



# ANNUAL REPORT '78





# ANNUAL REPORT 19

General Directorate – Headquarters  
San Jose, Costa Rica





*Note*

*As in previous years, the information contained in this report is based on IICA's programs. However, the readers are reminded that it is neither the purpose nor possible to present extremely detailed information on work accomplished in this type of report. Those interested in further data on a specific project or activity may obtain the necessary information from the IICA representative in each country.*

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**Our cover illustrates the multiplier effect of IICA's actions. The technical support provided through advisory and other services to national institutions effectively helps resource problems of all types in the agricultural sector of our countries.**

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## INTRODUCTION



## INTRODUCTION

As one of my responsibilities as Director General of the Inter-American Institute of Agricultural Sciences, I hereby submit the Annual Report of IICA for the period July 1, 1977 through June 30, 1978 for the consideration by the honorable members of the Board of Directors of IICA and of the Central Assembly of the Organization of American States (OAS).

This is the last report presented in the fiscal year system we have used since the Institution was founded. The report for the second semester of 1979 and the 1980 calendar year, together, will be for a period of 18 months. From then on our annual reports will be on a calendar basis, as for the new system to be used for technical and budget programming purposes, in compliance with IICA/JD Res.13 (27/78), approved on May 10, 1978, where it was agreed to change the fiscal period of the Institute to a January 1 to December 31, or calendar year.

I am pleased to be able to report that IICA has received sustained support from the member countries for the institution's programs, projects and activities, as is evident from the approval of a number of Resolutions with respect to our quota scale; programs and allocations; contracts, agreements, contributions and donations, the Simon Bolivar Fund program, and funds for the implementation of the recommendations of the VII Inter-American Conference on Agriculture, held in Tegucigalpa, Honduras, September, 1977.

At the same time, I would like to express our sincere appreciation to the Governments of the member countries, governments and agencies of extra-continental countries, foundations, international agencies, and development financing agencies which have confidence in IICA's capability to implement —totally or partially— specific projects in different agricultural areas, raising the level of our resources in order to provide a sound operative base to strengthen the institutional systems in our member countries.

I would like to take advantage of this introduction to provide more information on the results of the VII Inter-American Conference on Agriculture.

The Inter-American Conference of Ministers of Agriculture is a specialized conference which, in accordance with Article 128 of the OAS Charter, is convened to deal with special technical matters in the field of agriculture.

To date, six Inter-American Conference of Ministers of Agriculture have been held: In the United States (1930); in Mexico (1942); in Venezuela (1945); in Uruguay (1950); in Mexico (1960); and in Peru (1971).

Each Conference has dealt with matters pertaining to agriculture and rural development, of immediate interest or of a structural nature of special concern to the Member States.

Since the last Conference held in Lima, in 1971, there have been notable changes in the identification of problems and in agricultural perspectives throughout the world and in the Americas. The very density, extent and nature of the problems have also changed. Nonetheless, it should be noted that there has been little or no change in the relative slowness in agricultural growth; rural unemployment indices have risen; and the standards of living throughout the rural zones of the continent have deteriorated.

The current situation of food production, distribution and consumption at international levels; the notable reduction in world food reserves; the increased disparity noted between actual and potential demands for food; the enormous productive potential of Latin America, and the existence of large numbers of people in the area; all indicated the advisability of convening the most highly authorized representatives of the agricultural sector of the member countries of the Inter-American System to seek formulas and action strategies applicable at national and international levels, so as to contribute to the solution of current problems and to make agriculture, throughout the continent, a stable basis for the economic development and social well-being of the American man, especially the rural worker of limited resources.

The Seventh Inter-American Conference on Agriculture was held, therefore, in accordance with OAS General Assembly Resolution AG/RES.198(V-0/75); CIES Resolution No. 93(X-75); IICA Resolution No. 33(14/75), approved by the Board of Directors of IICA; the recommendations delegated by CIES to, and adopted by CEPICIES; and the final decision taken by the Permanent Council of the OAS, by delegation of the General Assembly.

The central topic of the event was "Production, Distribution and Consumption of Foods in the American countries". Discussion was divided into three areas, which included the actual and potential situation of food production in the American countries; the factors limiting development (internal and external) and the policies, programs and organization needed to foster the development of the available potential.

In addition, two round-tables were held on the expansion of agricultural frontiers for food production purposes (in the wet tropics and in irrigated areas) and on technology and technological inputs for food production.

The meeting was held in two stages: the first a technical-level meeting; the second a ministerial-level meeting, with the participation of the Ministers or Vice-Ministers of Agricul-



*Inaugural session of the VII Inter-American Conference on Agriculture, Tegucigalpa, Honduras, September 1977. In the usual order: Ing. Carlos J. Molestina, General Coordinator; Dr. José D. Epstein, in representation of the President of the Inter-American Development Bank; Dr. José Emilio G. Araujo, Director General of IICA; Mr. Rafael L. Callejas, Minister of Natural Resources, Honduras; Dr. Santiago Meyer Picón, in representation of the Secretary General of the Organization of American States; Mr. Enrique Blair, Secretary General of the Conference; and Mr. Juan Rohrman, Vice-minister of Agriculture for Guatemala.*

ture of most member countries which lent a high-level political and technical flavor to the Conference which IICA, together with the OAS and the Government of Honduras, were responsible for organizing and getting underway, with great success.

IICA published the agreements and recommendations of the VII Conference within its Official Documents Series (No. 14, November, 1977) and distributed it throughout the hemisphere.

Still, given the importance of this subject and the fact that our Board of Directors approved Resolution IICA/RAJD/Res.77(17/78) at the Seventeenth Annual Meeting (Asunción, Paraguay, May, 1978), concerning funds to implement Recommendations of the VII Inter-American Conference on Agriculture, I consider it opportune to reprint the text of the "Tegucigalpa Declaration", which contains the opinion of all the member countries, and the titles of the recommendations which were adopted at the Conference.

### **TEGUCIGALPA DECLARATION ON THE PRODUCTION, DISTRIBUTION AND CONSUMPTION OF FOOD**

An overview of the agricultural potential of Latin America and the Caribbean indicates that the region has the necessary physical bases, particularly with respect to land and water resources, to attain self-sufficiency in food production in a relatively short period and to increase the export of these products to the rest of the world. Moreover, the effective demand for food and the nutritional level of the region, compares favorably with the situation encountered in other regions of the world, even allowing for chronic deficits in the

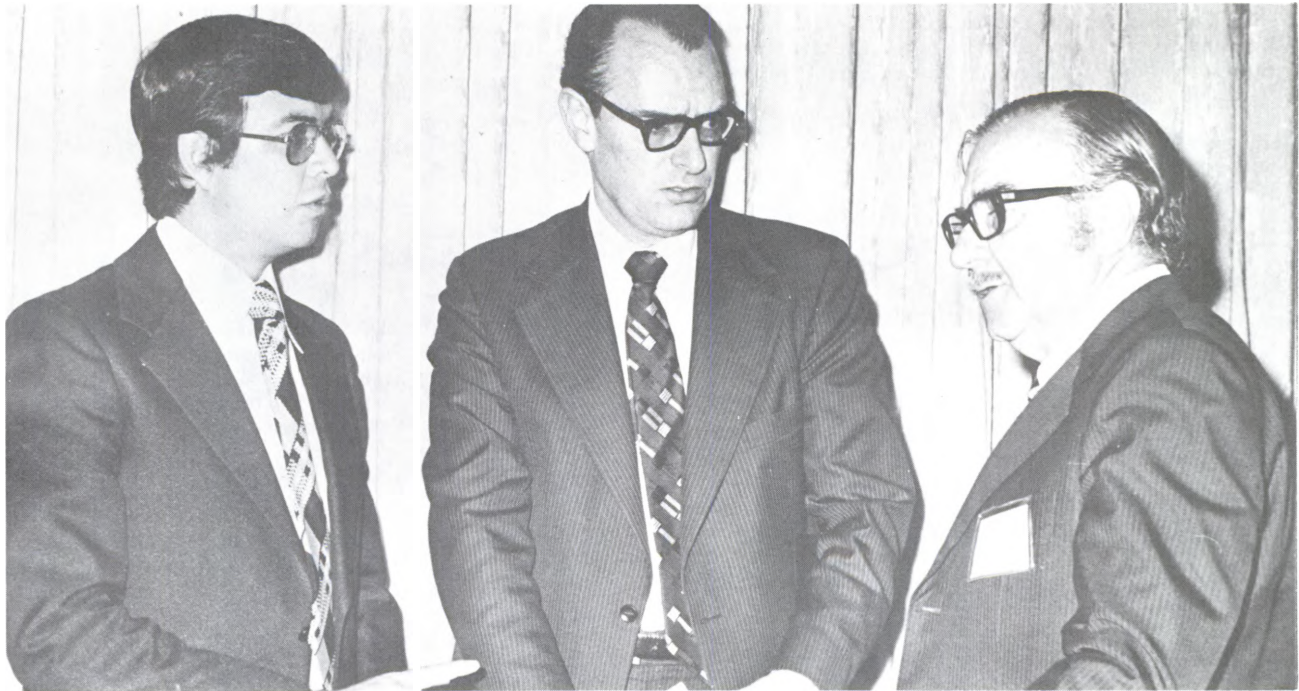
availability of certain food products and the inadequate physical bases in some of the countries.

Nonetheless, increases in food production are particularly affected by the persistence of some problems in the supply and demand of these products. Demand problems are undoubtedly the main constraint to sustained increased production of these items.

The low income levels of a large sector of the population of some of our countries (close to 85 million people in the rural sector alone with annual incomes under 115 dollars, averaging out the decade) are the principal obstacles to increased consumption levels and to the qualitative improvement of domestic demand levels.

From the food supply point of view, it may be observed that *per capita* food production in many countries of the region, is increasing more slowly than the population. Some of the main problems hindering production increases are:

- a. Deficiencies in marketing systems which reduce the volume of production available for consumption, resulting in higher prices at the consumer level.
- b. The persistence of some technological constraints, particularly with reference to the availability and use of appropriate technologies for most of the farmers that produce food;
- c. In many cases, the economic returns on food crop production is lower than that for export crops and those which serve as raw material for industrial purposes; and



*Mr. Rafael L. Callejas, Minister of Natural Resources in Honduras, discusses the order of the day with Dr. Meyer Picón of the OAS and Mr. Enrique Blair, IICA, Secretary General of the VII Inter-American Conference on Agriculture.*

- d. Finally, in some cases, the relative importance of State support services for food production is less than that for services provided other sectors.

The measures needed to solve these problems are complex in nature, and must be formulated in a systematic and inter-related manner.

Three main groups should be stressed, amongst the types of measures directed towards expanding the demand for food products:

- a. The formulation of policies that modify the distribution of national income.
- b. The formulation of policies to assure the best possible utilization of silvicultural and agricultural production resources.
- c. The formulation of policies directed towards creating rural employment opportunities and toward up-grading the remuneration of small and medium-sized farmers and laborers.

As in the case of measures oriented towards fostering increased demand, the incentive to produce food requires the methodical development of a series of complementary measures. The following are worth stressing:

- a. Measures directed towards reducing pre-and post-harvest losses, and correcting the problems in traditional systems, so as to assure a more equitable participation of the producer in the final price;
- b. The development of technologies, taking into due account the specific characteristics of agricultural producers; the ecological constraints in agricultur-

al production areas; irrigation conditions; limitations of capital and the availability of labor;

- c. The development of policies and services directed preferentially towards the small farmers that produce the food.

It is recognized that this brief synopsis of policy measures is not a complete set of all possible options. Nevertheless, they reflect most of those presently being considered by the Member States of the Inter-American System. Independently of the selection made by each country to orient its development process on a medium and long term basis, the implementation of these policy measures will require a large investment of resources. Obtaining these resources is a real challenge to the countries responsible for most of the effort, as well as for the developed countries and international financing organizations.

The total amount of available resources, is notably deficient in relation to requirements particularly, with respect to the need for designing and implementing demand expansion policies. Moreover, these effort are not feasible, if the countries are not committed to sharing and disseminating their own successful development experiences, in general, in relation to the application of measures, particularly those described above.

The Member States of the Inter-America System attending the Seventh Inter-American Conference on Agriculture, are convinced that it is possible to overcome existing obstacles in order to expand the demand and supply of food products.

In this respect, the countries express the strong political will of their respective governments to jointly seek solutions to these obstacles.

They also request that the Inter-American Institute of Agricultural Sciences, with the countries, evaluate the recommendations which have been made at the Inter-American Conferences on Agriculture.

### Recommendations

1. Mobilization of resources of the design and financing of projects oriented towards generating income and productive employment in the rural sector of the American Nations.
2. Increased knowledge about natural resources.
3. Technical cooperation and technical-financial cooperation.
4. Adjustments in the institutional system (as related to the rural sector).
5. Technical and scientific cooperation among Latin American and Caribbean countries.
6. Strengthening the sub-regional price and market information systems and other marketing services.
7. Institutionalization of the Inter-American Conferences on Agriculture.
8. Rational utilization of water resources in Latin America.

9. Support on the eradication of coffee rust in Nicaragua and on the prevention of this disease in the other countries of the region.
10. Prevention and control of Aftosis in the area of Colombia, Central and North America.

In this introduction to our Annual Report I have wished to stress one of the most important accomplishments of this period, that is, the VII Inter-American Conference on Agriculture.

A more thorough appraisal of our work may be obtained from the following chapters of this report, as concern the strengthening of the institutions in the agricultural sector of the member countries, within the programs approved for the period and in line with the Seven Lines of Action of IICA.

In closing, I wish to express my deep appreciation to the Governments of our countries, and extra-continental countries, foundations, international agencies and development financing agencies for all the aid provided, for believing in us and helping us.

Responding to this confidence in us, we have been expanding our operative capability in order to assure that new programs, projects and activities will benefit the small American farmer, and in this manner, attain our ultimate goal.



*José Emilio G. Araujo*  
*Director General*



Chapter I.  
INSTITUTIONAL RELATIONS



# Chapter I

## INSTITUTIONAL RELATIONS

### Introduction

IICA submits its Annual Report in its present form, in accordance with a mandate of the General Assembly of the Organization of American States (Resolution AG/Res.171 (IV-0-74), approved by the Eighth Regular Session of the General Assembly (May, 1978), Resolution No. 327.

Thus, a brief summary of the origins and structure of the institution as given in this chapter, and of its relations with OAS, the Board of Directors, with other agencies of the Inter-American System, world-wide organizations and extra-continental countries.

We have been able to develop our internal structure in order to have a sound support base at Headquarters, for our National Offices, which are the basic operative units of the Institute.

### Founding

The Inter-American Institute of Agricultural Sciences (IICA) is the specialized agency of the OAS for the agricultural sector. It was founded in 1942 by the American governments to foster the economic and social development of their respective countries through teaching, personnel training, research, consultation and communications, as related to the field of agriculture.

### Organization

IICA is an autonomous inter-governmental institution. It has its own convention, and carries out its work through the following structural organization:

- a. Deputy Director General's Office in charge of the administrative management; the Associate Deputy Director General's Office for External Coordination in charge of official relations with the governments of the member-countries, international, regional and world-wide organizations and for seeking external resources; the Associate Deputy Director General's Office for Planning in charge of elaborating and permanently up-dating IICA's technical, institutional, and instrumental policies, in accordance with the pertinent norms established to this end; and the Associate Deputy Director General's Office for Operations, which analyzes the technical quality of IICA's activities and provides technical support as needed.

The Inter-American Centre for Agricultural Documentation and Information (CIDIA), in charge of strengthening the national agricultural information systems and processing agricultural information at hemispheric levels; and the Public Information Bureau (DIP), producing institutional information, both of an informative as well as a technical nature for IICA's different public.

- b. For Regional Offices, for the Andean, Antillean, Northern and Southern zones respectively, with offices in Lima, Peru; Santo Domingo, Dominican Republic; Guatemala City, Guatemala; and Montevideo, Uruguay.
- c. Twenty-four National Offices one in each of the member countries except Canada, which shares the IICA office located in Washington, D.C., United States of America.

### Board of Directors

The highest governing authority of IICA rests with the Board of Directors, which is comprised of the same representatives of the American States to the Permanent Council of the Organization of American States (OAS) and meets in Washington, D.C., the headquarters of that organization. Once a year, a meeting is also held with the participation of high-level representatives of the ministries or secretariats of agriculture or special representatives of the American governments. This meeting is held in a different country each year at the invitation of the government of that country. Before the meeting, a Special Committee appointed by the Board of Directors assembles to study and present an opinion on the proposed program budget prepared by the Office of the Director General; to suggest guidelines for its preparation; to examine, study and present an opinion on all other matters entrusted to it specifically, as well as any proposals that the Representatives of the Member States and the Director General may wish to submit to the Board for consideration at its annual meetings.

### General Objectives

To assist the American States to stimulate and promote rural development as a means of accelerating the development process in order to attain improved levels of well-being in the rural sector, and to support national efforts to:

- a. Increase agricultural production and productivity in line with increases in population and purchasing power,



*His Excellency the President of Paraguay, General Alfredo Stroessner and Mr. Hernando Berton, Minister of Agriculture of Paraguay, are greeted by the Director General of IICA, Dr. José Emilio G. Araujo and the Director of the IICA Office in Paraguay, Mr. Ernani Fiori, as they arrive for the inaugural ceremony of the Seventeenth Annual Meeting of the Board of Directors of IICA, held in Asunción, in May 1978.*

especially those products that may compete on world markets and those that can contribute toward improvements in the diet of the population.

- b. Increase employment opportunities in the rural sector in proportion to the growth rate of the active rural population.
- c. Increase the participation of the rural population in development activities, reducing its non-participation to levels that allow for a continuous significant transformation towards equal opportunities for all active members of the rural community.

To achieve these objectives, the basic strategy adopted by IICA consists in strengthening the institutions in the American nations which dedicate their efforts to agricultural development.

#### **General Plan**

The General Plan is a pragmatic interpretation of IICA's objectives and the basic principles of its Convention, in response to the ever-changing conditions of the agricultural and development processes within the rural sector of the American States, as expressed in the Director General's Message to the Board of Directors: "A Hemispheric and Humanistic Projection for the decade 1971-1980".

The Plan defines IICA's action strategies and indicates the functions, lines of action, working methods and the necessary approaches, in terms of structure, organic functioning, personnel and financial aspects.

The Director General implements Plan policies, issuing specific instructions concerning ongoing progress in each Line of Action and devising operational strategies with respect to

programs, administrative organization, personnel and financial matters.

The General Plan is a dynamic, flexible instrument. Thus, in accordance with the characteristics, and on the basis of the fundamental concepts of humanistic rural development, as adopted by IICA, the Board of Directors approved the report submitted by the Director General in 1976, containing an outline as to how the programs will be increasingly oriented and up-dated in line with the provisions of the General Plan. To this end, the Director General was requested by the Board of Directors to prepare a Five-Year-Plan, to ensure the necessary flexibility of IICA's actions over the next five-year period, within the so-called "humanistic rural development projection", in order to assure the progressive application of the above-mentioned General Plan.

#### **Simon Bolivar Fund**

The Simon Bolivar Fund is multinational, and of a voluntary nature, for a total amount 20 million dollars. It was established in 1974 on the basis of a 10 million dollars commitment by the Government of Venezuela. It operates in accordance with the policies and objectives of the General Plan in the field of rural development in Latin America and the Caribbean.

#### **National Committees**

The National Program Committees have also been made a part of the Institute's official programming policy, where these Committees are the first link in the decision-making chain which culminates in the approval by the Board of Directors of the Program-Budget.

The intention is to have the IICA staff members in the countries intimately acquainted with the needs of each



*The Joint IICA/OAS Committee meets in February 1978, with the Secretary General of the OAS, Dr. Alejandro Orfila and the Director General of IICA, Dr. José Emilio G. Araujo presiding over the Sessions.*

country. To this end, it is felt that the most expeditious method is to have the sectoral agricultural planning offices report national technical cooperation requirements directly to the Institute, indicating what collaboration IICA can provide.

#### **Lines of Action**

These define and focus IICA's activities, through a Program-Budget, with the aim of promoting improvements in the institutional systems of the rural sector. They cover the following fields of action:

- Information and Documentation on Rural Development
- Education for Rural Development
- Agricultural Research and Transfer of Technology
- Agricultural Production, Productivity and Marketing
- Regional Rural Development
- Structural Change and "Campesino" Organization
- Formulation and Administration of Agricultural Policy

#### **Instruments of Action**

To accomplish its technical cooperation objectives, IICA utilizes the following instruments:

- Teaching with the aim of training individuals in technical as well as human aspects so as to ensure greater participation in the development process, making them fully aware of the obstacles, limitations to, and possibilities for accelerating the development process.
- Training, in the preparation of projects to improve and upgrade institutional systems and their agencies.

- Research, in order to produce new knowledge.
- Direct advisory services to help apply knowledge to the solution of problems, based on the experience of the technicians and technical teams, or on the results of pertinent research work.
- The work of permanent groups or committees whose main function is to coordinate the institutional efforts and to solve specific problems.
- Support professional associations to help them acquire the capability to achieve their objectives on their own.

#### **Medium-term Indicative Plan**

At its XVI Annual Meeting the Board of Directors, approved Resolution IICA/RAJD/Res.53(16/77) concerning the Medium-term Inductive Plan, to operationalize IICA's General Plan, governing the institution's actions and programs until 1982.

The Board of Directors recommended the periodic evaluation of this Indicative Plan, in order to meet the changing needs and interests of the member countries.

#### **Institutional Committees**

To complete IICA's organization, the General Directorate decided to create Institutional Committees formed by highly qualified technical personnel, whose main purpose is to carry out studies and provide advisory services in IICA's Line of Action areas. To date, work is underway on Agrarian Reform and "Campesino Organization"; the Humid Tropics; Education; Rural Women and Youth; and the Transfer of Technology and the possibility of studies in the area of management is contemplated.



*The Director General of IICA, Dr. José Emilio G. Araujo, awards the Inter-American Agricultural Medal for 1977 to Mr. Humberto Gandarillas Santacruz, in La Paz, Bolivia.*

### Permanent Board of Directors

Secretarial and technical support was provided on the revision and discussion of matters submitted for consideration by the Board of Directors and the Permanent Committee, including:

1. The Protocol of Amendment to the Convention.— The Working Group in charge of revising the draft Protocol of Amendment to IICA's Convention concluded a detailed study of this document, taking the observations and comments received from member countries into due consideration. Moreover, new articles have been introduced so that the Protocol of Amendment will instead, become a proposal for a new Convention.

The Permanent Committee, then approved the Report of the Working Group with the new draft Convention, which is being submitted to the Board of Directors for consideration and approval.

2. Officers of the Permanent Committee.— The President and Vice-President of the Permanent Committee were duly elected Ambassador Kemil Dipp-Gomez the representative of Dominican Republic, and Mr. Michel Careau alternate representative of Canada.
3. Granting Ing. Carlos Madrid the title of Director Emeritus.— The Permanent Committee accepted

the proposal formulated by the General Director to grant Ing. Carlos Madrid the title of Director Emeritus of IICA, Mr. Madrid recently retired from IICA as Deputy Director General of the Institute. A recommendation to this effect was formulated to the Board of Directors.

4. Adjustment of IICA's Fiscal Year to coincide with the Calendar year.— On May 10, 1978, the Board of Directors of IICA, approved Resolution IICA/JD/Res.13(17/78), establishing that in future the fiscal year of the Institute coincide with the calendar year, that is, January 1-December 31, fiscal period.
5. Basic Agreements on Privileges and Immunities with Barbados and Trinidad and Tobago.— The Board of Directors accepted the draft Basic Agreements on Privileges and Immunities, granted the Institute and its staff, between IICA and the Governments of Barbados and Trinidad and Tobago.

### Seventeenth Annual Meeting of the Board of Directors

The Seventeenth Annual Meeting of the Board of Directors of IICA, the Special Committee Meeting, the Twenty-third Meeting of the Technical Advisory Council and a Round-table on "Rural Youth and Development", were held in Asunción, Paraguay, from May 18 to 25, 1978, at the express invitation of the Government of Paraguay.



*His Excellency the President of Costa Rica, Mr. Rodrigo Carazo Odio, and Vice-President Dr. Rodrigo Altmann visit IICA Headquarters with Dr. José Emilio G. Araujo.*

The following resolutions were approved at the Seventeenth Annual Meeting of the Board of Directors.

- Program Evaluation
- Recovery of Technical Supervision and Institutional Support Costs
- Adjustment of IICA's Fiscal Year to coincide with the Calendar Year
- Marking the Fiftieth Anniversary of the Kellogg Foundation
- Recognition of the Outstanding work of Mr. Simon N. Wilson
- Quota Scale
- Programs and Allocations
- Contracts, Agreements, Contributions and Grants
- Funds to Implement Recommendations of the VII Inter-American on Agriculture
- Recognition accorded Ing. Carlos Madrid
- Convening a Special Meeting of the Special Committee
- Simon Bolivar Program-Budget
- Furnishing and Equipment of the IICA Headquarters Building
- The Increased participation of Women in Rural Development
- Natural Resources Survey for Rural Development in Paraguay
- Support for Agricultural Information, Documentation and Communications
- Posthumous Homage Rendered to Mr. Mauro Villaviscencio
- Posthumous Homage Rendered to Mr. Jose Vallega
- Site and Date of the Eighteenth Annual Meeting of the Board of Directors
- Vote of Thanks to the Government and People of Paraguay

The text of these resolutions and the proceedings of the Special Committee Meeting and Seventeenth Annual Meeting of the Board of Directors, have been published and distributed to the member countries as document No. 16 of IICA's Official Documents Series (English and Spanish).



