a. To make courses in the social sciences obligatory for students in all departments, up to at least 20%+ of all course hours required for the degree.

b. To make economic tests a regular part of all research issuing in specific proposals for farm practices.

4. In its research, the program in the social sciences should concentrate for the foreseeable future on:

a. Projects and problems of immediate importance to extension programs in agriculture and home economics, and to the organization and administration of governmental agencies serving agriculture.

b. Projects of such order of simplicity or complexity that students in training (both undergraduate and graduate) can participate in them, thus learning research methodology in the process.

+ In the first draft of this memorandum this figure was 25%. I reduced it to 20% to try to avoid the charge of being an unrealistic advocate. Now that this figure (20%) has been challenged as perhaps being unnecessarily high, I wish I had left it at the original figure. Twenty per cent is not an "asking price"; I would consider it rock bottom, particularly in view of the almost universal lack of under-

RP/Doc. No. 16-Ing.
7/5/61

ADDRESS BY MR. ADRIANO URBINA

AT THE CLOSING SESSION OF THE PROGRAM REVIEW PANEL

July 5, 1961 - 8:00 P.M.

Mr. Samper:
Gentlemen:

It pleases me very much, both as an official of the Government of the Republic, and as a man who has for a lifetime been close to the land, to affectionately greet all the members of the Program Review Panel of the Inter-American Institute of Agricultural Sciences of the O.A.S., which you now honor with your visit.

I have followed with particular interest the development of the activities which have been confided to you because of your profound knowledge of agricultural problems. It is my belief that your deliberations will bring forth highly satistactory results for a technical agency such as this, which has been created with the spirit of inter-American cooperation for the promotion of the agricultural sciences, as one of the best means of improving the economic and social life of the rural communities of the continent.

All the demands of the agrarian, technical, economic and social problems being faced by most of our countries in the course of their development have not yet been satisfied. Undoubtedly there is much to be done if we wish to guard ourselves, while there is still time, against the great evils which threaten our hemisphere. But what is important today is not merely to think about what it has been possible to accomplish or what has not been done. What is important is to undertake the tasks necessary in order to achieve, within the foreseeable future, the improvement of the economy of our masses, as well as their social and cultural progress, in order to prevent their povverty and ignorance from being converted into factors of their own political and moral dissolution.

From these points of view, I believe that the effort now being made by the Inter-American Institute of Agricultural Sciences, and the job you are doing, with the purpose of giving this institution a broader and more solid structure, have a value which must be appreciated within the lines of a necessary expansion of its activities and of its influence on agricultural development. The fact that the Office of the Director General of the Institute has decided to call this round table to examine, with absolute competency and freedom and with high purposes, the studies that have been made by the work teams in the fields of the Social Sciences and the Biological Sciences, is evidence of its firm intention to assume responsibilities of vaster dimensions in view of the delicate mission which has been confided to it.

Our country is most flattered that this outstanding group of men of science, who with such devotion have put their knowledge and efforts to the service of the greater welfare of the American communities, should have chosen to meet in San José.

As Costa Ricans, we feel honored to be able to offer you an atmosphere that is favorable to deliberations of such a high intellectual level as yours have been during these days of intense labor.

Within our limitations, Costa Rica has strongly supported the Institute since its very beginning. It has done so in conditions that have made it possible for it to accomplish many of its tasks. A similar spirit of cooperation exists today.

I am pleased to recognize the importance of the work you have done in order to enable the Institute -- in the words of the Director General -- to assume fully the role which behooves it in the development of the agricultural sciences for the improvement of rural life in the Latin American countries.

As I extend to you my best wishes for your personal wellbeing and for a happy return to your homes, I reiterate my confidence that the work you have undertaken will be positively beneficial to the peoples of our America.

Thank you.

PROGRAM REVIEW
JULY 1961

DATE	ISSUED TO