*Dr. Rajamin Timor, Director, Division of International Cooperation, Israel and Dr. José Emilio G. Araujo, Director General of IICA, sign a cooperative agreement between IICA and the Government of Israel.*

#### **United States Agency for International Development (USAID)**

1. Agreement for the Sectoral Planning and Analysis of Agricultural Policies.— Several points were discussed with USAID with respect to some adjustments in the Plan of Operations and Agreement for the implementing of the Project, which was approved. Collaboration was provided on the implementation stage, with technical and administrative arrangements.
2. Agreement on the Management of Agricultural and Rural Development Projects.— All necessary arrangements were made before the subscription of a new project proposal to strengthen IICA's activities in agricultural and rural development project management aspects.
3. Crop Credit Insurance Project.— All arrangements have been made to sign an Agreement whereby IICA will be project executor, in order to carry out an in-depth study of the crop credit insurance situation in Latin America and the Caribbean.
4. Project on "Educational Media for the Integration of Low Income Women in Rural Development".

Preliminary contacts have been made to explore the possibilities of an agreement with USAID in this field.

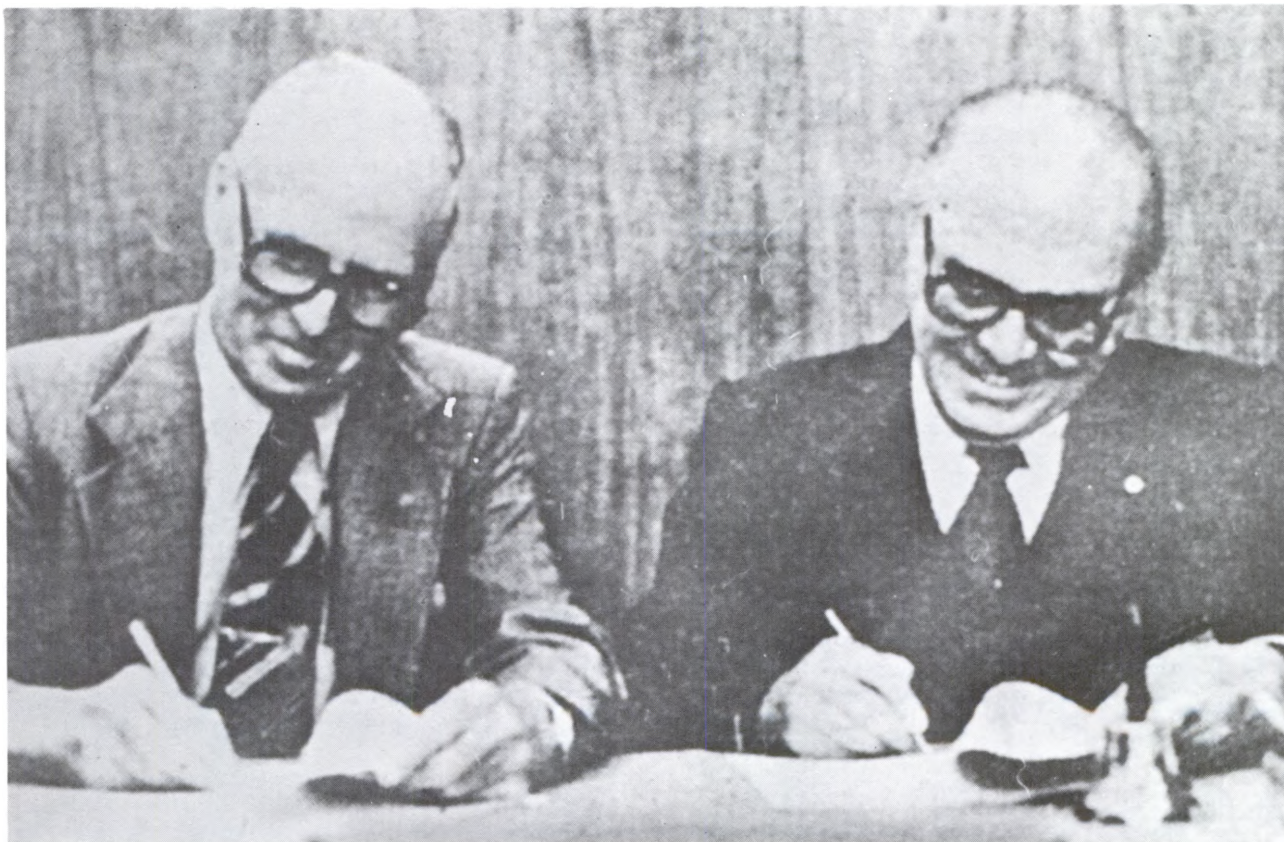
#### **United States Department of Agriculture (USDA)**

1. Relationships with USDA are increasing. Necessary arrangements have been made to subscribe an agreement on technical cooperation for food production and agricultural development in Latin America and the Caribbean.
2. Collaboration was also provided on various technical activities in support of specific IICA programs and events such as the Agricultural Project Management Project, in the area of training, and the exchange of technical information.
3. Representatives of this agency participate on IICA's Board of Directors to study and approve the Institute's Program-Budget.

#### **Government of Canada**

1. Regional Marketing Project in Central America (IICA-CIDA).— Contact with CIDA has been maintained with the aim of completing all necessary arrangements to formalize an agreement whereby CIDA will contribute, jointly with IICA, to the up-grading of national agricultural marketing institutions in the area.
2. Simon Bolivar Fund and Canada.— Arrangements are being made for Canada's (CIDA) support to the Simon Bolivar Fund, and to establish the mechanism for contributing to specific projects.





*Dr. Norman Borlaug, CIMMYT, Mexico (International Center for the Improvement of Corn and Wheat) and Dr. Araujo, Director General of IICA, sign a cooperative agreement between the two institutions in May 1978.*

3. IICA's range of contacts with other technical agencies in Canada, includes Agriculture Canada, several universities, IDRC, etc.

#### **IGAD/LAC**

1. International Group for Agricultural Development in Latin America and the Caribbean (IGAD/LAC).— As one of the international member agencies of this Group, IICA has attended the plenary sessions and those of the IGAD/LAC Working Group. The following topics were discussed at these meetings: Report on reducing post-harvest crop losses in five Central American countries, the Inter-American Program to Study Beef Cattle and the Aphtose Fever (PIPECA); and the IGAD/LAC Annual Report.

#### **World Bank**

1. Relationships with IBRD are increasing. IICA has participated in the Region Coordinated by the World Bank on "Caribbean Group for Cooperation for Economic Development". IICA is also in touch with CGIAR with the aim of discussing common areas of interest, and with the Department of Agricultural Projects and Rural Development. IICA also participated at the Meeting of Representatives from Training Institutions in the Ibero-American region. Contacts was made with the information division, and the exchange of material was established.

#### **Inter-American Development Bank**

1. Cooperative Agricultural Research Program for the Southern Cone countries.— All arrangements for this project have been made, and the Non-Refundable Technical Cooperation Agreement was signed.
2. Cooperative Agricultural Research Program for the countries of the Andean Zone. Pertinent Arrangements were made for a meeting of the Agricultural Research Directors of the Andean Zone, at the Bank's main office.
3. Contact was made with the information section, and the exchange of material was established.

#### **Organization of American States**

1. Joint IICA-OAS Coordinating Committee.— The Committee held its Fifth Meeting at the OAS Headquarters, to define possible areas for coordination.
2. Seventh Inter-American Conference on Agriculture.— Conference Secretariat Services were provided for the meeting held in Tegucigalpa, Honduras, besides the organization and holding of the meeting and preparation of documents for the event.
3. OAS Scholarship Committee.— The Committee participated in the study and evaluation of candidates for scholarships from the Member States, in the areas of agriculture and rural development.

4. IICA Representation on the different OAS Agencies.— IICA participated as official “observer” at the following meetings:
  - Permanent Executive Committee of the Inter-American Economic and Social Council
  - Inter-American Women’s Commission
  - General Assembly
  - Permanent Executive Committee of CIECC
5. Accredited Mission at the OAS.— A number of contacts have been made with the Ambassadors and other members of the Permanent Missions to the OAS, related to the proposed draft Convention of IICA, the adherence of Grenada and Surinam to the IICA Convention and holding the Seventeenth Annual Meeting of the Board of Directors.
6. Administrative Tribunal.— Several matters of interest to IICA personnel and to the Institute itself have been dealt with, based on an Agreement signed by IICA with the General Secretariat of the OAS.
7. Retirement and Pension Fund.— Meetings of the Retirement and Pension Committee were held and attended to review the reports of the consulting agencies’ reports in charge of Fund investment and to discuss aspects related to the Retirement and Pensions Plan. Other matters of interest of IICA personnel with respect to loan requests were also satisfactorily dealt with.
8. Travel unit.— The Official OAS Travel Document of IICA staff members were processed: a registry of requests for new, renewed and cancelled documents was maintained.

#### **Other Agencies and Institutions**

1. Title XII.— IICA relations with Title XII authorities were continued, particularly with the Executive Secretariat of BIFAD, by attending meetings of the BIFAD Board.
2. United States’ Universities.— IICA has been in constant contact with and has cooperated on the processing of the Project for Agricultural Planning and Sectoral

Analysis, with Iowa State University and Michigan State University. IICA also collaborated with Cornell University on preparing a project. Progress was also made on identifying possible areas for projects with the above-mentioned universities.

3. Other United States’ Institutions.— IICA has been in touch with the National Academy of Sciences in the field of post-harvest food losses and participated in a working meeting; with the World Watch Institute; with International Food Policy Research Institute, etc.
4. Relationships with FAO.— Working relationships between FAO and IICA have continued. Information has been exchanged on FAO and IICA programs, and on the technical personnel with both agencies appointed in the field of marketing and post-harvest food losses, with the participation of FAO/Rome, to attend a Seminar in the Dominican Republic.
5. IICA attended the Annual Convention of the National Association of State Universities and Land Grant Colleges (NAOSULGC) held in Washington, D.C.

#### **Exchange of Information**

The systematic exchange of information between IICA and other technical and international agencies in the United States and Canada has increased, as noted above.

#### **Relationship with Extra-Continental Countries.**

IICA relations with extra-continental countries have increased substantially, both with the permanent observer group such as Spain, Italy, France, Japan, Israel, Belgium and England, among others, as well as those not formally connected with the institution but which are interested in IICA’s work, such as Germany, Egypt, Denmark, Holland, etc.

In the following chapters, the cooperation provided by each country is explained, particularly with respect to research, agrarian reform, education, information and marketing.

#### **Agreements and Contracts**

During the period of this report, IICA has signed or extended and implemented different agreements with the governments of the member and extra-continental countries regional or world-wide agencies, national or international financing agencies; a list is presented in the pertinent appendix.

Chapter II.  
THE TRANSFER OF TECHNOLOGY  
AND FOOD PRODUCTION



## Chapter II

# THE TRANSFER OF TECHNOLOGY AND FOOD PRODUCTION

### Introduction

The tremendous importance of agricultural production for Latin American and Caribbean countries has been clearly perceived in recent years, and is based on the relative contribution of agricultural production to the gross national production, to the exportation situation of most of the countries of the region, and in its capacity to generate employment for a rapidly growing rural population. Evidently, agriculture must also meet the increasing demands for an adequate supply of food.

Despite the importance of agricultural production, and the generally excellent situation of natural resources throughout the region, increases in production and productivity in the agricultural sector have not been in line with the existing needs of the population, nor with the potential of the region.

### Food production Latin America

Perhaps the more serious problem with respect to the low production growth rate experienced over the past several decades concerns the food availability situation which is evidently deficient throughout the region. Seven countries only have daily per capita intake averages above the minimum calorie requirements (2550 calories/day) and only three consume more than the minimum protein requirements (71 gr/day). Thus, with a population growth rate of close to 3 percent—one of the highest in the world—considerable effort must be made in Latin America merely to maintain the present deficient levels of food production. To adequately meet existing, to say nothing of growing demand, requires substantial production increases.

The agricultural sector is quantitatively perhaps the more important sector in most of the countries of the region either because of its contribution to the GNP or because of its relative weight with respect to the balance of payments. It is evident, therefore, that economic growth must be based on increased productivity in the agricultural sector as well as the reinvestment of surplus generated by other relatively more profitable sectors of the economy.

Considering these factors jointly, it is evident that requirements to be met by the agricultural sector imply a growth rate on the order of 4.5 or 5 percent. This is significantly higher than the traditional growth rate of slightly more than 3 percent a year, which is not much higher than the average population increase rate.

Moreover, practically a third of these increases are due to expansion of area under cultivation and not to increased productivity of the land, which recently has been lower than the population growth rate.

This situation has resulted in a standstill if not a reduction of agricultural production rates on a per capita basis, in addition to a marked decline in the participation of the region in the world trade of agricultural products, dropping from 20 percent in 1950 to 12 percent in 1975. This is particularly significant, in view of the potential importance of the region as a supplier of food for the rest of the world.

Perhaps one of the more outstanding characteristics of agricultural production in Latin America and the Caribbean is the tremendous variability in production and productivity increases for different crops in one country or for a given crop in the different countries of the region.

Cited by way of example is the rapid rate of increase in potato production in Colombia (3.2%) as compared to much lower increase rates in other countries of similar ecological environments, or the increase in wheat production in Mexico (4.9%) and Brazil (3.7%) as compared to the recent average for the region of under two percent.

These differences in yield performance are particularly important since they permit an assessment of the existing conditions in those cases where production increases have been successfully obtained.

### The importance of technology for the implementation of food production strategies

To assure rapid agricultural production increases as a means toward improving the food situation in the region and the standards of living of rural producers requires the implementation of appropriate strategies adapted to the specific conditions of each country in the region.

There are two inter-related elements which are essential to these strategies: The one refers to the possibility and advisability of expanding agricultural production through the incorporation of arable lands not presently under cultivation (horizontal expansion) as compared with the possibility of increasing production through increased capital investment and/or a more effective utilization of labor per land unit (intensification factors).

Traditionally, both means of increasing production have been important, but their relative importance will depend on



*Dr. Robert S. Bergland, State Secretary of Agriculture of the United States of America is informed of IICA activities by the Director General. IICA has agreements with several US universities on the transfer of technology to small farmers.*

the existing possibilities in each country, since both means usually require the prior development of new technologies. In the first case, technologies must be developed for specific ecological conditions, particularly with respect to the soils of new regions. In the second, increases in land productivity can be attained through the introduction of new production techniques.

A second important point is the design of food production strategies, with particular attention being given to the qualitative nature of the necessary technologies.

It should be fairly obvious that different technologies will use different levels of capital or work inputs and the effect on overall capacity and growth rates of the agricultural sector will differ in varying degrees, depending on the availability of existing resources.

The variable rates of growth as a result of new technologies suggest the need for a mechanism to ensure a process of generation and adoption of technologies in order to contribute effectively to increased food production and overall economic growth. Of concern here regarding the selected strategies is the level of intensity of the innovative actions—this depends largely on the development of appropriate institutions—and the relative intensity of new technology factors. The levels of use and content of these innovative activities should be a matter to be determined by the State, and will depend largely on the ability of the private sector to direct its innovative efforts towards socially acceptable goals.

#### **Components of the innovative process in the agricultural sector**

The innovative process is comprised of a set of inter-related sub-processes, with particular attention paid to the following: a) the generation of new knowledge (technologies);

b) the transfer of this knowledge to farmers; and c) the adoption process by the micro-economic units. The governments must undertake a number of actions to assure the effective development of these sub-processes. The State plays an important role in the innovative agricultural process since it is largely responsible for fostering research activities—high risk investment, etc.—partly as a result of the structural nature of the sector, that is, small and medium-sized holdings, and quasi-competitive markets, etc.

The first set of activities is to establish basic research endeavors oriented toward finding new scientific frontiers to serve as frame of reference for activities directed toward developing technologies.

The second sub-process includes what could be called “applied research” and is directed toward developing new (or improved) inputs and capital gains, and to perfecting the production processes in order to assure a maximum utilization of available economic and natural resources in the agricultural production process.

The second group of activities concerns providing the producer sector with the knowledge generated in the two previous sub-processes or stages. This is commonly called the transfer of technology and should be viewed as a central or main mechanism to link the producer sector with the research structure. This same mechanism can also serve to identify the problems and constraints to be solved by the research endeavors, and to disseminate research findings at the user level.

The last step of this process concerns the adoption of the new technologies by the productive units. Effective adoption of new technology depends largely on the behavioral pattern of farmers, as well as on the actual nature of available



*Outreach work in El Salvador on small farmer production systems is an example of the transfer of new technologies to make better use of land resources.*

technology and the economic conditions of the given production structure which in turn, is largely determined by national economic policies.

Concerning performance or behavioral patterns, empirical evidence accumulated over the past several years indicates that farmers generally adopt available technologies when it is possible to improve their economic situation through their use. Thus, it would seem that where new technologies are available, the most important constraints to attaining adequate adoption levels and consequent increases in productivity have had to do with the socio-economic policies in force for the agricultural sector.

#### **Advances in agricultural technology. Needed actions.**

Mention has been made of the role played by the State regarding the innovative agricultural process, based on the rather special characteristics of the pertinent research endeavors and on the types of production units in the sector. This role is evident in the work to promote the necessary forms of institutional organization needed to develop appropriate technologies, in terms of the the potential users requirements and restrictions. In addition, a clear definition of an adequate economic context is needed, to ensure the adoption of these technologies by the farmers. This implies the instrumentation of socio-economic policies which are in harmony with proposed technologies.

An analysis of what has been happening in Latin America and the Caribbean over the past several decades, particularly with respect to a comparison of evident successes regarding technical advances, indicates the need to develop an adequate institutional frame of reference for each of the components of the innovative process. Moreover, an adequate articulation between these components and therefore of the process as a whole, is also essential.

To this end then, strategies directed toward fostering technological changes require a coherent set of definitive actions by the State concerning a number of aspects, such as:

a. The adequate development of the organizations responsible for generating basic and applied research.

There are two main elements to the process of generating new technological knowledge: i) an adequate organizational infrastructure; and ii) adequately trained human resources and the minimum critical mass needed.

The research institutions constitute the organizational framework within which the human, physical and budgetary resources are combined, and where the necessary procedures are designed in order to adequately develop research activities. The human resources are perhaps the central element of these activities due to the rather specific nature of the work expect of them.

The two elements mentioned above function and inter-act within a general overall institutional framework which each society will develop with regard to its research activities. Thus, in addition to existing organizational and human and financial resources, an effective process to assure technological change will also require the following set of conditions to assure: i) the development and implementation of research priorities; ii) the effective organization of research activities; and iii) an adequate dissemination of resulting technologies, and their adoption by the producer sector.

These conditions can be met if an adequate institutional mechanism exists which can ensure the articulation and inter-connection of the research institutions, and of these with other public organizations and with the potential users of the research findings.



*New technologies must be developed in order to produce food in Andean zones.*

Such institutional mechanisms guarantee that the organizations provide their researchers with the physical and financial resources needed to carry out their work, as well as to assure that research priorities respond to identified social needs. In this manner, research findings will be more effectively used, and will be socially beneficial, contributing to increased social awareness of the problems involved and an adequate recognition and acknowledgement of research institutions.

b. Adapting technologies to suit production needs of the potential adopters.

One of the more outstanding characteristics of the agricultural process in Latin America is the tremendous diversity of types of enterprises which predominate in the different regions or in the way of cultivating certain crops.

Thus, the types of technology that the different kinds of producers will be able to adopt will be based on their individual production structures. Therefore, technological institutions must develop the institutional mechanisms needed to permit an adequate understanding of the priorities and real needs of the producer sector being served. This is particularly important and a constraining factor in the case of small farmers who generally have little access to any type of institutional mechanism through which they may transmit their needs to State agencies.

Thus, the programming of research activities must be based on the identification and description of production problems of the different types of enterprises to be helped. This would seem a suitable model to resolve those problems related to the two well defined stages of the innovative

process: the identification of the technological needs and requirements of future users with respect to research findings and therefore with the designation of priorities for the different research alternatives; and the adequate integration of research findings into a model or technological package which can be transferred to the farmer.

During the intermediary stages, that is, during the actual research process, it would seem necessary to maintain a one-product or discipline approach as a means of attaining the necessary level of specialization. Several experiences along these lines, though isolated, tend to support this point of view.

The main point here which requires further thought, would seem to lie in the form of attaining the organizational integration of both elements.

c. The third and last point refers to the instrumentation of an economic policy in line with identified needs in the producer sector so as to facilitate and encourage the adoption of technology.

### **COOPERATIVE RESEARCH PROJECT ON AGRICULTURAL TECHNOLOGY IN LATIN AMERICA**

Objectives:

a. General:

The general objective is to generate information on the nature and operation of the technological process in the region, in order to contribute to a more complete understanding of the present situation in order to



develop new alternatives as needed to arrest the current technological stagnation generally encountered throughout the Continent. This will be done by means of empirical observation of a number of specific situations or cases, selected for their representative quality vis a vis the conditions for developing agricultural production in Latin America.

b. Specific Objectives:

1. To generate conceptual models that contribute to an understanding of the process to generate, disseminate and adopt technologies in the agricultural sector.
2. To analyze the technological generation-dissemination system, evaluating the existing organizational mechanisms and how they function within a framework of existing scientific policies and techniques.
3. To describe the existing inter-relationships between the different components of this system and the coordination mechanisms used throughout the region.
4. To typify the more relevant production situations in Latin America relating their structural characteristics to the qualitative nature of the technological innovation process.
5. To evaluate the relationship between the economic context of the agricultural production situation and the technology adoption characteristics.
6. To globally evaluate the nature of technological progress underway in a number of agricultural production situations in order to analyze the agricultural technological process in the countries of the region, in comparison with other sectors of this region and with other countries.
7. To analyze the instruments for implementing technological policies most suited to attaining certain policy objectives that are consistent with development objectives.

Goals:

- a. To undertake a descriptive and conceptual analysis of the technology generation-adoption process underway in the agricultural sector of Latin America in order to facilitate the selection of cases of technological change on which to base the dissemination of empirical information on the nature and functioning of the process, to later, arrive at general conclusions concerning the process based on this information.
- b. To conduct a number of case studies in order to analyze specific situations of the technological process in a given region, in greater detail, to be selected on the basis of the conceptual framework developed for the purpose.
- c. The preparation of a comparative analysis of case study findings, in order to seek common elements that can be linked to the causal factors and characteristics of the technological process under study.

Programmed activities completed to date:

- a. The integration and comparative analysis of institutional models for the generation and transfer of technology in selected countries.

- b. The development of a case study methodology, and its application to a test case.
- c. The selection and initiation of the case studies.
- d. Development of analytical methods to serve as a basis for the process of typifying the agricultural enterprises encountered.
- e. A seminar for discussion of methodologies and the coordination of activities of participant teams.

Statistical synthesis:

a. List of collaborating and beneficiary institutions:

- CEDES, Argentina.
- Centro de Investigación sobre Estado y Administración, CISEA, Argentina.
- Centro de Investigación y Docencia Económica, México.
- Centro de Investigaciones Socioeconómicas, Perú.
- Centro de Investigaciones Económicas, Uruguay.
- Centro Internacional de Investigaciones para el Desarrollo del Canadá, CIID.
- Centro Internacional de Agricultura Tropical, CIAT.
- CIENES, Chile.
- Comissão Estadual de Planejamento Agrícola, Brasil.
- CSUCA, Costa Rica.
- CENDERCO, Chile.
- EIAP, Fundación Getulio Vargas.
- Facultad Latinoamericana de Ciencias Sociales, FLACSO, Chile.
- Fundación FORD.
- FUNDARCO, Colombia.
- FAO.
- Instituto Colombiano Agropecuario, ICA.
- INIA, México.
- Institute for Advanced Study, Estados Unidos.
- CFICEL, Colombia.
- Planeación Nacional
- Programa de las Naciones Unidas para el Desarrollo, PNUD.
- Unidad de Estudios Socioeconómicos, México.
- Unidad Investigación sobre Tecnología Agrícola, CIDER, México.
- Universidad de California, Estados Unidos.
- Universidad de los Andes-CEDE, Colombia.
- Universidad del Zulia, Venezuela.
- Universidad Central de Maracay, Venezuela.
- Universidad Federal de Pernambuco en colaboración con la Comisión Estadual de Planificación del Estado de Pernambuco, Brasil (CEPA) y de SUPLAN.

Current project status:

- a. *Synthesis.* During the 1977-1978 fiscal period, the coordinating team prepared four methodological documents, thereby completing the tasks programmed for the period. These documents, together with the ones prepared the previous year, serve as a basis for the elaboration of uniform methodology and objectives for the programmed case studies.
- b. *Modifications.* Eight national teams have prepared detailed research proposals and external resources to finance the work were obtained. The following studies

were underway by the end of the period under consideration: those on sugar cane in Colombia and the case studies in the North-east of Brazil, in Peru and Ecuador. The three remaining studies will be initiated once the support promised by IDRC-Canada has been provided.

- c. *Complementary actions.* Papers were given at two seminars and the Seminar Proceedings were edited and

published, as part of the more general project activities directed toward disseminating information and ideas resulting from project research activities.

In addition, two papers were given at the Annual Meeting of the American Association for the advancement of Science held in Washington last February.

Chapter III.  
RECIPROCAL TECHNICAL COOPERATION



## Chapter III

# RECIPROCAL TECHNICAL COOPERATION

### Introduction

As this decade draws to a close, a new challenge arises for which we must summon all our strength, ability and intelligence. Development concepts and strategies which depended on one or several factors such as technologies or increased investments and which relied on spill-over effects, whereby total product increases must eventually be reflected in the lower income sectors, have proved inadequate. The solution to complex development problems requires integral and systematic concepts and strategies.

One of the factors making this development concept possible, is the increasing awareness in our countries of the need to avoid the "island" or isolationist theory, where one country ignores what another one is doing, thereby diminishing or eliminating the possibility of taking advantage of appropriate technologies developed under similar conditions.

This is why today we speak of "integrated development", an expression which clearly acknowledges the need for a new, global approach. However, this does not necessarily mean that we have a new understanding of the development process, of its influencing factors, or the multiple causal relations which link them.

We have had occasion to include many elements into our models, and have combined them in many ways, but we have seldom considered mankind, or have taken him into account simply as a passive beneficiary of the process. This is not the approach called for: man *must* be considered the master of his own destiny. Without this ingredient, any "integral" system, regardless of its complexity, is destined to fail. Hence, our concept of the process as one of "integrated rural development", above all a participative process, which should also be dynamic, self-sustaining, and pragmatic in nature.

The process is participative, insofar as the beneficiaries of the process make the decisions, implement and orient the process; it must be a highly dynamic process, with prompt results, hopefully on a massive scale; it must be progressively self-sustaining as a result of the farmers' own efforts; it should be pragmatic in nature, in the sense that the process should not be tied to preconceived models, and should be sufficiently flexible to develop along the lines of actual possibilities and opportunities.

Defining the characteristics of the process is merely a first step. We feel that the general conceptualization and the characterization of specific elements of the process, must be studied and implemented. In the former case, we would like to organize a small but select technical group which can contribute to the development and diffusion of these ideas. In the

latter, we plan to increasingly orient our development projects so as to constitute a cornerstone on which these ideas can confront realities, and the resulting hypotheses tested, accepted or rejected.

Thus, we have an area of work where the reciprocal technical cooperation process between member countries, through an institution such as IICA, can be developed to obtain maximum benefit for all, since it is the nations who identify their own needs and each Government determines its own priorities when presenting a national technical cooperation program, according to the country's and sectoral development needs.

### Reciprocal Technical Cooperation and Institutional Strengthening

The validity of IICA's policies and operational strategy is evident from the insistence on institutional strengthening in the member countries. Only with strong, competent and efficient institutions can we develop the confidence at international levels needed to establish sound reciprocal technical cooperation programs. After so many years of experience, it is increasingly evident that only national institutions and agencies with sound reputations based on their own products and installed technical capacity are the ones called on to provide advisory services on their specialty to other countries.

Therefore, it is this technical capacity we have to strengthen, with the aim of building up technical teams capable of transferring knowledge from the relatively more developed countries, institutions or entities to the less developed ones.

Differences in levels of development are not only established between countries or specific areas but also at the level of national institutions or agencies. This is a natural procedure from the moment a country, institutional system, or group of people, does not progress in a parallel manner.

For Latin America, this type of exchange is of importance and hence the most effective contribution to the development process would seem to be to systematically facilitate these exchanges, particularly in the urgent areas of food technology, management capabilities, marketing, education, research, administration. . .

### IICA's Action in the member countries

IICA's actions, or almost all of them, have a strong ingredient of reciprocal technical cooperation fostering the permanent exchange of professionals between member

countries and on the provision of supportive and advisory services by one country to another, through IICA.

The following specific cases are cited; by way of example:

In the case of Argentina, 31 professionals were sent to other Latin American countries to provide technical assistance or to receive training themselves to acquire further knowledge and experience abroad, in their own field of specialization. Some technicians have provided technical assistance within their own country, in programs with foreign financing. At the same time several foreign professionals have provided cooperation in Argentina, at the behest of national authorities. Argentinian professionals provided assistance in Brazil, Chile, Costa Rica, Nicaragua, Peru and Uruguay.

In Venezuela, reciprocal technical cooperation activities included arranging a trip abroad for 17 Venezuelan technicians to receive training in agricultural information systems, in Colombia; in extension management services, also in Colombia; in the administration and management of extension services in Mexico; in "campesino" organization in Peru, in Cadastral surveying in El Salvador and Panama; and in agrarian tribunal aspects in Peru, amongst others.

In Bolivia, the Director of the Sectoral Planning Office of the Ministry of Agriculture and "Campesino" Affairs (MACA) travelled to Argentina, to study operative planning and coordination techniques.

Several high-level MACA functionaries also visited Colombia to observe the results of the National Integrated Rural Development Program. They also travelled to Ecuador to observe the progress being made in institutional development in that country.

Several different reciprocal technical training activities were carried out in Colombia: technicians from Peru, Bolivia, Honduras and other countries were received in order to visit and observe specific work projects underway; in addition; several Colombian professionals made field trips to other countries.

A total of 16 technicians from El Salvador visited different countries, including Costa Rica, Guatemala and Venezuela, for similar purposes. Mexico received a large number of Latin American technicians in reciprocal technical training a large number of Latin American technicians in reciprocal technical training activities, mainly from Guyana, Honduras and Colombia, while, Mexican technicians visited Costa Rica, Honduras and Colombia, in technical advisory capacity.

Chapter IV.  
IICA AND AGRICULTURAL INFORMATION  
AND DOCUMENTATION





## Chapter IV

# IICA AND AGRICULTURAL INFORMATION AND DOCUMENTATION

### Introduction

The questionable validity, inconsistency and incomplete nature of available information are amongst the most serious limitations to actions oriented toward increasing agricultural production and productivity in the countries of Latin America and the Caribbean.

These limitations hinder the formulation of good plans, programs or projects; their probability of success is frequently low due to weak bases. Information is an essential input for adequate decision-making at the different levels and in different disciplines as related to economic and social development actions.

Although a restructuring of systems and methodologies to gather and catalog statistical and documentary information is necessary, a process designed to facilitate and orient its pertinent distribution and utilization, is also absolutely essential. Hence, IICA's Line of Action I Information and Documentation for Rural Development, must be based on a three-pronged approach. There is a need to strengthen or create centers to receive and process material; to assure a more dynamic system for the dissemination of information; and to train the personnel involved in the process.

The concept of Line I transcends national boundaries of a given country, in the effort to resolve problems of regional or hemispheric scope. Information processing at these levels provides more opportunity for structuring more flexible mechanisms with the aim of achieving a product which can serve as the basis for the formulation of good plans and programs and for the establishment of well-conceived policies, through the integration of information sub-systems into an inter-America system (AGRINTER), and through this system into the world flow of agricultural information (AGRIS).

In accordance with a resolution approved by the Board of Directors, IICA appointed an Evaluation Committee for this Line of Action composed of Messrs. Richard Woolston of Canada, and Norbert Reichart of Argentina. They presented a report on their appraisal which was accepted by the Institute and served as the basis for an IICA Report to the Board of Directors for consideration at the Seventeenth Annual Meeting. This report was approved by means of Resolution IICA/RAJD/Res.84(17/78), which also recommends measures to strengthen and institutionalize the national agricultural information, documentation and communication systems.

The Evaluation Committee also recommended that IICA seek the aid of private editorial firms in the member countries

as a means of substantially increasing the number of books published within the Textbooks and Educational Material Series.

### The Inter-American Agricultural Information and Documentation Centre (CIDIA)

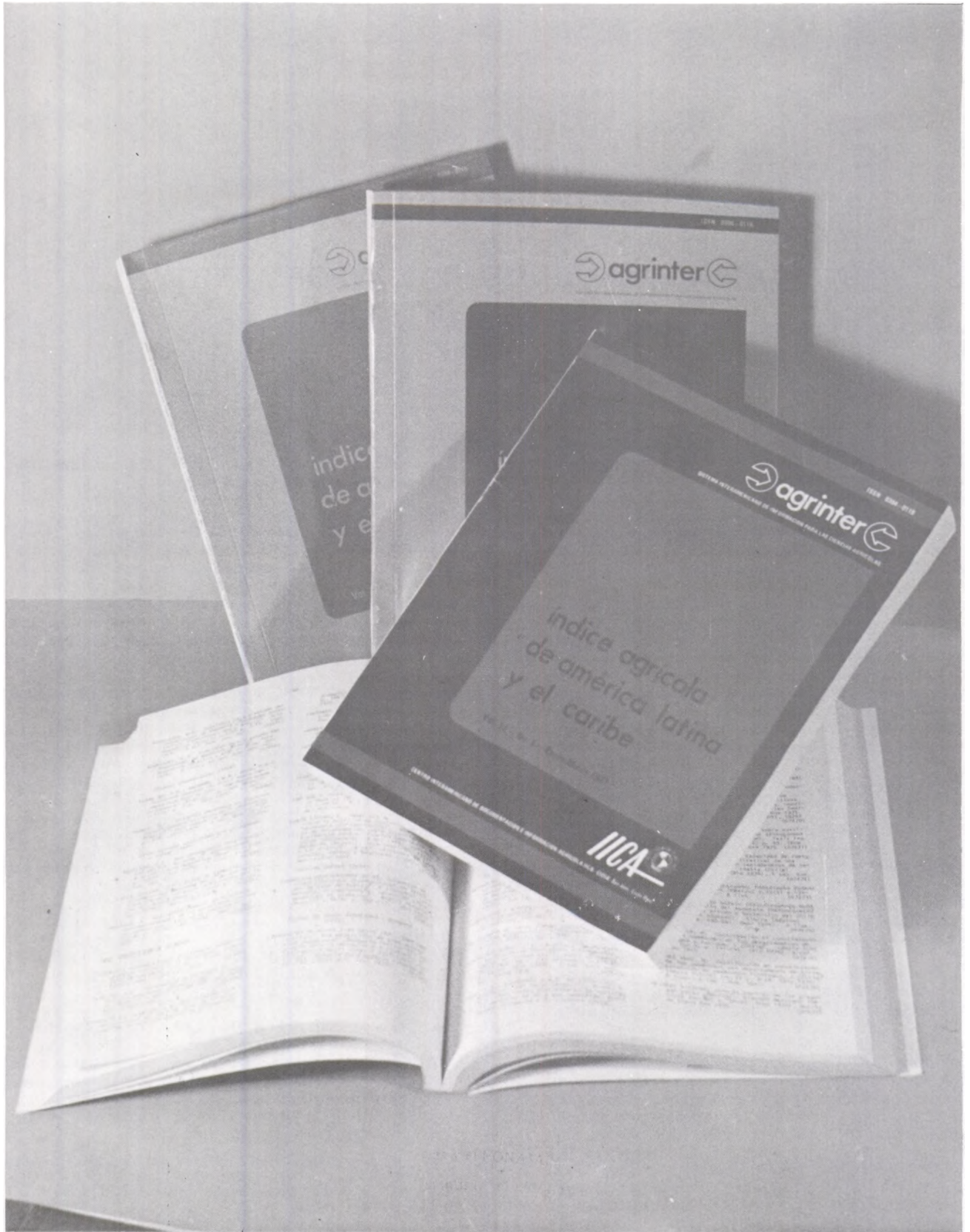
CIDIA has been working in the three priority fields of Line of Action I, particularly with respect to planning, coordination and support of measures for the integration of the Inter-American information system, with the objective of increasing member country capabilities to plan and operate their national information systems, and to increase the capacity for cooperation and coordination between countries in the region.

Progress has been made on achievement of program goals. Sixteen direct technical support activities helped national authorities in ten countries to create or strengthen their national agricultural information systems. Thus, it was possible to get the AGRINTER participant countries to contribute almost 50 percent of the input as compared to only 30 percent the previous year. Nonetheless, the AGRINTER data base still only represents about 40 to 50 percent of the documentary information produced in Latin America and the Caribbean. One of the major weaknesses is to find and get copies of non-conventional documents scattered amongst the national institutions.

The Agricultural Index for Latin America and the Caribbean is now completely automated; the publication is being brought up to date and by the end of 1978 it is expected that users will be receiving current information on a regular basis.

There is demand for the concentration of technical support for countries as a complement to this project on the design, planning and operation of national information systems or on alternative models for relatively less developed countries, as well as on increasing program capacity to train information specialists at different technical and managerial levels within the national agricultural information systems.

CIDIA has also done considerable work on producing inputs and elaborating methods and instruments to standardize information systems and services in the member countries. The following actions have been done within this project: 13,000 current documents have been identified and collected throughout Latin America and the Caribbean; these documents have been duly selected and the titles catalogued, translated,



*The Agricultural Index for Latin America and the Caribbean is an excellent source of information on the scientific endeavors underway in the field of agriculture, in the Americas.*

and enriched, and the documents themselves indexed; bibliographic descriptions of the documents have been made and converted into machine-legible inputs; magnetic tapes have been produced; bibliographic references have been compiled and listed; and standardized computer programs have been generated, up-dated and improved; standards have been revised, up-dated and published; an agricultural vocabulary was published in Spanish; and a catalog of existing bibliographies was prepared; work manuals have been distributed and in-service training offered librarians from Latin America and the Caribbean.

Ninety-six percent of programmed project activities was carried out along with several unprogrammed activities, in order to achieve annual goals and objectives. Thus, the automatic system was completed and has been consolidated, permitting IICA to process documentary information produced by the AGRINTER members and transfer the information to users in an efficient manner, and with future projections. To this end, it was necessary to design, elaborate, test and get the system underway, creating in this manner, the capacity to process and store inputs, to generate the AGRINTER data base and produce the Agricultural Index for Latin America and the Caribbean. This completes the informative stage of AGRINTER, encompassing the areas of gathering, analysis, processing, tape storage, and services.

In addition, the AGRINTER documentary data base was expanded and new instruments were created to standardize the preparation of information inputs, while up-dating existing data.

The project for the transfer of agricultural information to users was considerably furthered by the totally automated production of the Agricultural Index for Latin America and the Caribbean. A course was given at CATIE-Turrialba on the use of scientific literature. A Bibliographic Reference List was drawn up on conferences with 400 entries; an IICA Publications Catalog was prepared and has been widely distributed.

Insofar as Line of Action I is concerned, IICA intends to provide CIDIA with the most ample support. CIDIA staff will be dedicating a large part of their time to the provision of direct technical cooperation services to member countries.

#### **Agricultural Information Program for the Central American Isthmus (PIADIC)**

The Ministers of Agriculture from Central American Isthmus Countries (in Tegucigalpa, Honduras for the VII Inter-American Conference on Agriculture), met on September 6 and 7, 1977 to discuss various matters of common interest. They were fully informed about PIADIC activities at the meeting, and as a result, issued the following declaration:

"The Ministers of Agriculture of the Central American Isthmus countries have been favorably impressed with the information received concerning the objectives, progress achieved and attainments of the Agricultural Information Program for the Central American Isthmus (PIADIC), conducted by IICA in cooperation with the Regional Office for Central American Programs of USAID (ROCAP). Moreover, they declared:

- a. PIADIC is an invaluable means of providing current, reliable and complete information to serve as a basis for rural development planning and decision-making and therefore is deserving of support and encouragement by the public agricultural sector of our countries.
- b. The Ministers of Agriculture are interested in backing and strengthening the committees which

serve as the PIADIC coordinating agencies in each country, so they may submit their plans and designs for the implementation of National Agricultural Information Systems as soon as possible.

- c. Achievement of PIADIC goals and objectives is of the greatest importance. It is therefore advisable that program financing through an IICA/ROCAP Agreement should be extended for as long as needed to establish a Regional Information System to serve as the basis for actions to upgrade productivity and the standards of living of the agricultural sector in the Central American Isthmus."

From the above, it is evident that PIADIC is fully backed by the member countries. As a result, a new agreement to extend the present contract to June 1981 is being processed with USAID/ROCAP.

Some of the more important accomplishments of this program have been as follows:

In Costa Rica, the National Information System for Purposes of Development has been institutionalized, under the aegis of the President's Office. An important part of this system is the Agricultural Information Sub-system which has adopted the methodologies being promoted by PIADIC for the national sectoral systems of the six countries in the Isthmus.

In El Salvador, work is underway at the sub-system level using PIADIC guidelines. Several specific project proposals have been prepared concerning the integration of the marketing, science and technology information sub-systems.

Based on the conclusions of a study on the demand and availability of sectoral information, the General Secretariat of the National Economic Planning Council of Guatemala, with technical assistance from PIADIC, is finalizing an official proposal for the institutionalization of the National Agricultural Information System. This System will be responsible for the coordination and improved collection of numerical and statistical information from the rural sector, together with a parallel effort of the Secretariat in the field of documentary information, through the National Science and Technology Information System.

In Honduras, a Master Plan for the establishment of an Agricultural Information System has been submitted for due consideration by the National Agricultural Policy Commission. The Plan has been divided into individual components which can be financed separately; their possible financing is presently under study. In addition, a specific project is being prepared for the establishment of a Marketing Information Service.

A similar plan has been approved by the National Agricultural Information Coordinating Committee in Panama, together with a number of specific sub-projects to get the plan underway. These projects have been submitted for due consideration by national agencies and financing institutions where support is being sought.

Although no similar operative plan is being prepared for the establishment of a similar system in Nicaragua, a specific project is being prepared for the construction and functioning of a sectoral data bank which eventually will serve as the nucleus of the national system.

#### **Advancements in Public Information**

Public information has always been one of the Institute's main concerns since the transmission of technical knowledge to our member countries depends largely on this service, as does the projection of the right institutional image through more and better knowledge of our plans, programs,



*IICA publications are available in all of the member countries. In the picture, IICA's display stand at the World Meeting on Animal Production, held in Buenos Aires, Argentina.*

projects and mode of action and which serves as a means for obtaining increased outside funding, one form of expressing confidence in our work.

Moreover, due to the entrance of a large number of new member countries in the Caribbean, efforts are being made to strengthen document translation into English and French. The area of information has also been strengthened with the designation of two Press Officers to assure improved contact with mass means of communications; one is located in Costa Rica and the other in Argentina. Moreover, the Information Dissemination Division has been created in order to provide more, better and current information about IICA actions in our member countries.

The two specialized journals *Turrialba* and *Desarrollo Rural en las Américas* which publish high quality technical and informative material, appear regularly; the former on a trimestral and the latter on a quarterly basis. The number of subscriptions to both journals has increased substantially, indicative of the demand for and interest in these scientific publications which have wide circulation throughout the Americas, with some subscribers from European, Asian and African countries as well.

The Textbooks and Educational Materials Program supported by a contribution from the Kellogg Foundation is in its final year of the agreement. However, it is expected that this agreement will be renewed, since the impact of this Series on the Faculties and Schools of Agronomy and related disciplines throughout the Americas has been considerable. Ten books were published during the last year, five new ones, one second, revised edition, and four reprint editions. This is

indicative of the tremendous demand for these publications and books, and the evident interest of Latin American professionals to publish their manuscripts. IICA is conducting an exploratory study of the need for publishing teaching material for the Caribbean area and has prepared a project for the translation of books and educational material which will be submitted for consideration to development financing institutions, for possible funding.

A total of 21 books have been published during the five years of the agreement with the Kellogg Foundation, and a number of trips have been made to seek and encourage authors in the member countries to publish their contributions. At present, there are five books being published and 20 are being reviewed for possible publication.

#### **IICA Action in the Andean Zone**

In Bolivia, IICA worked specifically on building up the library at the Bolivian Institute of Agricultural Technology (IBTA). In Colombia, work was multinational in nature, and centered on the automating of library and bibliographic processes. In future, this type of work will be financed by each country in the Zone interested in the service. In Ecuador, two activities were carried out within the project to strengthen the National Agricultural Information Sub-system in an effort to get legal approval for the establishment of the sub-system. This has not yet been possible, although the Ministry of Agriculture and Livestock has formally declared its interest in the matter. In Peru, IICA has continued working with the Coordinating Nucleus of the AGRINTER System. A project for the institutional organization of this sub-system has been prepared, and the creation of cooperating "nodes" is being



*Journalist Levi Vega receives IICA's Prize for Agricultural Journalism for 1977 from the Director General of IICA and the President of the College of Journalists in Costa Rica.*

encouraged. Backing has also been provided on training national personnel in library sciences and AGRINTER methodologies (support was provided for the II National Library Science Course), and on the formulation of AGRINTER-related agricultural information and documentation policies. To this end, financial support was obtained so national staff could attend the Regional Meeting of the AGRINTER System, held in Costa Rica. In Venezuela, the government has established a National Library Service and Information System – Humanistic, Scientific and Technological. IICA has been supporting and promoting the Agricultural Sciences Information Network which forms a part of this System, consolidating the network by means of advisory and training service activities. The network is already providing services of importance to users who now have access to the information available in Venezuela as well as in other member countries. Given the importance of this movement, IICA will continue to support Venezuela's REDIAGRO.

#### **IICA Action in the Antilles Zone**

IICA's Office in Barbados was set up in September 1977, but the first institutional analysis and preliminary diagnostic study of the agricultural sector was not conducted until January 1978. Based on this study, a number of projects will be designed within Line of Action I for this country. In Guyana, data has been gathered on existing agricultural programs, projects and policies, as well as current statistical studies of the sector. Of importance in this country is the development of capabilities to compile agricultural statistical data within an eventual agricultural information system. In Jamaica, IICA has been working on the translation of educational material and on seeking national authors for textbooks;

one document of interest is on middle-level agricultural schools. Agricultural documentation and information activities in the Dominican Republic have been revitalized. A team from CIDIA helped reformulate the project for the creation and development of a National Agricultural Information and Documentation Center and Data Bank, to function under the aegis of the State Secretariat of Agriculture (SEA). This project will have USAID backing. Dominican personnel were trained abroad in library sciences and documentation, financed by IICA as well as other sources.

#### **IICA Action in the Northern Zone**

All countries in the Northern Zone except Mexico have been working actively on strengthening and coordinating their respective agricultural information systems and on achieving their integration into a regional system. PIADIC and CIDIA have been working on these aspects, as described at the beginning of the chapter. In Mexico, IICA has continued to provide support on training aspects for national personnel, assuring their participation at the regional meetings of the AGRINTER System.

#### **IICA Action in the Southern Zone**

In Argentina, IICA has been working on strengthening the National Agricultural Sciences System (SNICA), amply sponsored by the national agencies involved. It is expected that the pertinent agreements and contracts implicit for the functioning of the System will soon be signed. In Brazil, IICA has been working on the Cooperative Program to Upgrade Agricultural Libraries, providing advisory services to national institutions on their planning and organization and on

upgrading and training librarian staff. In Chile, Paraguay and Uruguay, IICA has been helping strengthen the National Agri-

cultural and Forestry Information and Documentation Sub-systems.

Chapter V.  
IICA AND  
AGRICULTURAL EDUCATION





## Chapter V

# IICA AND AGRICULTURAL EDUCATION

### Introduction

IICA's Line of Action "Education for Rural Development", has been able to confirm the fact that the educational systems in Latin America and the Caribbean have been irrelevant to the needs of developing countries, mainly due to the lack of compatibility between national development priorities and the structure and content of the education programs.

In Latin American countries, the "city" represents the concept of progress thereby creating an educational dualism where the rural sector is almost completely relegated. Human, technical as well as economic resources are not distributed equitably as to geographic or demographic functions in the interest of education.

Education in rural areas is not equivalent either qualitatively or quantitatively to that provided in urban areas nor does it respond to national priority needs in production, employment, income, services and infrastructure aspects.

Where there is a lack of coherence between the demands for rural development and the training of the human resources working in this area, it is difficult with only economic help, limited at best, to up-grade production levels and the standard of living in rural zones.

To meet this challenge, a two-level strategy must be adopted: educational planning in order to attain the highest possible utilization of resources at all structural levels and the articulation of human resources training with national priorities.

Thus, IICA's restructured Line of Action II was formulated so as to better promote and support national efforts to change the type of education of those working for the agrarian sector, at all levels, into a strong and efficient instrument to foster rural development and the improved well-being of the population of the sector.

### IICA Action in the Andean Zone

IICA cooperated with the higher agricultural education institutions in Bolivia through the National Higher Education Council (CNES), on the institutional and legal restructuring of the Faculties of Agriculture and Animal Husbandry Sciences.

A study of the human resources and research requirements for the rural development process was also carried out. Support was provided on the implementation of teaching reforms and the possible creation of a Post-Graduate School at a national level, and to the Bolivian Association of Higher Agricultural Education.

In Colombia, activities were carried out in the Nariño area, in an effort to link the University to the rural development process and to support DRI's planning and coordination actions. Several seminars were held, directed towards orienting research toward small farmer needs. Another important area is training: the National Agricultural Training Program (PNCA), gave 2,030 class hours in the last fiscal period to 536 Colombian and 10 foreign students in the fields of marketing, agricultural education and on improving administration aspects.

In Ecuador, three support activities were provided on the organization and planning of the agricultural education sub-system. The country's higher agricultural education planning set-up was institutionalized, with the establishment of Planning Units at the Faculties of Quito, Riobamba and Babahoyo, while other faculties are in the process of setting them up. Many of these units have started creating organization and planning instruments in each of the faculties. It is hoped that through these planning units, it will be possible to totally reorganize the higher agricultural education sub-system.

In Peru, IICA continues providing support to the Basic Workman's Education Office of the Ministry of Education, holding coordination meetings with a technical team in Lima, and with technicians, promoters, and coordinators of three education regions: Chiclayo in the North; Cuzco in the South, and Iquitos in the West. Within the higher agricultural education scheme, IICA has been working on modifying the teaching management and planning structure of the Universities of Puno, Piura, Cuzco, Iquitos and Lambayeque. In addition, IICA has continued fostering interest in creating rural development programs at these universities, and has been trying to strengthen the university management and administration aspects at others by means of working meetings. In this past fiscal year, a study of the job market for professionals in the field of agricultural sciences was initiated in Cuzco and its zone of influence.

In Venezuela, IICA has held a number of seminars, given courses and provided advisory services on identified problems with the participation of national specialists and leaders of post-graduate programs, and from other Latin American countries.

The main purpose of these national and international seminars was to elaborate a frame of reference to formulate an Action Plan for fostering, programming, coordinating, implementing and evaluating present and future national post-graduate programs in order to train university professors, researchers, planners and evaluators of the policies and projects pertaining to the scientific, technological, educational, economic, social aspects within the development process.



*The Director General of IICA addresses the participants at the First Andean Regional Meeting on Higher Agricultural Education, held in Lima. With him is the Rector of the Agrarian University of Peru, Dr. Federico Anavitarte and several IICA staff members.*

Attendance at the international seminars on "Post-graduate Education and Rural Development in Latin America" (Edo. Barinas, Venezuela), and the meetings of the Latin America Post-Graduate Education Association (Edo. Zulia-Venezuela), was large, with a number of valuable suggestions having been made which are being implemented today.

The advisory services provided by IICA were at a post-graduate level in many cases: a) Curricular Organization, (Rural Development, Soil Sciences and Statistics), b) Support provided on-going courses (Rural Development, including methodology for Educational Action at the rural level and in "campesino" organization, for the Post-graduate Program); c) Examination of the research plans used by the teachers and students and suggestions for up-grading these courses; d) in rural development, direct advisory services on educational action methodologies at the rural level; econometric methods and the formulation and evaluation of projects, e) in Animal Production, support was provided on curricular structure, reinforcing the terminal areas of the study program.

In line with planned support to reinforce the third and fourth levels of higher agricultural education, training workshops in agricultural planning were organized in Barinas, Guanare, San Carlos, and Monagas States.

A system has been proposed in order to attain the coordinated participation of agricultural research professionals on the formulation and maintenance of a coherent policy to handle research problems by means of meetings at different levels, assuring adequate follow-up and evaluation of research and teaching endeavors; all this in an effort to up-grade research efficiency at the university level.

Twenty-two agricultural researchers were chosen, to work with a concrete method to suggest agricultural production priorities, summarizing facts, dates, analysis, identification of technical, economic and social variables for the region and for the country.

It is hoped that these workshops will provide a dynamic reformulation and improvement of the guidelines for post-graduate research projects.

IICA sponsored the VI Agricultural Education Conference (ALEAS) and the Inter-Annual Meeting of the Latin American Association of Post-graduate Agricultural Education (ALEAP).

#### **IICA's Action in the Antilles Zone**

The Guyana Office sponsored the trip of a delegate to the VI Inter-American Meeting of the Latin American Association of Higher Agricultural Education held in Venezuela, as well as the participation of national representatives at the regional rural youth meetings, held in Jamaica.

In Haiti, negotiations for the Education Project with the Government and IDB were completed. On March 7 an Agreement was signed to implement the technical cooperation aspects of the loan provided by IDB; the pertinent project will be presented shortly.

In Jamaica, considerable work has been done to interest authors in publishing books and other educational material. The publication of a text-book for medium-level agricultural schools is planned.



*IICA staff members attended the VI Latin American Conference of Higher Agricultural Education, held in Maracaibo, Venezuela.*

In the Dominican Republic, activities were based mainly on the training programs of the PIDAGRO Project; more information on this is given in another chapter. -

#### **IICA Action in the Northern Zone**

In the field of agricultural education in Costa Rica, a basic meeting was held with functionaries of the Ministry of Public Education and with Deans of three Universities, as well as with members of the National Council OPES, and the Deans and Directors of four faculties, to further work on the Agricultural Education Organization and Planning Project. An Agreement was signed with the Ministry of Public Education to strengthen middle level agricultural education.

Three activities were conducted in El Salvador on the project in support of national agricultural education agencies in connection with UCA's curricular planning; three professors were trained in specific areas, and agencies were encouraged to integrate their agricultural education with the institutional sub-system.

IICA cooperated closely with UCA at IDB's suggestion, elaborating a report on the "Analysis of the professionals in Agricultural Sciences", with immediate, short and medium-term actions outlined; the implementation and continuity of the project through a pertinent agreement, will depend on UCA authorities. Professors were trained as programmed and the integration of the agricultural education sub-system was promoted at a work-shop seminar including efforts to create a sense of motivation in the agricultural education institutions and to establish bases as a preliminary step to the possible creation of a National Association of Agricultural Education agencies, in that country.

In Guatemala, IICA concentrated on providing advisory services to the Agricultural Teaching and Training Office, (DECA) and the Faculty of Agronomy of the University of San Carlos. A methodology was elaborated with DECA to determine the needs for trained technical personnel in the public agricultural sector; questionnaires were prepared for the survey. IICA collaborated also with the University of San Carlos on the formulation of recommendations for the academic and administrative restructuring of the Faculty of Agronomy, to train professionals to be more closely identified with sectoral problems.

Another important result of the project was the organization and implementation of different activities which benefited 159 functionaries from the sector, and professors from two Regional University Centers. Lastly a study for the analysis of the implementation of the Human Resources Development Program was carried out.

In Honduras, IICA has been strengthening the National Agricultural School at Catacamas in order to implement the innovations and improved content of the academic program. This work is directed at training teaching staff, the organization of its executor units, the elaboration of agricultural production projects, study programs, improving relations with former students and the establishment of connections with other public sectoral entities in order to be able to propose adjustments and improvements in their programs.

In Mexico, IICA has concentrated specifically on higher education, both at the university and post-graduate levels, and on training agricultural extension personnel. The main actions included establishing linkages between universities and the rural community, as well as with national development plans; cooperation was provided on the evaluation of the situation of

higher agricultural education; interest in training human resources was fostered and support was provided on structuring study plans designed for professionals capable of studying and resolving rural sectoral programs.

In Panama, IICA has continued to work on strengthening educational aspects for rural development purposes.

#### **IICA Action in the Southern Zone**

In Argentina, IICA has been working mainly on a project to strengthen agricultural education and on fostering the establishment of postgraduate education units in agricultural sciences; contributing to the appropriate institutionalization of post-graduate education; help was given on programming post-graduate courses and on creating a mechanism for perfecting management and teacher-training aspects, and on analyzing the demand for professionals.

In Brazil IICA cooperated with the National Human Resources Center (CNRH) on the coordination of the Integrated Rural Education System as well as on holding a National Rural Education Seminar. Work was continued on reinforcing the consolidation of ABEAS (Brazilian Association of Higher Agricultural Education) and on strengthening the higher agricultural education sub-system. Considerable work was also accomplished on providing support services to middle-level agricultural education (CCAGRI) by strengthening its capacity and augmenting its publication and dissemination programs.

In Chile, work was started on the gradual transfer of the organization and functioning of the Permanent Graduate Program. In addition, activities with the Permanent Agricultural Sciences and Forestry Committee of the Council of Rectors were continued and were extended so as to include middle-level agricultural education. A meeting of Southern Zone specialists was held with this in mind. In addition, activities got underway at the middle-level agricultural school located in San Fernando, with Simon Bolivar Fund financing.

In Paraguay, work on the project to strengthen agricultural education included research on job profiles and demand projections; fostered coordination between educational agencies and strengthened the agencies responsible for middle and higher level agricultural education.

In Uruguay, the project in support of the agricultural education agencies helped establish the National Agricultural Education Committee; cooperated on the diagnosis of the actual situation of the different levels of education, encouraged interest in upgrading professors in specific areas of specialization; supported and held seminars on up-grading teaching capabilities; fostered the establishment of permanent teaching support units; and reinforced the structuring of specialized departments for education connected with agricultural development.

Chapter VI.  
IICA AND  
AGRICULTURAL RESEARCH



## Chapter VI

# IICA AND AGRICULTURAL RESEARCH

### Introduction

The countries of Latin America and the Caribbean have made considerable progress in organizing, expanding and consolidating their agricultural research and technology transfer institutions in line with producer needs and national rural development objectives.

However, there is need for extensive work by IICA to help solve some persistent problems, as specialized agency in technical cooperation in agriculture and rural development in the member countries.

The following are amongst the main problems in these areas;

- a. A lack of definition as to approach or objectives and strategies to operationalize both research and technology transfer endeavors.
- b. Planning imprecisely applied to methodological and conceptual problems, is difficult to adjust to specific governmental decisions or the indications of sectoral development plans and the interests and needs of both producers and beneficiaries, within a frame of the stated objectives.
- c. Organization and technical and administrative management.
- d. Human resources policies in line with the training and stability of scientific and technical personnel.

Latin America and the Caribbean are known for the lack of articulation of research agencies with dissemination mechanisms and the adoption of technologies, besides an inadequate relationship of these services with credit, marketing, provision of inputs and planning services, which are essential if the expected impact is to be made.

The approach and planning of agricultural research are two essential components of the process for generating technology adapted to each country's development needs. One of the most important commitments of research and technology transfer agencies is to increase the production efficiency of agricultural enterprises, particularly small and medium production units, in order to increase income levels and the well-being of the rural population.

All these expressions must be qualified and quantified so as not to be considered mere "wishful" thinking of the legal

instruments which originated these agencies and govern their functioning; productivity, income and well-being, must become indicators to be used by researchers and the agents of change, as a frame of reference when programming activities.

### IICA Action in the Andean Zone

In Bolivia, IICA has been working on strengthening the Bolivian Institute of Agricultural Technology (IBTA) on technical up-grading, creating, transferring and adopting technical and scientific advances to assure increased production and productivity within the rural development process. IICA provided collaboration on the consolidation of the National Research and Extension Plan and cooperated on the establishment of a mechanism for the implementation of investment and personnel training projects.

The Latin American Project for generating and adopting Agricultural Technology has its headquarters in Colombia. Based on case studies, the project determines the conditions in which agricultural production develops and disseminates knowledge on the origin and functioning of the technological process. This work is reported on in detail in the chapter on the transfer of technology.

In Ecuador, IICA has continued collaborating with the National Agricultural Research Institute (INIAP) in order to consolidate and accelerate the reorientation of the research systems, especially in the area of production systems related to small farmer problems. Arrangements were made for three professors specialized in coffee cultivation to visit Ecuador.

In Peru, IICA collaborated on the creation of an institutional mechanism to facilitate structural change in the public research agencies. Based on the new legal Decree concerning the organic law for the Agricultural Sector, the National Agricultural Research Institute was created; IICA provided constant backing in these endeavors. At the same time, progress was made on technology transfer aspects, especially with the Regional Agricultural Research Centers (CRIA III) and IV) as well as with the production agents of the North-East and South.

In Venezuela, the instrumentalization of the research planning system mechanisms was finalized, as a result of team work and IICA's advisory services. This year, a diagnostic mechanism was designed and some guidelines were prepared for the evaluation of research. For purposes of the medium-term orientation mechanism (Indicative Plan), the definition of priorities in information at the product level was continued. Methodologies on spatial location are being elaborated for the



*Dr. Juan Antonio Aguirre, Director of the IICA Office in Nicaragua, hands Mr. Klaus Sengelmann, Minister of Agriculture of that country, a copy of the feasibility study on the Research, Extension and Education project for the government, in the presence of a number of national and international officials. The project will be financed by the Inter-American Development Bank.*

implementation of the diagnostic and evaluation mechanisms and for the identification of production systems for programming and evaluation purposes.

A start on training personnel from the Planning Office and Economic Analysis Section has been made, by means of trips abroad and consultant services and lecturers.

The MAC/76/1 Project has Five Operative Units: Maracaibo in the Zuliana Region; Santa Barbara and El Tigre in the North-East Region and Acarigua in the Center-Western Region. The creation of an operative unit for the Valle de La Pascua in the Central Plains and the South of the Lake area in the Zuliana Region, has been suggested.

The diagnostic study and medium-term program for the Acarigua Unit was reviewed; in addition a document on organization is being prepared for the Unit which will serve as a model for other units. An evaluation methodology has been proposed and has already been applied to one Operative Unit.

In 1977, IICA worked with 46 "campesino" economic organizations and a total of 2417 beneficiaries who planted 47,225 has. of corn, sesame, sorghum, rice, beans and peanuts. In this manner, 88 technicians were trained in diagnostic activities, programming and evaluation of integral production projects, using in-service and other formal means of training.

#### **IICA Action in the Antilles Zone**

The new IICA office in Barbados has been concentrating on analyzing national work priorities emphasizing the problem

of the conservation and management of land and water, having already carried out a study and established a demonstration program with 4H Club members.

In the Dominican Republic, considerable work has gone into the field of research and the transfer of technology, utilizing two sources of support; quota and IICA/SEA/FEDA (PIDAGRO) Agreement funds, from an agreement between the Dominican Government and the Inter-American Development Bank. This agreement came to an end in April, 1978 after providing 395 man/months (technical) in 16 specialized fields.

The more important contributions resulting from this Agreement are in:

#### **Organization and Planning**

- a. The elements of a National Research and Extension Plan were set up in order to allow the Dominican Government to orient its policies in line with the country's needs, establishing a programming system for the more efficient utilization of human, physical and financing resources.
- b. A proposal for structuring a research, extension and training system for SEA national and regional agencies. Besides, organizational proposals in several areas have also been presented with description of functions, restructuring of some units and creation of others for SEIECA.





*The Director General of IICA gives Mr. Pedro Bretón, State Secretary of Agriculture of the Dominican Republic, a copy of the final report on the services provided on the Integrated Agricultural Development Project (PIDAGRO).*

- c. Establishment of bases for a national policy to strengthen rural organizations at all levels utilizing self-management principles, thereby changing traditional concepts.
- d. Progress has been made in seed legislation aspects with Operative Regulations of the Seed Law 231 having been elaborated and given to the Government for consideration. This Regulation establishes the bases for the organization and functioning of all mechanisms of a seed production and distribution system.

#### **Scientific and Technological Development**

- a. The areas in which advisors are participating now have more comprehensive basic information to orient their work, and more motivation and increased levels of training at national levels for research and extension purposes. This action has been of considerable importance for the counterparts assigned to provide advisory services.
- b. Work in plant breeding included the introduction of lines and promising varieties, selection work and planting systems, mainly in corn, sorghum, beans and guandule and in a complementary manner, some work has been done on a new approach for integrated pest control. These actions result in higher producer incomes.

#### **Technology Transfer and Training**

- a. The preparation of a number of studies, manuals and teaching material included into 250 documents. This

material contributes significantly to the multiplier effect of the advisory services provided.

- b. National personnel at different levels and farmers have been trained in specific areas of work by means of 689 working meetings, 106 field days and demonstrations, 94 conferences and lectures, 44 seminars, work-shops and round-tables, 19 courses and short-courses and 145 field trips of advisers with counterpart national personnel.

As for quota fund work, IICA concentrated on adequately channeling the work conducted under the PIDAGRO Agreement, establishing appropriate follow-up mechanisms. By June, 1978, external resources have been found to provide continued support for the work on biological pest control, and actions were being taken to assure support of the certified seed production, processing and distribution system.

#### **IICA Action in the Northern Zone**

The Office for the Coordination of IICA's Action Plan in Costa Rica participated on the Advisory Committee appointed by the Minister of Agriculture and Animal Husbandry, to formulate bases for the possible establishment of an Agricultural Research and Technology Transfer Institute. The Committee report contains new ideas on research and technology transfer and has served as the basis for establishing terms for preparing this type of project which is being formulated by the Agricultural Sectoral Planning Office (OPSA).

In El Salvador, IICA has been concentrating on the basic grains project; more details on this are given in another

chapter. Advisory services were also provided the Information Department of CENTA in order to better serve the country's agricultural research program.

In Honduras, IICA cooperated with the Natural Resources Secretariat to determine priorities in the restructuring of the national agricultural research programs.

In the area of research and technology transfer in Mexico, contact was made with the National Agricultural Research Institute, ending with the signing of an agreement for the elaboration of a Simon Bolivar Fund project to back-stop a research plan to increase cassava production, marketing and industrialization for implementation the following fiscal year.

In Nicaragua, IICA has been working with INTA on strengthening the national science and technology system.

In Panama, IICA has been working mostly with the Agricultural Research Institute (IDIAP) on the implementation of the National Animal Husbandry Research Program.

### **IICA Actions in the Southern Zone**

In Argentina, IICA has been working with INTA, although some changes in the administration have delayed the implementation of some of the programmed activities. Eventually it is hoped that during the next fiscal period more can be accomplished.

In Brazil, IICA has done some important work in the field of research mainly with the Brazilian Agricultural Research Institute (EMBRAPA), providing technical cooperation on the implementation of projects, with technical advisory and human resource training services. IICA has been working closely with the Executive Committee of the Plan for the Recuperation of Cacao (CEPLAC) in Itabuna, Bahia on the planning, technification and administration of cacao plantations.

In Chile, IICA has contributed indirectly on various studies and postgraduate education programs.

In Paraguay, agricultural research aspects are under the Ministry of Agriculture and Animal Husbandry, where programming has recently become very important, once the National Economic and Social Development Plan, the technological policy of the country and guidelines for government actions were defined. Tobacco and cotton programs have been increasingly oriented toward the small farmer.

Considerable work was done in Uruguay in collaboration with the Government, seeking solutions to problems of low-level production, productivity and the adoption of a new technology. Collaboration is being provided on studies to determine the appropriate technology for small and medium-sized producers; and also on linking the physical and biological research endeavors with those of socio-economic orientation.

Chapter VII.  
IICA FOSTERS  
AGRICULTURAL PRODUCTION



## Chapter VII

# IICA FOSTERS AGRICULTURAL PRODUCTION

### Introduction

Accelerated population growth rates together with unstable food production problems, particularly as concerns basic grain and protein foods, together with the inflationary process, have caused serious alterations in production costs and a deficit in trade balances which threatens problems of inadequate food supply in the countries. Moreover, acute unemployment situations have also produced problems which must be solved quickly and, insofar as possible, on the basis of medium and long-term solutions.

To make matters worse, many of the countries depend largely on the exportation of their agricultural products, processed foods or material of agricultural origin, whether semi-processed or processed, as a main source of foreign exchange. If exports are reduced or do not keep up with the expansion of other sectors, the problem is aggravated with serious repercussions on employment, income and services.

As is well known, large sectors of the "campesino" masses produce almost exclusively for their own use, and have little or no access to the benefits of organized and stable marketing processes. This is partly due to the fact that techniques to improve their productivity is beyond their reach, or because they farm only marginal areas or because the productive structure is such that little support is provided a sector where the work potential is largely underutilized.

Increases in agricultural production may be obtained by increasing the amount of surface area under cultivation or by increasing productivity, or a combination of both. Some countries have already used up their land resources which implies the need to incorporate areas which require the intensive application of new technologies and the expansion of infrastructure and support programs.

At the same time, increased costs for inputs plus the underutilization of some of them, together with the continued use of traditional productive systems result in a reduction in the supply of food or raw material for industrial purposes.

Added to the problems of production and productivity is the problem of marketing agricultural inputs and outputs. This problem deserves careful attention.

### Some possible courses of action

Any actions taken in the field of production that do not contemplate corresponding endeavors in the field of marketing, will only contribute in a limited manner to improved income levels, the generation of employment or raising the standards of living in rural areas. "Campesino" and

farmer organizations in general have more chance to successfully consolidate if they include marketing aspects and a possible integration with agroindustries into their plans.

In Latin America and the Caribbean, the State plays an important role in seeking solutions to these problems. Important resources are channeled through governmental institutions with the aim of eliminating restrictions in the product marketing system. The governments must create a coherent frame of reference to orient production, developing appropriate price policies at both the producer and the consumer level, fostering adequate distribution, transportation, storage, quality control and processing systems as well as other aspects related to the production, supply and use of inputs.

IICA has been increasing its capacity to run institutional support programs, in order to collaborate with the governments in solving these problems. To this end, the Institute has been concentrating on two programs within Line of Action IV (Agricultural Production, Productivity and Marketing) on pertinent aspects of this particular area. A model has been formulated for the implementation of these programs, orienting actions in the area of technical cooperation in line with national or multinational projects financed on their own or with resources from national and foreign financing agencies.

### IICA Actions in the Andean Zone

In Bolivia, IICA has been working mainly on strengthening the forestry development agencies in that country. The Forestry Development Project had been providing advisory services to the Center responsible for work in this field on aspects pertaining to programming national forest development and on training personnel in forest plantations, as well as on the formulation, at a national level, of a plan for establishing forest plantations.

Work is also underway on fostering milk production in the Tarija zone, having completed a feasibility study and several cases studies. Advisory services have also been provided on cattle feed and management aspects, and in training staff,

In Ecuador, the project on strengthening agricultural marketing agencies has been continued. Documents have been drawn up containing the necessary guidelines for conducting diagnostic studies, and on programming and management aspects. Considerable progress has been made in programming; a seminar was held on this topic, and a complete "package" was structured, consistent with existing marketing programs. Progress has also been made with respect to associative forms of production. Support is being given the Ministry of Agriculture and Livestock and its Zone Offices in these areas.



*Dr. Abdo Magdub, Mexico, accompanies the Director General of IICA on his visit to the Industrial Fibre-spinning Center, in Mérida, Yucatán.*

In Peru, IICA continued to provide support on the national integral marketing system. Within this project, training has been provided for all the technical personnel attached to the previous Food Zones in order for them to take over the system. In addition, three technical publications were prepared and distributed, both to Peruvian technicians and to other interested countries (Miscellaneous Publications No. 167, 168 and 169).

In Venezuela, IICA has been working on marketing aspects with emphasis on providing support to farmer organizations. Considerable support was given along this line to the authorities of the Agricultural Marketing Corporation, on getting the first Collection Centers organized and functioning, and on two of the Corporation's existing services: Promoting Markets and Marketing Information both of which are essential to assure the program's success.

#### **IICA Actions in the Antilles Zone**

In Guyana, a food production and marketing project was prepared with IICA assistance. In addition, work was continued on the definition and promotion of cassava and legume production systems, developing production plans for the soy bean and setting up needed agricultural machinery services. Work shops were organized on pertinent subjects of interest, and national technicians participated on the multinational project to reduce post-harvest losses.

In Haiti, the project to strengthen the national improved seed service has made great strides in institutionalizing the service since September 1977 when the pertinent agreement was signed. In concrete terms, the technical-administrative unit

of the seed service has been adequately institutionalized, an internal system of control on the supply of improved seed was created, and a national program for the production and distribution of seed got underway.

In Jamaica, work continued on the project to implement and promote interest in hillside farming at Allsides. IICA has been helping the government to develop specialized production systems adapted to the varying eco-systems of the country, while improving the institutional capability to implement promising production systems and helping to upgrade the existing marketing system.

In the Dominican Republic, considerable work was done in training national staff in agricultural marketing aspects, on the consolidation of a price information system, on preparing marketing projects, and on drawing up a National Marketing Plan. Work was stepped up with the National Price Stabilization Institute (INESPRE), holding a course on the formulation and evaluation of projects. As a result of this course, 8 project profiles were prepared and approved and will be submitted for due consideration to IDB.

#### **IICA Action in the Northern Zone**

In Costa Rica, IICA has been providing support on a National Small Farmer Marketing Program. Under a somewhat different orientation, this project is being directed toward the farmers of reduced means.

In El Salvador, the project in support of fostering the production of basic grains programmed and initiated an institutional analysis of CENTA (National Agricultural Technology



*Dr. Mauricio Rangel, Minister of the Interior of Brazil, visits the San Desiderio Irrigation District, part of the CODEVASF/IICA project, to observe the progress being made under this agreement.*

Center), in order to attain an integrated, coordinated definition of the problems restricting the attainment of its objectives, and an insight into future projections. A study of the production situation of basic grains in the country is being carried out, and has almost been completed (80 percent of the situation study has been done) and will provide up-to-date overall information of this sub-sector of products which form an integral part of the national diet.

In Mexico, progress was made on the project to strengthen the institutions involved in the employment, control and promotion of the adequate use of agricultural pesticides, on the basis of advisory and training services provided the Plant Sanitation Office. In agricultural marketing, IICA collaborated on the operational planning and structural design of the Trade Standards Bureau and on the formulation of operative and indicative programs, including an outline of technical and research endeavors to be done.

In post-harvest losses in Mexico, IICA has been emphasizing the following aspects: contributing to an in-depth knowledge of the prevailing post-harvest situation, having prepared a basic document on the pertinent problems and current situation and determining the methodological approaches to be used to carry out the necessary diagnostic study and structure the resulting programs and projects directed at reducing post-harvest losses. IICA also collaborated with CONAFRUT on the translation of a Manual on Storing Perishables; enough interest was generated that this institution now includes study plans at the master's level in related aspects. INIA was also interested in establishing a unit to be responsible for post-harvest research endeavors.

In Nicaragua, IICA worked through the Simon Bolivar Fund on a technical cooperation project concerning the sub-system to foster production and to improve agricultural services for small farmers. In marketing, IICA worked on strengthening the Nicaraguan Foreign and Domestic Trade Institute, the National Agrarian Institute and the Sectoral Planning Office. A tangible result of this work is the formulation of a project to reduce post-harvest losses in basic grains which is being negotiated at this time with IDB for due financing.

In Panama, IICA worked on strengthening the institutional system to foster the production of basic grains.

#### **IICA Action in the Southern Zone**

In Argentina, IICA provided the National Rural Economics and Sociological Service of SEAG with support on a study of prices and markets, finding several opportunities for the establishment of projects of interest in these areas.

In Brazil, support was given on the implementation of the Brazilian Technical Assistance and Rural Extension System (SIBRATER), as well as to the Coordinating Committee for the national rural credit policy. Support was also provided the Brazilian Agricultural Supply System and on increasing agricultural production and productivity in the northeast of the country, where considerable cooperative work has gone into the development of irrigated areas to assure increased production of food and raw materials for agroindustrial purposes, as well as on the organization of farmers into cooperative enterprises within the irrigated districts as well as outside them, and on training technicians and users in irrigation technologies.

In Chile, the final reports were written up on the assistance provided since 1972, on the DIGUA Project, and on the Simon Bolivar Fund support provided the National Irriga-

tion Commission. Project results worth mentioning are the methodologies that were formulated for identifying homogenous areas and the establishment of priorities areas for development purposes.



Chapter VIII.  
IICA AND  
REGIONAL RURAL DEVELOPMENT



## Chapter VIII

# IICA AND REGIONAL RURAL DEVELOPMENT

### Introduction

Strategies for regional development endeavors have been attaining increasing relevance recently. The present and future utilization of regional resources is based on studies for the identification, inventory, evaluation, management and conservation of these resources and on the combination of the economic and human factors needed to be able to clearly distinguish given geographical areas for the implementation of an integral development plan.

IICA has acquired considerable experience in the field of regional rural development in different areas of Latin America. Thus, this Line of Action is able to advise the member countries on their work to strengthen or establish national regional development policies, approaches and mechanisms.

IICA has been back-stopping national efforts to incorporate frontier agricultural regions into the production process, at a country's request. The development of the most extensive multinational region, or the humid tropics of the Amazon river basin, will be receiving special attention. This Line of Action also includes projects on the management and conservation of land and water.

### Planning Regional Development

Although regional planning utilizes the same instruments as national planning, a regional approach demands a more specific handling of each region's characteristics and resources, since its development should be an integral part of and a complement to national-level endeavors.

Thus, IICA has been paying special attention to the consolidation of the institutional systems needed to formulate and implement rural development policies and strategies, while taking into consideration national legal aspects concerning material, technical, human, social and economic resources, as related to the process.

This consolidation can be achieved, it is felt, if the pertinent national agencies carry out the following functions:

- a. Define a national regional rural development policy, and the part it plays in the general development process of the country.
- b. Where none exists, develop a regionalization system suited to a country's individual characteristics, and based on well-defined criteria of a physical, biological and socio-economic nature.

- c. Establishing appropriate agencies or institutional mechanisms for the management of specific regional development projects in pre-selected geographic areas.

- d. Provide these agencies (or mechanisms) with regional development program and project planning, administration and evaluation models, and train the personnel responsible for this work.

- e. Endeavor to obtain adequate support for the planning, administration, implementation and evaluation of each regional development program or project.

### Implementation of regional rural development policies

The institutions of a country must be organized and coordinated in such a way so as to assure greater effectiveness of the national integral rural development policies. This requires better and more specific training for the human resources working in rural development based on regionalization criteria, in settlement, forestry development, land and water conservation and management, tropical area development, agroindustry, and other related areas.

Thus, IICA activities in this field are oriented towards assuring that the national agencies in charge of the implementation of regional rural development policies are able to:

- a. Develop operational policies, within a regional development approach.
- b. Compile and provide basic information in order to have up-to-date regional inventories of actual and potential resources. This information will be used to identify problems hindering the rational utilization of these resources.
- c. Plan the use of resources so as to open up new areas, intensify the use of already occupied zones, augment and diversify job opportunities, increase production, and assure that the primary transformation of products will increasingly be carried out in rural areas.
- d. Upgrade administration, organization and management aspects in each case as needed, and coordinate actions with other pertinent agencies in order to obtain the joint backing of all the necessary basic elements for assuring the integrated development of pre-selected regions or sub-regions.



*General Juan Alberto Melgar, Chief of State, Honduras, listens to a report on the work underway on the Rural Frontiers Agricultural Project, given by one of the project staff members.*

- e. Give preference to the participation of low income levels in project implementation endeavors.
- f. Organize actions on the basis of a regional development approach as a part of or a complement to regional projects underway, or to start up new ones in the respective areas of competence of each agency.

### **IICA Action in the Andean Zone**

In Colombia, IICA has continued working with several institutions of the sector on integrated rural development aspects where important results have been obtained, using a number of different instruments. IICA has been cooperating with the National Training Service (SENA) on the elaboration of an internal training structure for Mobile Rural Programs (PAR) for "Campesino" Training, as part of the DRI. IICA has also cooperated on defining technical criteria for the identification of training methodologies for the rural sector and pertinent guidelines have been drawn up. Training for 110 technicians in rural development and farm planning was also provided.

Papers of interest published in Colombia within this field are: "Analysis of Rural Development Strategies in Latin America" and "Selected Bibliography on Rural Development in Colombia".

In Ecuador, three coordination, training and programming activities were carried out within a framework of institutional policies and mechanisms for the development of

uninhabited tropical areas. The programs related to the tropics are being organized with the aim of achieving the integration of these areas into the development process, through the creation of a pertinent office (INCRAE).

Within the Tropics Development project in Peru, IICA has been orienting its actions toward providing more direct support to the institutions in charge of implementing specific development actions in the Peruvian tropics. This year, a Manual on Rural Settlements in the Peruvian Tropics, and an inventory of tropical agricultural and forestry research (being carried out), were prepared. Support was provided on the establishment of fruit production system in the Amazon, and courses on communications and extension techniques for the transfer of agricultural technology were given in Tingo María and Iquitos.

In Venezuela, IICA cooperated on strengthening the rural cadastral surveying sub-system and provided support to the agencies working on developing the tropical regions.

### **IICA Actions in the Antilles Zone**

In Barbados, IICA's first activities were directed towards the development of a project for the conservation and management of land and water, and work was started on several soil conservation sample plots. A seminar on irrigation, to be sponsored by the Government of Israel, is also being organized.

In Haiti, the Islet Development project was oriented on a centralized basis, contributing to the consolidation of institutional capability to plan, manage and evaluate the integral



*Col. Alberto Natusch, Minister of Agricultural and Farming Affairs of Bolivia, and Mr. Guillermo Grajales, Director of the IICA Office in that country sign an agreement on Rural Development Projects. Looking on is Mr. Lempira Bonilla, Representative of the Inter-American Development Bank.*

development of micro-regions. A mechanism for programming activities in the field was established with the participation of the "campesinos" and a socio-economic analysis model was formulated.

In the Dominican Republic, the government requested IICA's collaboration on the re-organization of the Natural Resources Secretariat. In-service training for technicians was also provided, in order to assure follow-up and continuity on PIDAGRO's work in soil conservation; technicians from the Soil Department were trained in hydrology, topographical surveying, evapotranspiration studies and in preparing a conservation plan for agricultural units.

#### **IICA Action in the Northern Zone**

In Costa Rica, IICA completed its work on the program for Irrigation Research and Training and the Final Designs for the Enrique Jimenez Experimental Station; a summary and the project were presented to the National Irrigation Commission and to the Inter-American Bank. The project was favorably received, and will be getting underway shortly.

In El Salvador, IICA cooperated with the Ministry of Planning on improving the use and management of waters, as planned. A document on the alternatives for high-level institutional organization to ensure the nation's benefitting as a whole from existing hydro resources, was concluded. Terms of reference for a national inventory as well as a document on national policy for the generalized benefit from waters were also drawn up. Advisory services were also provided on compiling the necessary basic information for water legislation purposes.

In Honduras, IICA contributed substantially to the development of an important agricultural development project in the rural frontier areas. The impact of activities carried out was positive for both beneficiaries and institutions involved. The following activities, amongst others, were undertaken: social and economic studies of the area; a diagnostic study of the area for possible future expansion, preparation of sub-projects; evaluation of on-going sub-projects; "campesino" organization; agricultural experimentation; agricultural production; institutional organization; internal project organization; formulation of operative programs; professional and "campesino" training. During the implementation of the project, 2380 "campesinos", 163 professionals and 122 immediate beneficiaries (farmers) profited from project actions.

IICA also cooperated on the project for the integral development of natural resources and environmental protection, supporting CONDEFOR in training personnel in watershed management, and on diagnostic studies of the Los Laureles Watershed as well as strengthening the National School of Forestry Sciences (ESNACIFOR), by giving training in watershed management aspects.

In Mexico, IICA, through the Simon Bolivar Fund, provided national authorities with needed support on their efforts to develop the Yucatan Peninsula.

Line of Action V – Regional Rural Development, has become increasingly important in Panama because of the reforestation and watershed protection policy adopted by the Government after ratifying the pertinent treaties. IICA has been collaborating on the conservation and management of land and waters.

## IICA Action in the Southern Zone

In Argentina, IICA has been working mainly on two projects: on strengthening the institutional sub-system for regional rural development purposes, mainly in the provinces of Misiones, Formosa and Santa Fe, and on the conservation and management of land and water, carried out jointly with national and provincial agencies. During the last period, the project strengthened its linkages with the federal agencies of the Natural Renewable Resources and Ecology Undersecretariat. Recently, the Agriculture and Livestock Secretariat has become increasingly concerned about the conservation and management of land and water. IICA personnel serve as SEAG consultants, and are relied on by the agencies and functionaries in this field. An evaluation of this project will be made to determine necessary follow-up actions.

In Brazil, as a result of the Integrated Investment Program for the Agricultural Sector of Rio Grande do Sul, IICA prepared five volumes on agricultural development alternatives, in addition to the 18 volumes published previously.

IICA continues to collaborate with CEPLAC, the regional agency for the development of the cacao-producing zone in Itabuna, Bahia, Brazil, which is also responsible for implementing the regional agricultural planning and development process. Education and manpower projects were prepared and a study of subsidies for animal husbandry projects was made.

Negotiations leading up to the signing of an agreement concerning the technical cooperation to be provided CODEVASF (San Francisco River Valley Development Company) were completed, and the project is getting underway.

Considerable progress is being made in the humid tropics programs, but more information is given on this in the chapter on Special Programs.

When programming the work in Chile, it was decided that the Rural Development project would be the basic project of that office. Its objective is to increase agricultural production, up-grade productivity and assure the conservation of resources; to increase employment capacity of the sector and foster farmer participation in the economic and social development process. Based on these objectives, six work areas were selected, with first priority being given to the Reuinoa-Olivar area in region VI. After discussing the situation with the producers in that area, a draft project was presented to the Regional Secretariat of the Agriculture Ministry and to the Coordination and Planning Service (SERPLAC); the project was approved. IICA has been working with the functionaries of region VI and specialists from IICA Headquarters and the Regional Office for the Southern Zone on this project which will be financed by the Simon Bolivar Fund along with national counterpart funds. The project is scheduled to last for a period of five years.

In Paraguay, IICA's human and physical resources are being applied to regional rural development projects, with special emphasis in areas with significant social and economic problems. Work is progressing satisfactorily on the project to strengthen settlement and agrarian reform aspects, mainly in the Gral. Bernardino Caballero Colony area.

In Uruguay, IICA has been working on projects in support of national efforts to increase food production and productivity in the northeast, on the projects for regional agricultural development and with the conservation and management of land and water agencies.

Chapter IX.  
IICA AND  
STRUCTURAL CHANGE





## Chapter IX

# IICA AND STRUCTURAL CHANGE

### Introduction

From the very start, the concept of structural change was identified with social justice as related to land tenure situations; this implied the implementation of agrarian reform and colonization, oriented toward satisfying the "campesino" need for land.

The considerable experience acquired by the different countries that determined these concepts clearly indicates that production will probably be reduced if productive units are split up, with the resulting negative effect on income distribution and on satisfying the increasing demand for food.

Structural change must, therefore, be accompanied by solid and well structured "campesino" organizations, the approval of this segment of society and its active participation therein. Change must also have the backing of well-planned programs, ranging from technical production aspects to raising the "campesino" community's standards of living.

In line with IICA's General Plan approved by the member countries, the basic strategy for all Institute programs is institutional strengthening as concerns national entities, always acknowledging that the countries themselves must decide on the content and orientation of their agrarian reform and "campesino" organization endeavors.

IICA's considerable experience facilitates the identification of the series of internal and external factors which restrict institutional development. Thus, Line VI programs are directed at collaborating with national authorities on their efforts to overcome these limiting factors.

### Agrarian Reform

The agrarian reform process in Latin America has not always played an important role in the transformation of the social and economic structures of the countries, since the legal frame of reference, although theoretically well defined in those countries where the process has been implemented, has lacked the necessary support in budgetary, as well as human resource terms, and in technical and institutional aspects.

Moreover, it has not been possible to obtain a favorable balance between "campesino" production and that of the commercial sectors, and a ratio is maintained where 80 percent of the producers are "campesinos", but they produce only 20 percent of the total production value.

Thus, as is evident from documents studied and approved by the Inter-American System and the United Nations, high priority must be assigned to fostering interest in

training and technical cooperation in agrarian reform aspects, as a solution to the marginality problem of the "campesino" segment of the rural sector.

### "Campesino" Organization

The solution to production, productivity and rural employment problems depends largely on the capacity to foster, establish and activate "campesino" organization system in response to the farmers' felt needs and their way of life. These systems do not have to follow a rigid, standardized model; rather, they should follow different approaches and utilize various implementation alternatives adjusted to the development models chosen by the respective countries.

IICA's objective in this area, then, is to ensure that each country has the necessary institutional mechanisms to foster and support "campesino" organization, in order to coordinate the efficient and effective implementation of its various functions.

### IICA Action in the Andean Zone

In Colombia, IICA worked mainly in the area of associative forms of production (the PAP) offering pertinent training courses for technicians from a number of the institutions involved in this type of work. Of a number of research studies carried out, the most outstanding one is perhaps the one entitled: "Guidelines to determine the more appropriate associative forms of production for the different rural regions."

In Ecuador, a study of associative enterprises was carried out, helping to fill gaps in existing knowledge, and which may later serve as a basis to extend the system throughout the country. All arrangements were made so that a number of functionaries could travel to Peru to attend a seminar on agrarian reform in the Andean Zone.

In Peru, IICA worked mainly on the IICA/CENCIRA agreement, having provided direct support on the formulation of a training and management project to be financed by IDB. This cooperation was mainly in the area of project formulation and the provision of technical and financing support on the adaptation of specific rural development methodologies.

IICA has been in constant contact with the Rural Settlement and Agrarian Reform Office, the "Campesino" Enterprise Office and the CENCIRA Executive Office, as the Peruvian experience has aroused considerable interest and many technicians from other countries have participated in reciprocal technical activities, with IICA financing.



*Progress is evident at the Gen. Bernardino Caballero Colony in Paraguay, a project on associative forms of agricultural production.*

In Venezuela, the IICA/IAN agreement terminated in June 1977, whereby IICA provided IAN with technical support. The new directive body of the agency decided to subscribe a new agreement with IICA and the CIARA Foundation. Work under this new agreement started up in 1978, with special attention being given to IAN's request for support on its land tenure and planning regularization programs. Advisory services were provided IAN in this area, and a land value table was drawn up for the granting of lands throughout the whole country. In addition, assistance was provided on the writing up of the 1978-1982 Agrarian Reform Plan. In planning aspects, IICA coordinated its actions with those of the IAN Planning Administration and the Planning Office of the Ministry of Agriculture and Livestock (MAC). Advisory services were also given the Appraisal Department's staff on operational procedures.

#### **IICA Action in the Antilles Zone**

In Guyana, IICA has been working on the development of appropriate models for the social organization of production aspects. In Jamaica, a seminar was held to analyze the role and functions of agrarian reform. Sixty-four high-level functionaries attended the seminar, where three publications on agrarian reform were prepared and then distributed. In the Dominican Republic, IICA has been working on the development of "campesino" organizations with IICA/SEA/FEDA (PIDAGRO) Agreement and quota resources. A study carried out on "campesino" federations indicates the existence of 30 federations at both municipal and provincial levels, and the fact that there are many others in varying stages of formation.

With this project, it was possible to bring all the leaders of the existing federations together to train them in "campesi-

no" organization and self-management aspects. Progress was also made on the intermediate project objectives, collaborating with the SEA applied research and rural organization unit (UIAOR) on carrying out studies on "campesino" organization; on the analysis of organization models; on fostering organization concepts using local, provincial and national examples; on the production and dissemination of educational material on organization; and on the development of participative research and planning methodologies.

#### **IICA Action in the Northern Zone**

In Costa Rica, IICA has been collaborating on the planning of the Coyolar Complex, at the behest of the President of the Republic. Various meetings were held with ITCO Planning Office staff (Lands and Colonization Institute), with the First Vice-President of the Republic, and representatives of important related agencies. This project was established as a joint IICA/ITCO endeavor, signing the corresponding Letter of Understanding to develop the work within a given period.

In El Salvador, IICA collaborated with the Communal Development Office (FOCCO) on up-grading the Five-year Action Plan. In addition, support was provided on the development of methodologies for area diagnosis and on conceptual aspects of Integrated Rural Community Development. IICA has strongly supported the initiation of a first project concerning areas of critical importance, and has provided in-service training for 13 national technicians in this field.

In Guatemala, IICA worked with the National Agrarian Transformation Institute (INTA), on the preparation of a



*Dr. Genaro Peña, Deputy Director of IERAC, Ecuador, addresses Workshop participants on the formulation and application of Area Plan Methodologies. The workshop was sponsored by IERAC, the Ministry of Agriculture and IICA.*

producer organization program, and also provided technical support on the formulation of the "Chocón" project.

In Honduras, IICA has been working mainly on strengthening PROCCARA, the agency that is responsible for "campesino" training. A seminar-workshop was organized in this field for planning and programming for national, regional and sectoral supervisors. IICA has been elaborating a national "campesino" training program for PROCARRA and the existing "campesino" organizations. The project has benefited 249 Honduran functionaries and 63 from other countries.

In Mexico, IICA worked with the Agrarian Reform Secretariat on up-dating the study of the "campesino" organization situation, and on training Planning Office staff working on research in this area. Advisory services were provided the pertinent directive staff and national technicians were trained on the elaboration of a regional development project related to "campesino" organization.

In Panama, Line VI project work has emphasized strengthening the Agrarian Reform Office, as a means of

assuring the appropriate selection of land for agricultural purposes. Special attention was given to cadastral surveying and land appraisal aspects, and to the creation of laws and land granting mechanisms to assure the rapid and effective re-allocation of lands, on a massive scale.

#### **IICA Action in the Southern Zone**

In Argentina, IICA has been working on a cooperative project to study agrarian associative enterprises, with the aim of establishing clearly defined criteria.

In Paraguay, IICA continued working on the project of associative enterprises with conscripts from the Armed Forces of Paraguay. The following actions were undertaken: a preliminary analysis was made of the human resources in the Bernardino Caballero Colony; background information on military colonization in Paraguay was analyzed; a training plan for the conscript-settlers was prepared to ensure their participation in the process; the first associate production enterprise was organized, and the main functions of the leading agencies and enterprise members (conscripts) were duly designated.



Chapter X  
IICA AND  
AGRICULTURAL POLICY



## Chapter X

# IICA AND AGRICULTURAL POLICY

### Introduction

Changes in development strategies for the agricultural sector require adjustments in the institutional apparatus servicing the sector. To upgrade the standards of living of marginal farmers, for example, sometimes requires the creation of new agencies or entities or the adjustment of existing structures.

In recent years, some of the countries have been modifying the institutional structure of their agricultural sector. However, the positive effects of these changes are not always known due to the lack of systematization in the pertinent institutional analyses in order for these experiences to serve as a basis to encourage other countries with static structures to similar endeavors.

The element of coordination is essential before any institutional change is possible, both at the stage of formulating general policies and objectives as well as during their implementation and evaluation. Otherwise, there may be much duplication of efforts with the resulting waste in human, technical and financial resources.

Agricultural planning is one means of attaining the necessary coordination in aid of the development process. Although all the countries have agencies responsible for national planning aspects, substantial improvements in the process of formulating, implementing and evaluating agricultural policies at the national level have not always been possible.

In most countries, there is an evident absence of a definitive frame of reference on which to base work plans and to coordinate the efforts of the different sectoral agencies, while facilitating the articulation of rural development plans with those being implemented by the other sectors of the economy.

In addition, there is a need to establish agricultural planning methods and techniques suitably adapted to the specific conditions of the rural milieu of Latin America. Efforts must be made to increase the number and quality of technical personnel in the sector, and the deficiencies which are evident in the organization of the agricultural planning units must be overcome.

Aware of the present situation and the importance of these aspects, IICA has been cooperating actively on the formulation and implementation of adjustments in the institutional systems. Experience acquired by IICA's technical staff located in all the countries of the region is serving as a valid basis for the provision of cooperation in these matters, of application and impact in the individual countries as well as increasingly broader spheres of influence.

### IICA Action in the Andean Zone

The agricultural planning project in Bolivia has been supporting the Planning Office of the Bolivian Agricultural Technology Institute on the implementation of an investment project. Support is also being given the Planning Office of the Ministry of Farming and Agricultural Affairs (MACA) on rural development projects and on an institutional analysis of the sector.

IICA has been working on up-dating the Institute's Action Plan for Colombia, particularly within this Line of Action.

Three main activities were conducted in Ecuador: the in-service training stage of the PEPA course cycle (project formulation) was completed, having trained 14 national functionaries who prepared two projects, one on dairy cattle and the other on the agricultural development of Carchi province. The institutional sub-system formed by the Development Offices of the Ministry of Agriculture has been considerably strengthened, since MAG restructured these units on the basis of institutional management principles being advanced by IICA.

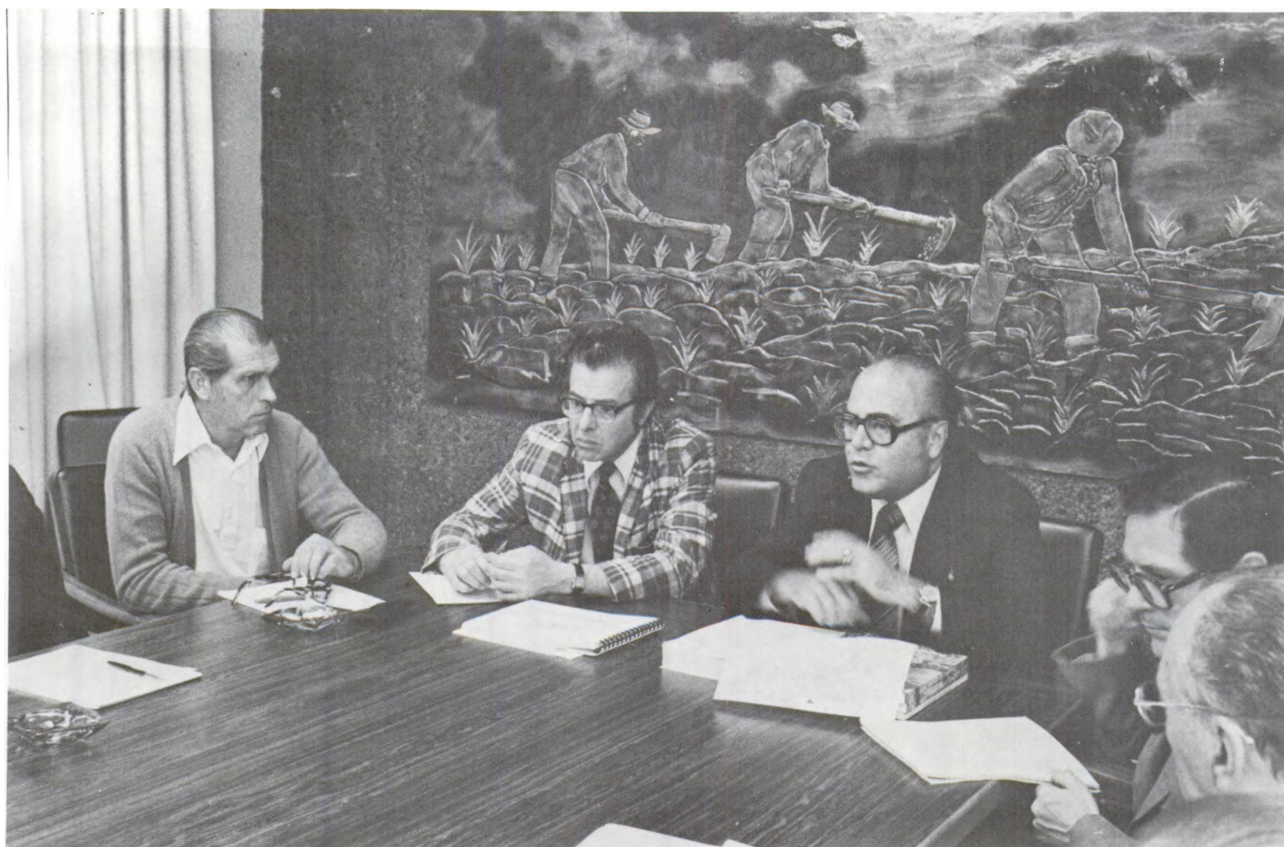
In Peru, work has continued on strengthening the zonal technical units responsible for supervising the work of the individual operative units. Meetings were held this past year in Arequipa, Iquitos, where it was possible to bring 49 directors and heads working in seven agricultural and food zones: Arequipa, Tacna, Puno, Cuzco, Ayacucho, Iquitos and Tarapoto. Current sectoral problems were analyzed at these meetings, identifying the main ones hindering effective work at the zone level.

In Venezuela, the 1978 Operative Plan was prepared together with sectoral institutions and Ministry Offices, to serve as a frame of reference for any agricultural policy actions in the country. Moreover, IICA has also collaborated on the structuring of an information system for planning and policy purposes, concentrating on a discussion of needed methodologies for interviewing and the rationale for presenting the accumulated data.

### IICA Action in the Antilles Zone

As the IICA Office in Trinidad and Tobago was opened only recently, efforts have been made to gather pertinent information on the institutions of the agricultural sector to serve as a basis for the country-level action plan.

Work in Barbados also centered on an analysis of the rural and institutional sector and in Guyana, IICA continued



*Dr. Milton Esman, Director, Department of International Studies, Cornell University, USA, discusses institution building aspects with top IICA officials.*

its work in strengthening the statistics division of the Planning, and Resource Development of the Ministry of Agriculture.

In Haiti, project work on strengthening the Programming Unit of the DARNDR was completed at the national level of Ministry of Agriculture actions, and will be oriented in the future toward regional-level planning.

Project objectives to strengthen sectoral planning in Jamaica were attained. Information on the evolution of Jamaican agriculture was up-dated and the country-level action plan duly revised. Six papers were published on agricultural planning and policies, and are being used to attract foreign funds.

Project actions in the Dominican Republic concentrated on institutional strengthening of the Technical Undersecretariat for Agricultural Sectoral Planning (SEAPLAN), on the formulation of plans, some of which had been started on before being incorporated into the project, and on the identification of the obstacles hindering the development of an adequate planning system.

As to specific plans and projects, IICA collaborated on the formulation of SEA's 1978 Operative Plan, and on the 1978-1982 Development Plan.

Assistance was also given on improving the procedures to formulate specific projects. In training, IICA worked with INESPRES, training 18 of this agency's technical staff in programming methods and how to monitor investment projects.

### **IICA Action in the Northern Zone**

In Costa Rica, IICA has collaborated with the Ministry of Agriculture and OFIPLAN on the basis of an agreement signed in August 1976. The physical bases and organization of the Sectoral Planning Office (OPSA) were duly established and 60 OPSA and PAS (public agricultural sector) technicians were trained in planning, institutional development and project formulation aspects. The diagnostic study of the agricultural sector for the 1962-1976 period was conducted and a National Agricultural Development Plan for 1978-1982 was prepared. The agricultural diagnostic study of the Atlantic zone was completed and published, as was the study on institutional aspects within the sector. Twenty investment projects were identified, oriented toward the solution of problems ascertained during the diagnostic study of the agricultural sector.

In El Salvador, IICA cooperated actively with MINIPLAN and OPSA on promoting the increased and improved use of methodologies for preparing strategic programs for the different regions. In the case of the north of El Salvador, MAG has approved the program and has agreed to cooperate on it, particularly with respect to operative planning aspects.

In Guatemala, IICA provided advisory services to the Project Coordination Unit of the President's Office (UNICP) on the establishment of a system to evaluate and monitor agricultural projects. A seminar was given for 20 staff members of this unit and from other agencies. Another outstanding activity was the organization and holding of a seminar on the administration of agricultural policy. This was held in Antigua,





*Dr. Pompeyo Ríos, Regional Coordination Director for the Andean Zone, inaugurates a Seminar on Agricultural Projects at the CENCIRA Headquarters, in Lima, Peru.*

for 18 functionaries of the Guatemala public agricultural sector and from other Central American countries.

In Honduras, IICA has been working on institutional strengthening aspects with the aim of ensuring that the agency responsible for sectoral planning do so properly. The following completed activities may be cited by way of example: technical support was provided the Higher Economic Planning Council on up-dating the sectoral diagnostic study; a course in the preparation and evaluation of agricultural projects was given; collaboration was provided on the formulation of the 1979-1983 National Agricultural Development Plan; and a total of 46 technicians of the public agricultural sector and 38 "campesinos" from the reformed sector received training.

In Mexico the necessary contacts were made to finally process an agreement with the SARH Planning Office to provide support on national programming endeavors for the 1978-1979 period.

In Nicaragua, a Simon Bolivar Fund project has been working in support of sectoral planning and management aspects with the aim of increasing food production. Assistance was also given to reinforce the Nicaraguan Agricultural Technology Institute (INTA) through the formulation of a project for possible IDB financing through the National Agraric tute, on matters pertaining to the definition of institut. roles and methodologies for project formulation. Support was also provided the National Bank of Nicaragua, or more specifically its Rural Credit Department, and the Sectoral Planning Office and National Training Center, to determine training needs.

In Panama, in addition to the specific actions undertaken on projects, IICA has participated in consultation meetings on the formulation of the National Agricultural Development Plan, and assistance was provided the Planning Ministry on the preparation of a project for the Canal River Basin, which will cost over 10 million dollars.

#### **IICA Action in the Southern Zone**

In Argentina, a diagnostic study of rural and institutional development has been continued, together with the pertinent national agencies.

In Brazil, two technicians were added to supplement IICA's work in support of SUPLAN-MA activities in agricultural planning, particularly in the following areas:

- formulation of the National Agricultural Planning System
- the administrative reorganization of SUPLAN
- formulation of terms of reference for sectoral contributions to the Development Plan
- Technical coordination aspects at SUPLAN
- Formulation of terms of reference for the Production and Supply Program, and the formation of the pertinent team of technicians
- formulation of the sub-program on agricultural machinery and inputs
- generation of methodologies for a strategy favoring low-income farmers
- participation in the formulation of a document entitled: "Agricultural Machinery Perspectives in Brazilian Agriculture"

The IICA/SUPLAN Agreement staff also participated on the formulation of a program for the exchange of experience in agricultural planning at the Latin American level, starting with Argentina and Paraguay.

As part of the IICA/SUPLAN/FGV Agreement, IICA staff has been collaborating on a course in Agricultural Development at the Master's level. This course is being given by the Inter-American School of Public Administration (EIAP) at the Getulio Vargas Foundation, and at the moment is open only for Brazilians. However, the course will be opened to candidates from other Latin American countries in the 1978-1979 period.

As part of the IICA/IDB and the IICA/SUPLAN Agreements, the IICA Office in Brazil gave courses on the preparation and evaluation of agricultural development projects in:

- a. Goiania, Goias, from November 1977 through February 1978 (22 participants and 17 instructors). The Federal University of Goias, and the Agricultural Federation of Goias State also participated on the course.
- b. Fortaleza, Ceara, from February through May 1978 (29 participants and 14 instructors). The course was given at the Federal University of Ceara.

In Chile, work was continued on the analysis of rural and institutional development in that country. In Paraguay, the study of the development of agricultural agencies there was completed. In Uruguay, support was provided the Ministry on techniques for the formulation and evaluation of sectoral policies and on rural and institutional development aspects.

Chapter XI  
SIMON BOLIVAR FUND



# Chapter XI

## SIMON BOLIVAR FUND

### Introduction

Resolution IICA/RAJD/Res.20(13/74) was approved at the Thirteenth Annual Meeting of the Board of Directors of IICA held in Caracas, Venezuela, in May 1974, creating the Simon Bolivar Fund to help accelerate the rural development process in Latin America and the Caribbean, based on a contribution of ten million dollars offered by the Government of Venezuela and up to an equal amount in voluntary contributions by the other Member States.

Fund duration is indefinite, and will be operational as long as there are the necessary financial resources available; expenditures incurred during the implementation of projects are non-reimbursable in nature. The Fund is administered by IICA.

At the Fourteenth Annual Meeting of the Board of Directors held in Ottawa in May 1975, Resolution IICA/RAJD/Res.26(14/75) was approved establishing the Regulations of the Simon Bolivar Fund.

Fund projects got underway as of April 1976, and are considered endeavors of a participative technical cooperation nature fostering agricultural development in the countries in Latin America and the Caribbean.

The institutionalization of positive changes in the capability of the countries, their agencies and personnel to think up, plan and effectively implement their rural development processes is sought. Hence, Fund projects are formulated and implemented in support of national projects; all contain an element of institution building and are oriented toward:

- Increasing the production and productivity of basic foods and other agricultural products that contribute to the development of the Member States, or to the solution of the problems of nutrition in these countries.
- Improving the marketing of inputs and of agricultural products.
- Supporting the global or sectoral management and planning mechanisms and the pertinent institutional units in order to improve the process of formulating and implementing rural development policies and plans.

Up to June 30 1978, the Fund had 21 projects underway in 19 countries and a multinational project for Central America. Three projects were completed: one in Mexico, one in Chile and the multinational project for Central

America. Thirty-seven highly qualified technicians specialized in the various areas of interest needed were employed for Fund projects. These projects represent an annual budget of two million dollars and generate six million in counterpart contributions – in cash or kind – from the countries for their respective projects.

These projects which, in general last for more than one year, are benefitting 68 national agricultural sectoral agencies and through them, it has been possible to provide training for over a thousand functionaries in the different areas of specialization. It is expected to benefit about 10 thousand "campesino" families with the projects currently underway.

At present, five projects are being prepared, to be implemented shortly in the same number of countries.

The areas covered by Simon Bolivar Fund projects, as per IICA's programs and fields of action, are given below:

### Agricultural Production and Productivity

This program back-stops national efforts to increase the production of basic foods through the provision of technical cooperation to agencies working on increasing agricultural production and productivity. Special attention is being given to those actions directed toward helping small farmers.

Projects underway include:

- Fostering milk production in Tarija.
- Agroindustrial production of Quinoa in Peru.
- Feasibility study for the development of cassava production, marketing and industrialization and the formulation of a National Cassava Plan for Venezuela.
- Production and marketing of improved seed in the countries of Central America (completed – multinational).
- Feasibility study to foster the production, processing and distribution of improved seed in Mexico (completed).
- Strengthening the National Improved Seed Service (SENASA) in Haiti.
- Fostering legume and cassava production in Guyana.



*Honourable Kevin B. Kennard, Minister of Agriculture of Guyana and Jean Nicot Julien, Director of the IICA Office in that country, shortly after signing an agreement on a Simon Bolivar Fund project, in the presence of government and international agency officials.*

- Study and implementation of hillside farming in Jamaica.

### **Agricultural Marketing**

This program supports activities oriented toward facilitating trade transactions and decision-making on matters of economic importance, to improve the efficiency of the distribution of agricultural products and inputs.

A pilot project to develop production, marketing and agroindustry aspects in irrigated areas is presently underway in Argentina.

In addition, a project is being prepared concerning the feasibility of introducing applied technology to the marketing systems of "campesino" associative forms of production in Colombia.

### **Regional Rural Development**

IICA cooperation in this area is provided through a program to design and implement research studies on regional resources, and economic and social studies on the optimum utilization of natural resources and on marketing possibilities. This type of cooperation also implies the design and structuring of organizations and the programming and implementation of regional rural development actions.

The following are the ongoing projects in this field of action:

- The Quimiag-Penipe integrated agricultural development project in Ecuador.

- Institutional strengthening of the agricultural development project in the rural frontier areas of Honduras.
- Strengthening the national system which supports community development projects (rural development islets) in Haiti.
- Regional agricultural development for the northeast region of Uruguay.
- Supporting increased production and productivity in the northeast of Brazil, through the implementation of irrigation districts.
- Establishment and upgrading of irrigation systems in Chile (completed)

### **"Campesino" Organization**

In this program, IICA is working on strengthening the national institutions which define and implement "campesino" organization policies from an economic, social and educational viewpoint. Assistance is also being provided on research, planning, implementation and evaluation aspects, as regards "campesino" organization actions.

Fund projects in this area are:

- Technical cooperation on planning agricultural production associative enterprises in Panama;
- Associate forms of agricultural production with conscripts from the Armed Forces of Paraguay.



*Gen. Oliverio Vásquez, Minister of Agriculture of Ecuador and Dr. Pompeyo Ríos, Regional Coordination Director for the Andean Zone, sign an agreement concerning a Simon Bolivar Fund project in the presence of top government and IICA officials.*

### **Agricultural Planning**

IICA is cooperating with the countries on structuring their national and sectoral planning offices and on developing planning methodologies adapted to the rural conditions of each country. Moreover, cooperation is being provided on the design and organization of training programs to form inter-disciplinary teams for rural planning purposes, including the identification, preparation and evaluation of agricultural projects.

Fund projects within this program are as follows:

- Elaboration of the National Agricultural Development Plan in Costa Rica.
- Provision of support on sectoral planning and management aspects in order to improve food production in Nicaragua.
- Strengthening the public agricultural sectoral units in order to effectively implement the Agricultural Development Plan in the Dominican Republic.

### **Administration of the Simon Bolivar Fund**

The Simon Bolivar Fund Office is an integral part of the Associate Deputy Director General's Bureau for Operations, and has the backing of all the other specialized technical and administrative units at Headquarters, and IICA's technical staff in the countries.

The specific functions of the Simon Bolivar Fund Office are to:

- Identify, prepare and present projects, together with the Regional Coordination Directors of IICA.

- Supervise the implementation of Fund projects.
- Collaborate with the planning and administration units of IICA on the preparation of the annual draft program-budgets of the Simon Bolivar Fund.
- Collaborate with General Directorate staff on the selection and employment of professional staff and general services personnel, as needed for project implementation purposes.



*The Minister of Agriculture of Chile, Ing. Alfonso Marques de la Plata signs an agreement for a Simon Bolivar Fund project in that country.*

**Table 1. 1977-78 Financial Requirements for the Implementation of Simon Bolivar Fund (IICA) Projects**

COUNTRY	S.B.F. CONTRIBUTION US\$	NATIONAL COUNTERPART US\$
Argentina	103,500	129,000
Bolivia	100,500	138,481
Brazil	100,000	3,805,309
Costa Rica	103,315	662,000
Chile	124,000	126,000
Dominican Republic	85,000	64,200
Ecuador	102,000	228,960
El Salvador	3,000	
Guyana	131,140	298,400
Haiti	120,000	92,000
Honduras	130,000	141,810
Jamaica	100,000	114,280
Mexico	90,000	20,000
Nicaragua	100,000	169,634
Panama	106,590	185,570
Paraguay	99,525	107,800
Peru	104,522	205,700
Uruguay	107,100	49,700
Venezuela	36,903	69,000
Fund Administration	192,000	
<b>TOTAL</b>	<b>2,039,295</b>	<b>6,607,844</b>

**Table 2: Temporary Professional Personnel for Simon Bolivar Fund (IICA) Projects, for their duration, 1977-78**

Country	Area of specialization	No. of Professionals	Man/ Months
Argentina	Agroindustry	1	18
Bolivia	Milk production	1	12
Brazil	Agricultural marketing "Campesino" organization Agricultural production -under irrigation	3	108
Costa Rica	Institutional development Agricultural planning Agricultural projects	3	72
Chile	Conservation and management of natural resources	1	60
Dominican Republic	Agricultural planning Agricultural projects	2	72
Ecuador	Rural development	1	24
El Salvador	Rural development Project management	2	24
Guyana	Legume production Rural administration Agricultural machinery	3	108
Haiti	"Campesino" organization Improved seed production	2	96



Table 2. Cont'd.

Country	Area of specialization	No. of Professionals	Man/ Months
Honduras	Regional development		
	Tropical crops		
	Tropical animal husbandry		
	Agricultural planning	4	108
Jamaica	Cropping systems	1	36
Mexico	Agricultural projects	1	4
Nicaragua	Financial Administration		
	Agricultural projects		
	Institutional development	3	90
Paraguay	Associative enterprises "Campefino" organization	2	30
Panama	Rural administration	1	30
Peru	Andean crops	3	36
Uruguay	Agricultural projects	1	36
Venezuela	Cassava production and industrialization		
	Agricultural projects	2	12
<b>Total</b>		<b>37</b>	<b>976</b>



Chapter XII  
SPECIAL PROGRAMS



## Chapter XII

# SPECIAL PROGRAMS

### Introduction

IICA has a number of work projects underway which are not regular fund (member country quotas) or Simon Bolivar Fund projects, but which are increasingly difficult to consider separately, since many of the actions are interconnected or mutually supportive. However, some of them can easily be distinguished, be it because of the nature of a specific programmatic action or because of the source of financing, or because it is being conducted at the express behest of the Board of Directors as a result of an agreement or contract with the government of a member country or with development financing institutions or foundations.

Some of these programs have been already described in other chapters. In this chapter, then, a selection has been made of actions underway which may be of special interest because of the multinational nature of actions underway or because their scope is broader than that of a strictly national project.

The following have been selected by way of example:

#### 1. The Tropical Agricultural Research and Training Center (CATIE)

Change in emphasis and orientation of research endeavors at CATIE toward production systems resulted in the need for a redefinition of the Center's action within context of the agricultural sector of the Central American Isthmus, with possible outreach in the future to Caribbean countries.

In March 1977, a meeting of possible donors was held to try and arrive at a definition of this new approach in overall terms, based on an outline entitled a "Module Plan of Concentrated Action". To this end, a planning committee—with the Center's Director serving as coordinator—was designated. The committee worked on redefining some of CATIE's actions, its regional outreach and established what internal reorganization was needed to better respond to the nature of this new approach.

CATIE will continue to direct its efforts toward the low-income farmer as beneficiary of any actions undertaken. The Center will, of course, be working closely with national agencies. Efforts are therefore being made to intensify cooperative connections with national research and training agencies. IICA is collaborating on these endeavors through its offices in the countries.

A clear example of the sustained support being received by CATIE is the substantial budgetary increase for special projects; the budget has increased from US\$ 297,000 in the

first year of CATIE activities to over US\$ 3,000,000 during the fiscal period covered by this report. It is expected that the budget for the next fiscal year will be approximately US\$ 4,750,000.

Much of this sustained support is being received from agencies with which CATIE has been working on certain projects: the government of the Netherlands; CIDA-Canada; USAID/ROCAP; the ODM of the United Kingdom; the DDA of Switzerland; the Organization of American States; and the Livestock Development Project of Honduras. There is also the possibility of another project, in new areas of interest, to be financed by IDB and the European Economic Community (EEC).

#### a. Research at CATIE

One factor which has contributed decisively to the consolidation of the center has been the emphasis given research as a key element in the generation of appropriate technology. Added to this emphasis on research as a main Center function, is the orientation of research endeavors toward production systems, now identified with CATIE, as compared to the work at other centers. This concept is further advanced by the fact that the Center houses the disciplines of agricultural, livestock and forestry production under one roof, a unique situation when compared, again, with other regional and international centers. Thus, CATIE's priority functions in the immediate future are related to research, as is clearly evident in the Center's recently published document entitled "Five hundred Summaries of Papers published by CATIE in its First Five Years of Operations, 1973-1978" which was prepared specially for the five-year anniversary celebration.

The Center stresses the fact that research undertaken must be innovative in nature in order to facilitate CATIE's cooperative work with the national agencies that are directly responsible for the generation of technologies to be used in their respective countries.

CATIE has been encouraging the countries to work on a systems approach, particularly in annual crops on small holdings. This approach requires a change in outlook in order to orient actions on an interdisciplinary basis and at the farmer level, as compared to the traditional approach by area of specialization at an experimental station. Once this is accomplished, the Center must be prepared to respond to national needs in this area while working on newer aspects which may contribute to the future generation of more appropriate technologies for small farmers throughout the Isthmus.

It will be possible to collaborate in the near future, on the formation of technical teams and on national structures in



*During a visit to CATIE, Chief of Government in Panama, Gen. Omar Torrijos and His Excellency the President of Costa Rica, Mr. Rodrigo Carazo listen to an explanation about cacao production given by Dr. Gustavo Enríquez.*

order to establish or strengthen research capabilities in livestock and forestry production. The need for research in the area of technology transfer is becoming increasingly important, in order to create methodologies or models for national agencies to be able to accelerate the use of appropriate technologies.

Thus, research becomes the frame of reference of all CATIE endeavors, and is its main function. Work is being continued on production systems in order to generate the necessary technologies for small farmers based on an interdisciplinary and regional approach. More attention must be given to consolidating the Renewable Natural Resources and Perennial Crops Programs to assure needed stability at the Center in order to produce impact throughout the Isthmus.

#### **b. Training at CATIE**

Definite steps have taken to improve training aspects at CATIE, another of the Center's basic functions and an essential element in institution building. Several measures taken have been in response to recommendations made by the representatives of governments from Isthmus countries at the Fifth Annual Meeting of the Council.

Considerable progress has been made in the Postgraduate Studies Program, in view of the decided interest of the University of Costa Rica to further the development of the Postgraduate Studies System, and the program with CATIE. The University has assigned a professor as program coordinator on a full-time basis. This, plus the work at CATIE through its training office, has meant a significant increase in the amount

of time and attention spent on graduate education, as compared to previous years.

In addition, there has been a notable increase in the number of admission requests from students from Central American Isthmus countries, and the number of actual admissions from this area has also increased. The United Kingdom has promised substantial economic aid for the Scholarship Fund managed by CATIE. Scholarships are being given, by preference, to professionals from the national agencies throughout the Isthmus who wish to do postgraduate work at the Center.

Other levels of training, such as intensive short courses or in-service training have also been expanded, both at the Center and in the countries. This type of training is particularly important for the countries, because of two main factors: it usually involves short-term training and benefits larger groups of technicians. Efforts must be made to encourage and expand this type of activity, possibly through the establishment of regional programs.

A considerable increase of this type of activity at the Center is not feasible, since space in the dormitories, the physical facilities and lecture halls is limited. Hence the interest to expand this type of activities in the countries, using existing national facilities and technical teams.

In line with a recommendation made by the Council, CATIE is in the process of discussing joint research endeavors with the University of Panama, as well as the possibility of the exchange of professors for short courses or seminars. This type of contact, although in preliminary stages only at this time,



*"Campesino" students attending the First National Course on Potato Production, in Honduras.*

could be tremendously beneficial in the future, with the transfer of the entire Faculty of Agronomy of the University of Panama to David, close to the Costa Rican border.

**2. Training and Studies Program on Agrarian Reform and Rural Development in the Central American Isthmus (PRACA)**

PRACA has been active over the past fiscal period. Worthy of mention are:

**a. Seminar on the Evaluation and Analysis of Experimental Laboratories.**

The seminar was held in Costa Rica in December 1977 to analyze results obtained with experimental laboratory techniques, with the aim of assessing this method as an effective training instrument. Considerably work was also done at the seminar on the development of a theoretical framework for the experimental laboratory technique for application to "campesino" associative forms of organization, and to evolve pertinent methodologies. Twenty-four participants from agencies in the Isthmus countries attended the seminar.

**b. International Seminar on the Inter-relationship between Production, Marketing and Financing, for "Campesino" Associations**

This seminar was held in August. It was organized jointly with the German Development Foundation, IDB, the Council of American Development Foundations (SOLIDARIOS), INA-Honduras and FUNDE-Nicaragua. Thirty-five technicians from agrarian reform institutions, cooperatives and

development foundations in 12 Latin American countries attended the seminar. The six countries of the Central American Isthmus, Mexico, Haiti, Dominican Republic, Peru, Ecuador and Chile were represented at the meeting.

Dr. Antonio García, Colombia, was asked to conduct an evaluation of the PRACA program. He was able to establish that the operational strategy of PRACA has been more clearly defined over the past period, in the measure in which its activities were expanded to include, in general terms, such aspects as training, research, promotion, assistance and dissemination.

Further on, Dr. García stated that the effectiveness of PRACA activities is evident, since the program was able to involve 4545 persons in different activities such as courses, seminars, laboratories, conferences, meetings and different types of reciprocal technical cooperation, in addition to its ability to foster an awareness of agrarian problems and the nature of the role of agrarian reform in the development process of the Central American area, and to promote the establishment of organizations capable of forwarding the process and of creating or facilitating the creation of an effective feedback system. Perhaps one of the more positive accomplishments has been the institutionalization of the Meetings of the Agrarian Reform Executives from the Isthmus, which served as an open forum for discussion and analysis of agrarian reform experiences in the region.

**3. Program for the Conservation and Management of Land and Waters**

The Program continues to work on strengthening the inter-connection of institutions responsible for the conserva-



*The High Andes Program continues to work on improving production aspects in Andean crops. In the picture, a view of experimental plots of inter-varietal crosses in Quinoa, in Patacamaya, Bolivia.*

tions and management of land and waters in the countries of IICA's Southern Zone, in order to capitalize on the experience acquired of mutual benefit to solve the many problems common to this area encountered in most of the countries.

Hence the need to study and disseminate appropriate methodologies with respect to existing land and waters infrastructure and resources, to ensure optimum utilization and management of irrigation projects.

Of the more important activities completed, mention should be made of the IV Meeting of the Advisory Committee and the exchange of technicians for reciprocal training purposes, at the international level.

It should be remembered that this program, as in the case of many of IICA's other special programs, is also contributed to in large measure by the country-level actions of some of Line V programs conducted by IICA. The Agreement between the Corporation of the Bonaerense Valley of the Río Colorado (CORFO) and IICA is cited by way of example. The aim of this agreement is to develop a production, marketing and agroindustry project in the irrigated areas of Argentina over a period of three years. This is a Simon Bolivar Fund project.

The area under CORFO jurisdiction covers 500,000 hectares of which 140,000 have access to irrigation concessions but only 50 percent are actually making effective use of the irrigation waters. In the future, it is expected that the irrigation zone will be extended so as to encompass about 900,000 hectares, once the work to incorporate Rio Negro waters has been completed. Over 20,000 inhabitants live in this area; 30

percent live in four population centers which have sprung up along the main highway, the rest are scattered, and of totally rural extraction.

Another project of this type consists in IICA's working with the National Electricity Service and the Ministry of Agriculture and Livestock of Costa Rica, on the studies needed to prepare a research and training program and the final irrigation designs for the Enrique Jimenez Nuñez Experiment Station in Cañas, Guanacaste. Information from this program will serve as a basis for adopting and transferring technologies in agriculture for use in irrigated areas of the Arenal-Tempisque project area which encompasses about 100,000 hectares.

Other work of importance in the conservation of land and waters has been carried out in Brazil, Chile, Paraguay, Panama and Honduras, and is reported in the respective chapters.

#### **4. High Andes Program**

Thanks to the Simon Bolivar Fund projects, the old High Andes program has become a set of specific projects, as in the case of the project to foster the agroindustrial production of Quinoa in Peru which will have outreach effect in other Andean countries such as Bolivia. Work on other Andean crops includes a project on Cañihua.

Accomplishments include the completion of a preinvestment study to foster quinoa production which has already been revised by the Peruvian government.

Seven specialized agents plus sectoral staff from the Agriculture and Food Ministry have been cooperating on the





*The Humid Tropics Program promotes research into tropical crops and the possibility of including them into small farmer production systems.*

identification and establishment of production units with participation of over 1,000 quinoa farmers from "campesino" organizations, on an area of approximately 4,500 hectares.

IICA has been cooperating actively on the organization and development of a Technology Transfer Program, since established, by means of courses, technical meetings, field days, experimentation and the preparation of audiovisual material.

The Quinoa Germplasm Bank project has been responsible for planting 800 lines with 905 introductions which are being monitored by means of computer systems established in collaboration with the Agrarian University of La Molina, in Lima. In addition, 134 ecotypes have been evaluated for resistance to frosts and droughts, as well as a number of intervarietal hybrids. A preliminary study on native cultivars was also carried out, mainly in terms of optimum planting density for each variety, appropriate time for weeding, and analysis of traditional versus mechanized planting systems. Moreover, a scarifying machine has been constructed and tested in order to assure the best design. This machine will soon be available to the "campesino" organizations and the industrial sector.

An Official Seedbed Program has been established on 150 hectares with cooperation of eight Farming Agencies, and local farmers, mostly in the area of Juliaca.

##### **5. Program for the Development of the American Tropics (IICA-Tropics program)**

This cooperative program was created by the Board of Directors of IICA in April 1969. The first meeting of the

pertinent Advisory Committee was held in January 1970, and the program finally got underway in 1971.

During the first stage of the Program work was concentrated on the identification, analysis, and diagnosis of institutions involved in the rural development of wet tropical regions in the program's country-participants: Brazil, Colombia, Bolivia, Ecuador, Peru and Venezuela. In addition, work during this stage included the consolidation of a Tropical Agriculture Documentation and Information Unit (UDIAT), and the organization of a number of international, technical meetings in the fields of education, research, ecology, settlement, wildlife, conservation and protection, forest management, integrated agricultural production systems and personnel training.

These activities together with the findings of seven Advisory Committee meetings and the promotional-type activities carried out by the National Coordinating Committees, have served to awaken considerable interest in the program in the participant countries.

Recommendations made at international meetings have led to a number of concrete actions of which the following are worth mentioning:

- The revision of national laws and policies on matters pertaining to wildlife protection and utilization.
- The gradual creation of a research network and experimentation in integrated agricultural production systems in the wet American tropical regions.



*His Excellency the President of Argentina, Gen. Jorge Rafael Videla, talks with participants attending the First Rural Youth Field Day held in Córdoba in March 1978.*

Based on the above, last year's program activities included an international seminar on strategies for the development of the American Humid Tropics, in Belém; a meeting on the Conservation of Plants and Fauna; and an IICA Meeting of the Inter-governmental Technical Committee.

The program's new orientation as a result of these meetings will be as follows:

- Country-level projects will be prepared in each country in line with the basic principles established as to areas of priority with ample participation of national authorities.
- Multinational activities will be programmed by the multinational coordinating unit of the IICA-Tropics programs, keeping in mind the need to reinforce IICA's national offices in each of the program's participant countries, providing technical assistance as needed on projects of common interest for the region as a whole, and in line with national priorities.

In the 1977-1978 Operative Program, a Multinational Course was given on the Brazilian Amazon (May 1978), on training in integrated agricultural production systems for the Amazon region.

Extra-quota resources are contemplated for some of the program's activities for the 1978-1979 fiscal period.

## 6. Inter-American Rural Youth Program

As 1978 was declared "Inter-American Rural Youth Year" by the General Assembly by the OAS, IICA —through its Inter-American Rural Youth Secretariat— elected to celebrate the year in order to benefit rural youth programs underway in member countries. To this end, IICA has had the support of the OAS, the Kellogg Foundation and the International Development Research Centre (IDRC-Canada) on several programs including a number of international meetings, the dissemination of information about rural youth through documentation and bibliographic means and training of technicians in specific areas.

The Inter-American Meeting of Directors of Rural Youth Programs was held at IICA Headquarters, Costa Rica, in December 1977, as one of IICA's activities to coordinate with other inter-American agencies and the national rural youth programs on special activities to project the image of rural youth and the role of this segment in the development process of the American nations.

The meeting worked on plans to:

- prepare a program to celebrate the year as means of focussing on youth problems, and what institutional action is being taken in this respect.
- motivate, orient and coordinate the participation of national and regional agencies in the programmed activities.
- obtain financing as needed to celebrate the programmed events.



*Participants attending the V Inter-American Meeting of Agricultural Librarians and Documentalists, held in April 1978, in San José, Costa Rica.*

- produce new ideas and identify positive experiences which can serve as a basis for specific rural youth policies, programs and projects.
- gather and present information in an organized manner on potential sources of financing, both national and external, for rural youth projects, and collaborate on disseminating this information in order to make the most of existing resources.

As a result of this first inter-American meeting, a number of national meetings have been held in the member countries on the subject of rural youth problems; a number of documents concerning national programs have been prepared; and four regional meetings were organized and held during the first semester of 1978. In addition, considerable work has gone into compiling a bibliography on rural youth, with an anticipated 1,800 references to up-date the literature on this topic. A Manual of Abstracts is also in preparation, and will have about 400 entries summarizing the best papers available to date on this subject.

A tremendous amount of work is also going into the preparation of Youth Self-management projects which has stirred considerable interest throughout the rural sector of member countries, particularly in Costa Rica where several meetings have already been held to get these programs underway.

A new aspect of rural youth programs concerns the preoccupation with the role of women in the rural development process. IICA perceives the urgent need for a systematic approach to assure the effective integration of women and the rural family into the development process.

It is felt that many of the traditional programs being carried out up to this time have largely ignored the positive role that the "campesino" family in general and women in particular can play in our countries.

Acknowledgement of this factor has important implications for future IICA programs. On the one hand it will be necessary to carefully revise IICA programs to assure compatibility with this idea of strengthening the key productive function of the family and women in the process. On the other, thought must be given to the establishment of a special program which will combine this basic approach with other approaches and actions being developed throughout Latin America and other parts of the developing world.

The preparation of a program for women and rural development, for possible USAID financing, was almost completed by the end of this past fiscal period.

#### **7. Support provided Scientific Associations**

IICA has continued supporting the five scientific associations with which it is closely connected through letters of understanding or specific agreements; these are: the Inter-American Agricultural Librarians and Documentalists Association (AIBDA); the Latin American Association of Higher Agricultural Education (ALEAS); the Latin American Agricultural Sciences Association (ALCA); the Latin American Postgraduate Agricultural Education Association (ALEAP); and the Latin American Animal Production Association (ALPA).

Support provided has taken the form of economic aid for trips to international meetings of the directors of these

associations; the preparation and distribution of technical bulletins of some of these groups; and financial aid for their inter-American meetings or conferences.

During this past period, the V Inter-American Meeting of Agricultural Librarians and Documentalists was held at IICA Headquarters in San José, Costa Rica, in April 1978. More than 200 specialists from American countries attended the meeting to analyze the need for training and permanent education of librarians, documentalists and information specialists in order not to waste the efforts undertaken at national levels due to a lack of properly trained staff to continue, improve and direct the work underway. Progress made in the field of training the information users was also studied, and suggestions were put forth on the means of rapidly overcoming identified problems. Several IICA specialists collaborated on the organization of the meeting and presented papers for purposes of discussion.

The Ministry of Agriculture and Livestock, the National Council of Scientific and Technological Research and the National University, all of Costa Rica, and the PIADIC program, helped sponsor the meeting.

ALEAS held its VI Inter-American Conference in May 1978, in Maracaibo, Venezuela, where a number of highly successful papers were given. IICA cooperated with ALEAS by financing the travel expenses of several of the Latin American specialists, some of them Deans of the Faculties of Agronomy in the region, and by working closely with the outgoing president of ALEAS, Ing. Italo Martínez, on the organization of the meeting.

The Latin American Animal Production Association also received substantial IICA support on the preparation and publication of its information bulletin and on assuring the participation of a number of Latin American specialists to the World Animal Production Meeting to be held in the second semester of 1978 in Buenos Aires, Argentina.

Chapter XIII  
FINANCIAL SUMMARY AND ANALYSIS  
REGULAR FUNDS



## Chapter XIII

# FINANCIAL SUMMARY AND ANALYSIS REGULAR FUNDS

### General Information

For the second consecutive year, and for the fifth year of the last six, total quota collections exceeded 100% of the quota budget approved for the fiscal year. Collections were 100.7% allowing expenditures of 99.7% of the approved budget, thereby providing maximum services to the member countries.

In addition to the above mentioned quota collections, one quota, in the amount of approximately US\$ 500,000 corresponding to the fiscal year 1977-78, was received in the first few days of July, and is not reflected in the 100.7% mentioned. Nevertheless, the payment helped the cash position considerably. This is very important during the first few months of the fiscal year, since there are few quota payments during that period.

### General Working Fund

As a result of improved quota collections, the General Working Fund reflected an increase. More important, however, was the fact that with the decrease in outstanding quotas, the liquidity of the Fund was improved.

### Quotas

With quota collections improving, outstanding quotas at the end of the year were reduced slightly. The figure shown, however, does not reflect the payment of approximately US\$ 500,000 received shortly after the fiscal year closing date.

### Accounts and Contributions Receivable

As in other years, these amounts represent funds received from sources outside of quota funds. These funds, received through separate contracts and agreements, are not always received by June 30, which is the closing date of the Institute's fiscal year. These special payments are received periodically, however, and are not considered doubtful.

### Inventories

Inventories reflect an increase over last year, because rather large purchases of materials for the Print Shop and general operational use were received in the latter part of the fiscal year.

**Table 3. Statement of Assets and Liabilities as of 30 June 1977 compared with Statement as of 30 June 1978**  
(UNITED STATES DOLLARS)

ASSETS	30 June		LIABILITIES	30 June	
	1977	1978		1977	1978
Cash on hand & in banks	497,819	1,726,832	Advance Funds/Operations	121,626	
Quotas Receivable			Accounts Payable	179,339	232,918
Contracting States	1,654,818	1,589,462	Third Party Funds		371,671
Accounts Receivable	743,846	710,779	Rotating Funds	370,957	791,074
Inventories	83,900	191,371	Reserves	40,000	53,744
Prepaid expenses	60,475	255,911	<b>TOTAL LIABILITIES</b>	<u>711,922</u>	<u>1,449,407</u>
Expected Contributions	295,096	184,920	<b>NET ASSETS:</b>		
Third Party Funds	128,925		Funds & Donations		
Grants	62,162	49,553	Received for Specific Purposes		335,227
Other Assets	<u>11,523</u>	<u>11,581</u>	General Working Fund	<u>2,826,642</u>	<u>2,935,775</u>
	<u><u>3,538,564</u></u>	<u><u>4,720,409</u></u>		<u><u>3,538,564</u></u>	<u><u>4,720,409</u></u>

## Accounts Payable and Revolving Funds

Accounts payable showed only a slight increase over last year, and reflect a normal increase in activity. Revolving Funds last year had become quite low to support the amount of IICA activity, which is increasing each year. As reported last year, the Construction Fund and the Equipment Replacement Fund showed deficits at the close of the fiscal year 1976-77. These Funds were both balanced this last year, as planned.

### Summary

The general financial position is considered to be sound. Liquidity in the General Working Fund has continued to improve, and this has strengthened the cash position which must be kept strong, in order to finance activities during periods when quota payments are not received.

## SIMON BOLIVAR FUND

### General Information

During the fiscal year 1977-78, contributions to the Fund in the amount of US\$ 2,072,969 were received from the

Governments of Venezuela, Chile, Ecuador, Haiti, Honduras, Jamaica and Panama. Authorized expenditures for the fiscal year 1977-78 were US\$ 1,795,395.

### General Working Fund

This Fund was increased this fiscal year by US\$ 320,000 providing a strong and liquid working fund to assure continuity of ongoing activities during periods when contributions are not received.

### Summary

As reported last year, activities financed by this Fund really began on a full scale during fiscal year 1976-77, and continued to grow during the past fiscal year.

The Fund is in a sound financial position, which together with a strong General Working Fund, can provide continuity for activities already initiated, within a reasonable and safe time horizon.

Table 4. Quota Movement for Fiscal Year ending 30 June 1978

(UNITED STATES DOLLARS)

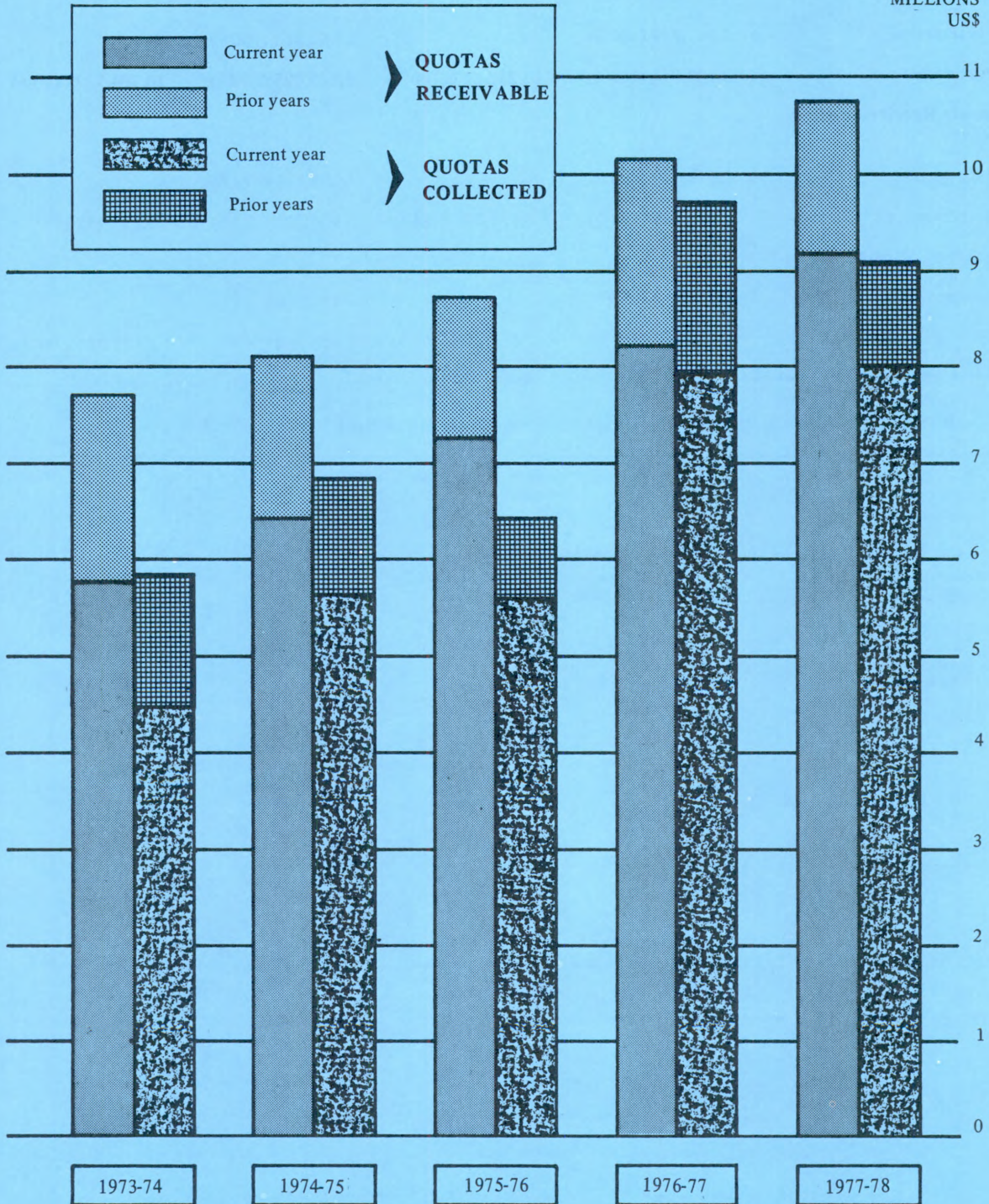
Contracting States	Quotas Receivable 30.6.1977	Quotas for the year 1977-1978	Total owed 1.7.1978	Total collections 1977-1978	Total owed as of 30.6.1978	Increase (Decrease) of balance owed between 30.6.77 30.6.78
Argentina	—	627,023	627,023	—	627,023	627,023
Barbados	—	6,779	6,779	6,779	—	—
Bolivia	14,686	16,099	30,785	14,681	16,104	1,418
Brazil	—	627,023	627,023	627,023	—	—
Canada	—	575,336	575,336	575,336	—	—
Colombia	59,379	130,488	189,867	—	189,867	130,488
Costa Rica	14,489	16,099	30,587	7,325	23,262	8,773
Chile	122,675	114,390	237,065	122,675	114,390	( 8,285)
Dominican Republic	99,715	16,099	115,814	—	115,814	16,099
Ecuador	1,442	16,099	17,541	15,222	2,319	877
El Salvador	—	16,099	16,099	8,050	8,049	8,049
Guatemala	—	24,573	24,573	24,573	—	—
Guyana	( 10,452)	16,099	5,647	—	5,647	16,099
Haiti	179,021	16,099	195,120	—	195,120	16,099
Honduras	14,684	16,099	30,783	14,684	16,099	1,415
Jamaica	—	16,099	16,099	16,099	—	—
Mexico	639,130	700,740	1,339,870	1,264,434	75,436	(563,694)
Nicaragua	44,360	16,099	60,459	27,438	33,021	( 11,339)
Panama	—	16,099	16,099	16,099	—	—
Paraguay	141,154	16,099	157,253	98,393	58,860	( 82,294)
Peru	51,780	56,771	108,551	—	108,551	56,771
Trinidad & Tobago	—	16,099	16,099	16,099	—	—
United States	—	5,667,363	5,667,363	5,667,363	—	—
Uruguay	44,724	49,145	93,869	93,969	100)	( 44,824)
Venezuela	238,032	260,977	499,009	499,009	—	(238,032)
<b>SUB-TOTAL</b>	<b>1,654,818</b>	<b>9,049,895</b>	<b>10,704,713</b>	<b>9,115,251</b>	<b>1,589,462</b>	<b>( 65,356)</b>
<b>Cuba</b>	<b>824,274</b>	<b>89,817</b>	<b>914,091</b>	<b>—</b>	<b>914,091</b>	<b>89,817</b>
<b>TOTAL</b>	<b>2,479,092</b>	<b>9,139,712</b>	<b>11,618,804</b>	<b>9,115,251</b>	<b>2,503,553</b>	<b>24,461</b>



FIGURE 1

QUOTAS FROM CONTRACTING STATES

MILLIONS  
US\$

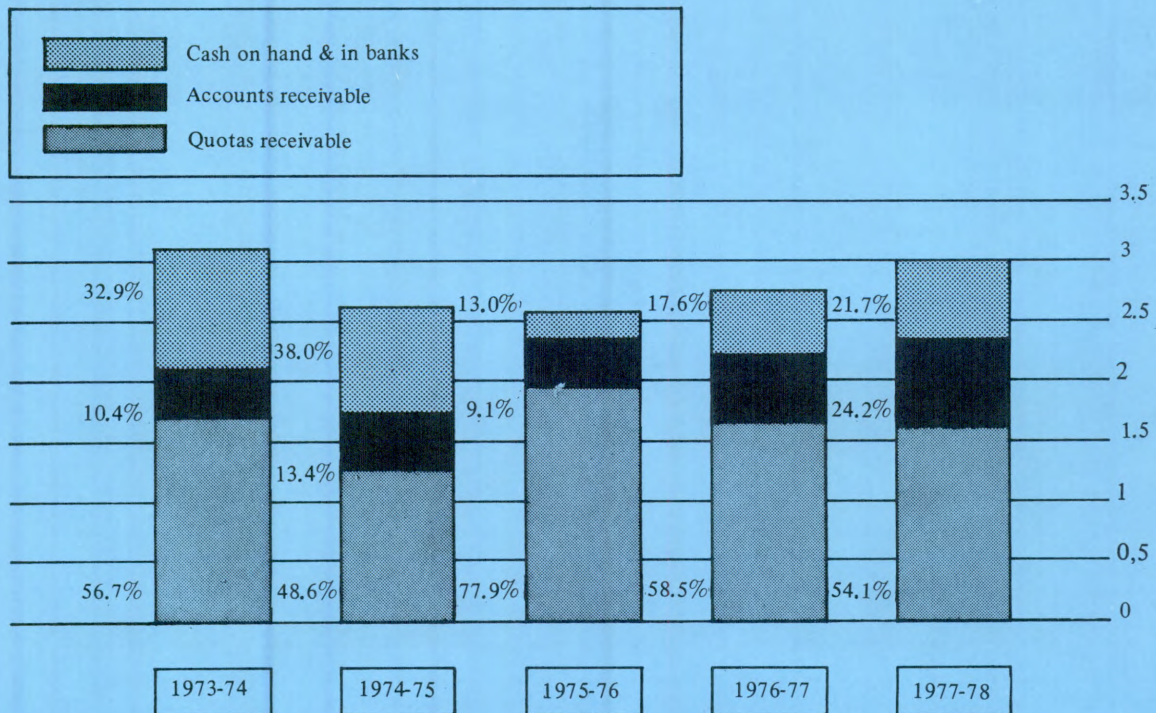


**Table 5. Comparative Detail on Member State Quota Collection**  
(UNITED STATES DOLLARS)

	Fiscal year 1976-1977		Fiscal year 1977-1978	
<b>Situation as of July 1</b>				
Prior year quotas	2,067,799 (100%)		1,654,818 (100%)	
Current quotas	8,190,814 (100%)	10,258,613 (100%)	9,049,895 (100%)	10,704,713 (100%)
<b>Payments Received during the Year</b>				
For prior years	1,644,040 ( 80%)		1,208,524 ( 73%)	
For the current year	6,959,755 ( 85%)	8,603,795 ( 84%)	7,906,727 ( 87%)	9,115,251 ( 85%)
<b>Situation as of June 30</b>				
Due from prior years	423,758 ( 20%)		446,294 ( 27%)	
Due from the current year	<u>1,231,060 ( 15%)</u>	<u>1,654,818 ( 16%)</u>	<u>1,143,168 ( 13%)</u>	<u>1,589,462 ( 15%)</u>

Note: Quotas corresponding to Cuba are not included into the amounts and percentages shown in this table.

**FIGURE 2 COMPOSITION OF THE GENERAL WORKING FUND**



**Table 6. General Working Fund Statement  
(UNITED STATES DOLLARS)**

Balances at the beginning of the year		
Quotas Receivable	1,654,818	
Other	<u>1,171,824</u>	<u>2,826,642</u>
Difference between Income & Disbursements during the year		
Income	9,134,895	
Disbursements	<u>9,025,762</u>	<u>109,133</u>
Balance at the end of the year		
Quotas Receivable	1,589,462	
Other	<u>1,346,313</u>	<u>2,935,775</u>

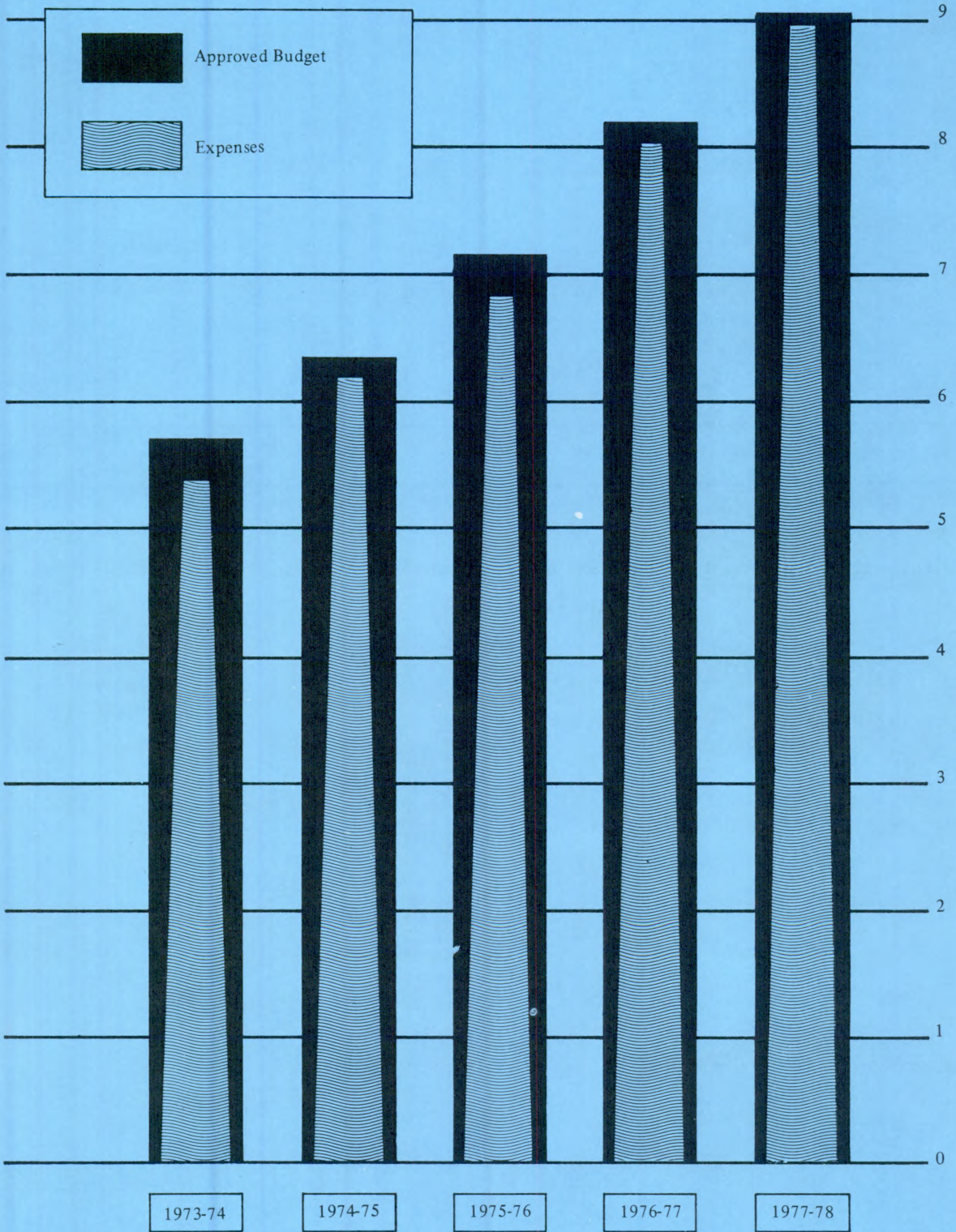
**Table 7. Summary of Income and Disbursements of the General Working Fund – 1 July 1977 – 30 June 1978  
(UNITED STATES DOLLARS)**

	<b>INCOME</b>		<b>DISBURSEMENTS</b>
Quotas from Member States	9,049,895	<b>BUDGET</b>	
		Line of Action I	1,013,104
		Line of Action II	907,209
		Line of Action III	717,557
Reimbursement to the General Working Fund, from Quota Budget	85,000	Line of Action IV	883,383
		Line of Action V	1,085,107
		Line of Action VI	646,427
		Line of Action VII	1,256,397
		Planning & Supervision of Programs	441,226
		Management and Administration	1,000,565
		General Costs & Provisions	487,525
		Equipment (Investments)	57,211
		Contribution (CATIE)	530,000
			9,025,711
		Commemorative Medals	51
<b>TOTAL INCOME</b>	<u>9,134,895</u>	<b>TOTAL DISBURSEMENTS</b>	<u>9,025,762</u>
		Increase General Working Fund	<u>109,133</u>
	<u>9,134,895</u>		<u>9,134,895</u>

FIGURE 3

PROGRAM BUDGET EXECUTION AS COMPARED TO APPROVED BUDGETS

MILLIONS US\$



**Table 8. Comparative Statement of Approved Annual Budgets and Actual Expenses**

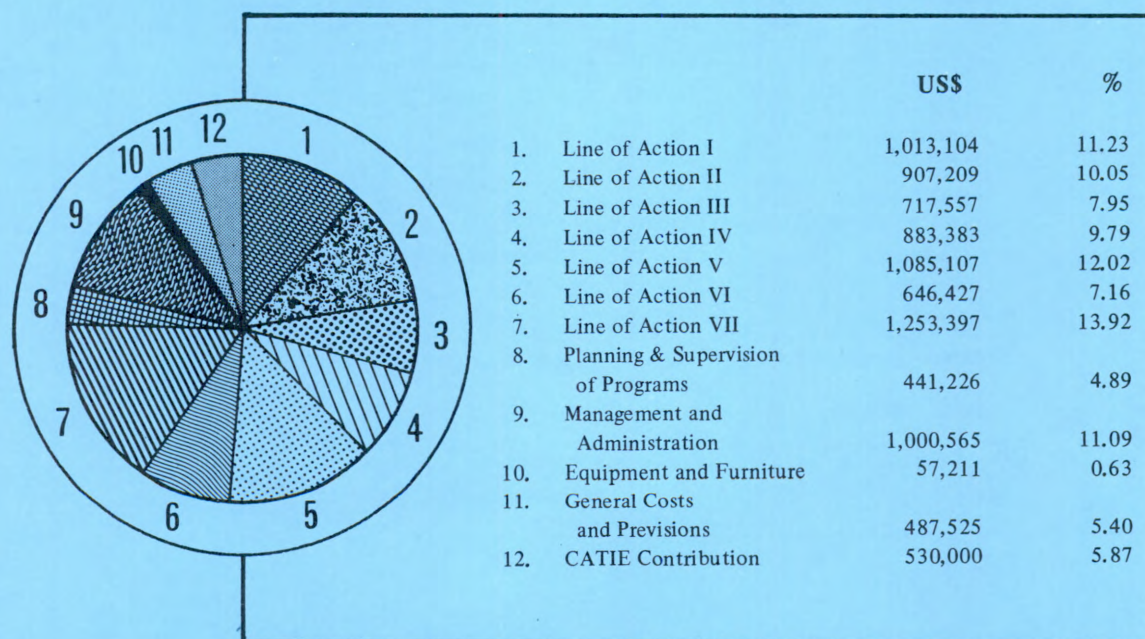
(IN THOUSANDS OF DOLLARS)

Fiscal Year	Approved Budget*	Actual Expenses	Percentage
1970-71	4,023	3,849	95.7
1971-72	4,425	4,086	92.3
1972-73	4,982	4,597	92.3
1973-74	5,539	5,436	98.1
1974-75	6,320	6,306	99.8
1975-76	7,063	6,744	95.4
1976-77	8,190	8,063	98.4
1977-78	9,050	9,026	99.7

\* Does not include quotas corresponding to Cuba.

**FIGURE 4**

**ACTUAL EXPENSES OF QUOTA FUNDS BUDGET AT THE PROGRAMMING LEVEL**



**Table 9. Comparison of Approved Quotas with Collections for the Years 1972-1973 through 1977-1978**  
(IN THOUSANDS OF DOLLARS)

Year	Quotas for the year*	Total collections for the year	Percentage
1972-73	4,982	5,151	103.4
1973-74	5,550	5,710	102.9
1974-75	6,320	6,691	105.8
1975-76	7,063	6,361	90.0
1976-77	8,190	8,603	105.0
1977-78	9,050	9,115	100.7

\* Does not include the quotas corresponding to Cuba.

**Table 10. Budget Execution distributed by Level of Programming and Budget Units**

(UNITED STATES DOLLARS)

	Andean Zone	Northern Zone	Antilles Zone	Southern Zone	CIDIA	Operations	Tech. Asst. & Planning	Manage. and Adm.	CATIE	TOTAL
Line of Action I	61,431	164,559	35,954	137,902	372,698	22,601	217,959			1,013,104
Line of Action II	216,593	239,753	96,863	331,399		22,601				907,209
Line of Action III	226,461	113,389	78,276	276,830		22,601				717,557
Line of Action IV	157,155	333,853	155,621	214,152		22,602				883,383
Line of Action V	325,296	156,919	50,209	530,081		22,602				1,085,107
Line of Action VI	258,131	185,254	63,788	116,653		22,601				646,427
Line of Action VII	239,386	357,089	326,411	310,910		22,601				1,256,397
<b>Planning &amp; Supervision of Programs Management and Administration</b>						251,829	189,397			441,226
<b>Equipment</b>	18,912	14,846	7,417	16,036				1,000,565		1,000,565
<b>SUB-TOTAL</b>	<u>1,503,365</u>	<u>1,565,662</u>	<u>814,539</u>	<u>1,933,963</u>	<u>372,698</u>	<u>410,038</u>	<u>407,356</u>	<u>1,000,565</u>		<u>8,008,186</u>
<b>General Costs &amp; Provisions*</b>	123,929	124,953	65,523	145,672	27,448					487,525
<b>CATIE Contribution</b>									530,000	530,000
<b>TOTAL</b>	<u>1,627,294</u>	<u>1,690,615</u>	<u>880,062</u>	<u>2,079,635</u>	<u>400,146</u>	<u>410,038</u>	<u>407,356</u>	<u>1,000,565</u>	<u>530,000</u>	<u>9,025,711</u>

\* Expenses have been distributed according to the percentage presented in the Program-Budget for 1977-1978.

**Table 11**

**SIMON BOLIVAR FUND  
STATEMENT FOR THE 1977-1978 FISCAL PERIOD**

Detail	Indiv. Contribution	Amount
<b>INCOME</b>		
Venezuelan Contribution	US\$ 2,000,000.00	
From other countries	72,968.86	
Capital interests: 1977-1978 Period	<u>161,566.38</u>	
Income Total	<u>US\$ 2,234,535.24</u>	<u>US\$ 2,234,535.24</u>
<b>EXPENDITURES</b>		
Expenditures for the Period 1977-1978	US\$ 1,475,395.44	
Increase in the General Working Fund	<u>320,000.00</u>	
Total Expenditures	<u>US\$ 1,795,395.44</u>	<u>US\$ 1,795,395.44</u>
Balance transferred to Account "Budget Surplus from 1977-1978 Period"	.....	<u>US\$ 439,139.80</u>

**Table 12**

**SIMON BOLIVAR FUND  
FINANCIAL STATEMENT TO 30 JUNE 1978**

CASH ON HAND & IN BANKS	US\$ 49,589.24	ACCOUNTS PAYABLE	US\$ 14,878.83
		BUDGET SURPLUS	3,214,710.41
		1975-1976 Period	US\$ 1,793,135.67
		1976-1977 Period	982,434.94
		1977-1978 Period	<u>439,139.80</u>
SHORT-TERM DEPOSITS	3,900,000.00	GENERAL WORKING FUND	720,000.00
		Amount assigned 1975-1976	US\$ 200,000.00
		Amount assigned 1976-1977	200,000.00
		Amount assigned 1977-1978	320,000.00
Total	<u>US\$ 3,949,589.24</u>	Total	<u>US\$ 3,949,589.24</u>





## APPENDICES



Appendix I.  
IICA ACTIVITIES DURING THE  
1977–1978 FISCAL PERIOD



## IICA ACTIVITIES DURING THE 1977–1978 FISCAL PERIOD

The activities described in the following list and summarized in the Table do not represent the total number of activities carried out by IICA, as many are included as part of others, and some had not been completed by the end of the period covered by this report. Even with these exceptions however, the total number of activities carried out by the Institute during this period, is somewhat greater than the total for last year (1011 activities within the Lines of Action in the Member States, as compared to 975 for last year).

**Summary of IICA Activities, by Lines of Action and by Country**

	LINES OF ACTION							Support Activities	Total
	I	II	III	IV	V	VI	VII		
Argentina	9	2	7	—	10	2	8	—	34
Barbados	—	—	—	—	3	—	2	—	5
Bolivia	1	4	7	6	—	1	7	—	26
Brazil	—	6	24	10	40	—	10	—	90
Colombia	2	27	4	—	13	7	3	—	56
Costa Rica	54	8	2	4	2	5	23	—	98
Chile	2	9	—	—	8	1	3	—	23
Dominican Republic	1	2	3	3	7	4	8	—	28
Ecuador	1	2	2	1	5	1	5	—	17
El Salvador	9	3	1	5	—	1	6	—	25
Guatemala	12	11	—	—	—	3	13	—	39
Guyana	—	—	—	3	—	2	4	—	9
Haiti	—	4	1	10	9	—	8	—	32
Honduras	6	9	2	1	19	2	9	—	48
Jamaica	—	—	—	16	—	1	2	—	19
Mexico	1	15	—	5	3	3	9	—	36
Nicaragua	5	—	3	6	—	—	15	—	29
Panama	7	—	3	1	9	12	3	—	35
Paraguay	3	2	3	—	7	24	3	—	42
Peru	2	6	13	26	6	3	2	—	58
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
Uruguay	3	7	9	3	11	—	9	—	42
Venezuela	4	14	7	4	1	5	15	—	50
Multinational Activities	4	5	9	6	5	9	17	—	55
Planning Bureau	—	—	—	—	—	—	—	75	75
Pub. Information Office	—	—	—	—	—	—	—	40	40
<b>TOTAL</b>	<b>122</b>	<b>136</b>	<b>100</b>	<b>114</b>	<b>155</b>	<b>85</b>	<b>184</b>	<b>115</b>	<b>1.011</b>

## ARGENTINA

### Line I: Information and Documentation on Rural Development

1. Cooperation provided on the integration and initial functioning of SNICA's Executive Council (July 1, 1977 through June 30, 1978, Buenos Aires). Activity I.SA.111
2. Contribution on the preparation of SNICA's operative documents (July 1, 1977 through June 30, 1978, Buenos Aires). Activity I.SA.112
3. Cooperation on in-service training provided for SNICA personnel and users (July 1, 1977 through June 30, 1978, Buenos Aires). Activity I.SA.113
4. Support provided SNICA's basic units (July 1, 1977 through June 30, 1978, Buenos Aires). Activity I.SA.114
5. Up-dating of the Directory of Higher Agricultural Education Institutions in the Southern Zone and its human resources (July 1, 1977 through June 30, 1978, Buenos Aires). Activity I.SA.115

### Line II: Education for Rural Development

1. Participation in programming postgraduate courses (July 1, 1977 through June 30, 1978). Activity II.SA.211
2. Fostering the exchange of information between units which organize postgraduate education activities (July 1, 1977 through June 30, 1978, Buenos Aires). Activity II.SA.212

### Line III: Agricultural Research and the Transfer of Technology

1. Cooperation provided INTA on a study to improve its institutional management aspects (July 1, 1977 through June 30, 1978, Buenos Aires). Activity III.SA.111
2. Cooperation provided INTA on seminars on institutional management and direction (July 1, 1977 through June 30, 1978, Buenos Aires). Activity III.SA.112
3. Aiding INTA's research and extension centers on specific management and administration aspects (July 1, 1977 through June 30, 1978, Salta). Activity III.SA.113
4. Collaboration provided INTA on a study of actual and potential national meat production systems (July 1, 1977 through June 30, 1978, Buenos Aires). Activity III.SA.114
5. Cooperation provided on the coordination of INTA's research studies and the Universities of Rio Cuarto and National del Centro of the Province of Buenos Aires (July 1, 1977 through June 30, 1978, Tandil, Buenos Aires).
6. Publication of livestock enterprise studies (July 1, 1977 through June 30, 1978, Buenos Aires). Activity III.SA.116

7. Course on scientific research methodology (March 24-29, 1978, San Miguel de Tucumán). Activity III.SA.117

### Line V: Regional Rural Development

1. Training personnel in aspects related to rural regional development and colonization (July 1, 1977 through June 30, 1978). Activity V.SA.113.
2. Cooperation provided on the institutional strengthening of the El Chaco Colonization Institute (July through December, 1977 Chaco, Resistencia). Activity V.SA.114
3. Collaboration provided the Province of Formosa to organize institutional and administrative mechanisms for its land policy (July through December, 1977, Formosa). Activity V.SA.115
4. Contribution on methodological and personnel training aspects for the regional development of the Bernardo de Irigoyen area (July Through December, 1977, Misiones, Posadas). Activity V.SA.116
5. Finalization and publication of the diagnostic study of the Argentinian institutional sub-system for the conservation and management of land and waters (July 1, 1977 through June 30, 1978, Buenos Aires). Activity V.SA.211
6. Technical assistance through the SSRNR and E on perfecting the legislation concerned with the conservation and management of land and waters (September 1977 through June, 1978). Activity V.SA.212
7. Cooperation provided through the SSRNR and E on methodological aspects and techniques related to the optimal utilization, conservation and management of land and waters (September 1977 through June, 1978). Activity V.SA.213
8. Technical support provided through the SSRNR and E on meetings for the coordination of the national and provincial executive agencies responsible for the conservation and management of land and waters (July 1, 1977 through June 30, 1978, Buenos Aires). Activity V.SA.214
9. Collaboration provided through the SSRNR and E on courses and study trips training the professional and technical personnel of the institutional sub-system agencies for the conservation and management of land and waters (August, 1977 through April, 1978, Buenos Aires and Santiago del Estero). Activity V.SA.214
10. Publication of a Directory of the Latin American Institutions in charge of the conservation and management of land and waters (July 1, 1977 through June 30, 1978, Buenos Aires). Activity V.SZ.214

### Line VI: Structural Changes and "Campesino" Organization

1. Elaboration of a preliminary report on the promotion and operation of large scale enterprises

(July through December, 1977, Buenos Aires). Activity VI.SA.211

2. Meetings to discuss large scale enterprise models, adapted to the specific conditions of the existing exploitation systems (Activity VI.SA.212).

#### **Line VII: Formulation and Administration of Agricultural Policy**

1. Support provided the National Agricultural Development Office on organizing its structure, personnel teams and programs (July 1, 1977 through June 30, 1978, Buenos Aires). Activity VII.SA.111
2. Cooperation provided SEAG on the preparation and evaluation of agricultural projects (July 1, 1977 through June 30, 1978, Buenos Aires). Activity VII.SA.112
3. Collaboration provided CFI and provincial project and policy formulation agencies on training personnel in these functions (July 1, 1977 through June 30, 1978). Activity VII.SA.114
4. Revision of the statistics series on the rural development diagnosis in Argentina (July 1, 1977 through June 30, 1978, Buenos Aires). Activity VII.SA.311
5. Continuation of the analysis of the components of the agrarian institutional system (July through December, 1977, Buenos Aires). Activity VII.SA.312
6. Preparation of a Medium-Term IICA Action Plan (July 1, 1977 through June 30, 1978, Buenos Aires). Activity VII.SA.313
7. Elaboration of the 1978-79 operative program, in cooperation with national agencies (July 1, 1977 through June 30, 1978, Buenos Aires). Activity VII.SA.314
8. Course on the elaboration and evaluation of agricultural projects (April 4, 1977 through June 31, 1978, Jujuy). Activity VII.SZ.115

### **BARBADOS**

#### **Line V: Regional Rural Development**

1. Diagnosis of the conservation and management of land and water situation in Barbados (September 15, 1977 through April 30, 1978). Activity V.LB.211
2. Strengthening the Ministry of Agriculture on the conservation and management of land and waters (September 15, 1977 through June 30, 1978). Activity V.LB.212
3. Training and advisory services provided Ministry of Agriculture personnel on the conservation and management of land and waters (September 15, 1977 through June 30, 1978). Activity V.LB.213

#### **Line VII: Formulation and Administration of Agricultural Policy**

1. Diagnosis of the rural and institutional situation in Barbados (September 15, 1977 through June 30, 1978). Activity VII.LB.311
2. Revision of IICA's Country-level Action Plan (September 15, 1977 through June 30, 1978). Activity VII.LB.312

### **BOLIVIA**

#### **Line I: Formulation and Documentation on Rural Development**

1. Restructuring the IBTA-MACA library in support of research and the transfer of technology (October 17-21, 1977, La Paz). Activity I.AB.111

#### **Line II: Education for Rural Development**

1. Cooperation provided the National Higher Education Council (CNES) (July 1, 1977 through June 30, 1978, La Paz). Activity II.AB.211
2. Cooperation provided ABIEAS and its Annual Meeting (September 13-16, 1977, La Paz). Activity II.AB.212
3. Cooperation and direct support provided the Bolivian Universities of: San Simon, of Cochabamba, Gabriel Rene Moreno, of Santa Cruz, Jose Ballivián, of Trinidad and Tomas Frías, of Potosí (July 1, 1977 through June 30, 1978, Santa Cruz and Cochabamba). Activity II.AB.213
4. Working meeting on university organization and management (April 16-22, 1978, Santa Cruz). Activity II.AB.214

#### **Line III: Agricultural Research and Technology Transfer**

1. Collaboration provided on the evaluation of the national agricultural research and extension plan. (January 2 through May 27, 1978, La Paz, and Cochabamba). Activity III.AB.111
2. Readjustment of the national agricultural research and extension plan (October 1, 1977 through May 27, 1978, La Paz and Cochabamba). Activity III.AB.112
3. Training workshop for IBTA researchers and extensionists (June 19-24, 1978, Tarija). Activity III.AB.113
4. Support provided in the operation of the Bolivian Institute of Agricultural Technology (IBTA) (December 1, 1977 through January 21, 1978, La Paz). Activity III.AB.114
5. Collaboration provided IBTA on the study and research of agricultural production systems (August 1977 through May 1978). Activity III.AB.115
6. Preparation of the Andean Agriculture Manual (July 1, 1977 through June 30, 1978, La Paz). Activity III.AB.119

7. Coordination provided on agricultural research in Andean crops (July 1, 1977 through June 30, 1978). Activity III.AB.121

**Line IV: Agricultural Production, Productivity and Marketing**

1. National Seminar on Forest Plantations (October 30, 1977 La Paz). Activity IV.AB.111
2. Working meeting on the programming and implementation of a National Forestry Plantation Plan (July 1, 1977 through June 30, 1978, La Paz and Santa Cruz). Activity IV.AB.112
3. Elaboration of a crop and forage and milk production plan (January through June 1978, Tarija). Activity IV.XAB.111
4. A feasibility study (January through June 1978, Tarija). Activity IV.XAB.112
5. Design and getting underway of a dairy cattle management and breeding program (January through June 1978, Tarija). Activity IV.XAB.113
6. Preparation, editing and dissemination of technical material on forage and milk production (January through June, 1978, Tarija). Activity IV.XAB.114

**Line VI: Structural Changes and "Campesino" Organization**

1. Andean Regional Seminar on Agrarian Reform (March 6-11, 1978, La Paz). Activity VI.AZ.225

**Line VII: Formulation and Administration of Agricultural Policy**

1. Advisory services provided on the implementation of the IBTA investment project (July through November 1977, La Paz). Activity VII.AB.111
2. Support provided the IBTA planning unit (July 1, 1977 through June 30, 1978, La Paz). Activity VII.AB.112
3. Collaboration provided IBTA in programming and elaboration of projects, at regional levels (August 1977 through May 1978, La Paz). Activity VII.AB.122
4. Agricultural planning coordination meeting (October 1977 through May 1978, La Paz). Activity VII.AB.122
5. Seminar on training in agricultural projects (July 1977, La Paz). Activity VII.AB.123
6. Working meeting on IBTA organization and management (May 16-20 1978, Cochabamba). Activity VII.AB.211
7. Organization of a working group for the elaboration, and implementation of coordination strategies and mechanisms (December 12, 1977, La Paz). Activity VII.AB.212

**BRAZIL**

**Line II: Education for Rural Development**

1. Participation in educational studies for integrated rural development purposes (June 1978, Rio de Janeiro). Activity ILSB.111
2. Advisory services provided ABEAS in the preparation of new projects for financing (July 1, 1977 through June 30, 1978). Activity ILSB.211
3. Advisory services provided ABEAS on project implementation and evaluation (July 1, 1977 through June 30, 1978). Activity ILSB.212
4. Collaboration provided on the organization of meetings and on dissemination activities (October 1977, Rio de Janeiro). Activity ILSB.213
5. Support provided the Faculty of Agronomy of Medio Sao Francisco (FAMESF) (July 1, 1977 through June 30, 1978). Activity ILSB.214
6. Support provided DAU/MEC for feasibility studies to develop courses for irrigation and drainage technicians (June 1978, Rio de Janeiro). Activity ILSB.241

**Line III: Agricultural Research and Transfer of Technology**

1. Technical cooperation provided on the organization of EMBRAPA's planning system (July 1, through December 31, 1977, Brasilia). Activity ILSB.111
2. Technical cooperation provided on the implementation of the Technology Diffusion Department of EMBRAPA (July 1, through December 31, 1977, Brasilia). Activity ILSB.112
3. Technical cooperation provided on the implementation of the information and Documentation Department of EMBRAPA (July 1, through December 31, 1977, Brasilia). Activity ILSB.113
4. Technical cooperation provided on the implementation of the technical-scientific structure of EMBRAPA (July 1, through December 31, 1977, Brasilia). Activity ILSB.114
5. Technical cooperation provided on the implementation of the Quantitative Methods Department (previously DPD) (July 1, 1977 through June 30, 1978, Brasilia). Activity ILSB.115
6. Technical cooperation provided on the implementation of a Human Resources Department at EMBRAPA (July 1, 1977 through June 30, 1978, Brasilia). Activity ILSB.116
7. Coordination of the IICA/EMBRAPA agreement (July 1, 1977 through June 30, 1978, Brasilia). Activity ILSB.117



8. Advisory services provided on the general programming and coordination developed within the IICA/CECPLAC Agreement (July 1, 1977 through June 30, 1978, Itabuna). Activity III.SB.121
9. Formation and conservation of basic genetic resources (July 1, 1977 through June 30, 1978, Amazonia). Activity III.SB.123
10. Use of Genetic resources for establishing crops (July 1, 1977 through June 30, 1978, Amazonia). Activity III.SB.124
11. Fundamental and applied research on subjects related to breeding processes (July 1, 1977 through June 30, 1978, Itabuna). Activity III.SB.125
12. Technical cooperation provided on strengthening the bean research program (July 1, 1977 through June 30, 1978, Goiania). Activity III.SB.131
13. Technical cooperation provided on strengthening the cassava research program (July 1, 1977 through June 30, 1978). Activity III.SB.132
14. Technical cooperation provided on strengthening the cotton research program (July 1, 1977 through June 30, 1978). Activity III.SB.133
15. Technical cooperation provided on strengthening the corn/sorghum research program (July 1, 1977 through June 30, 1978). Activity III.SB.134
16. Technical cooperation provided on strengthening the rice research program (July 1, 1977 through June 30, 1978). Activity III.SB.135
17. Technical cooperation provided on strengthening the rubber research program (July 1, 1977 through June 30, 1978). Activity III.SB.136
18. Technical cooperation provided on strengthening the beef cattle research program (July 1, 1977 through June 30, 1978). Activity III.SB.137
19. Technical cooperation provided on strengthening the dairy cattle research program (July 1, 1977 through June 30, 1978). Activity III.SB.138
20. Technical cooperation provided on strengthening the sheep/goat research program (July 1, 1977 through June 30, 1978). Activity III.SB.139
21. Technical cooperation provided on strengthening the production systems program for the Cerrado region (July 1, 1977 through June 30, 1978). Activity III.SB.1310
22. Technical cooperation provided on strengthening the production systems program for the North-east region (July 1, 1977 through June 30, 1978, Perolina, Per.). Activity III.SB.1311

23. Technical cooperation provided on strengthening the production systems program for the humid tropic region (July 1, 1977 through June 30, 1978, Belem). Activity III.SB.1312
24. Coordination of the IICA/EMBRAPA Agreement (July 1, 1977 through June 30, 1978, Brasilia). Activity III.SB.1313

#### **Line IV: Agricultural Production, Productivity and Marketing**

1. Advisory services provided EMBRATER related with the implementation of a reciprocal training program in technical assistance and rural extension (July 1, 1977 through June 30, 1978). Activity IV.SB.111
2. Advisory services provided EMBRATER on the organization of producers in associative enterprises (July 1, 1977 through June 30, 1978). Activity IV.SB.112
3. Support provided on EMBRATER participation on the implementation of a National Supply Policy (July 1, 1977 through June 30, 1978, Brasilia). Activity IV.SB.114
4. Fostering better marketing information (July 1, 1977 through June 30, 1978). Activity IV.SB.211
5. Definition of a strategy to improve rural marketing systems so as to raise the income of small producers (July 1, 1977 through June 30, 1978). Activity IV.SB.213
6. Administrative organization of the demonstration irrigated district of San Desiderio (July 1, 1977 through June 30, 1978, Barreiras, Ba.). Activity IV.XSB.251
7. Production, technical assistance and marketing programming for the irrigated district of San Desiderio (July 1, 1977 through June 30, 1978, Barreiras, Ba.). Activity IV.XSB.252
8. Organization and consolidation of the cooperative production and marketing enterprise (July 1, 1977 through June 30, 1978, Barreiras, Ba.). Activity IV.XSB.253
9. Formulation and getting underway of a system to monitor supervise and evaluate the development of the San Desiderio District (July 1, 1977 through June 30, 1978, Barreiras, Ba.). Activity IV.XSB.254
10. Definition and details of an operational marketing model for the implementation of agroindustries in the San Francisco Valley (July 1, 1977 through June 30, 1978, San Salvador). Activity IV.XSB.255

#### **Line V: Rural Regional Development**

1. Advisory services provided on the coordination of the agreement on preparing an agricultural development program in the cacao region of Bahia (July 1, 1977 through June 30, 1978, Itabuna, Ba.). Activity V.SB.111

2. Provision of advisory services on the analysis of the socioeconomic and natural resources study in the cacao region of Bahia (July 1, 1977 through June 30, 1978, Itabuna, Ba.). Activity V.SB.112
3. Advisory services provided on the identification of sectoral problems (October 1, 1977 through December 31, 1977, Itabuna, Ba.). Activity V.SB.113
4. Advisory services provided on criteria formulation for identification of priority areas and projects (April 1, 1977 through June 30, 1978, Itabuna, Ba.). Activity V.SB.115
5. Advisory services provided on the executive coordination of PII-RS project (July 1, 1977 through June 30, 1978, Pôrto Alegre, RS.). Activity V.SB.121
6. Advisory services provided on the formulation and presentation of agricultural policy alternatives (July 1, 1977 through June 30, 1978, Pôrto Alegre, RS). Activity V.SB.122
7. Advisory services provided on a comparative analysis of differentiated agricultural policies (August 1, through September 30, 1977 Pôrto Alegre, RS). Activity V.SB.123
8. Advisory services provided on the integration of PII-RS to the national agriculture planning system (July 1, 1977 through June 30, 1978, Pôrto Alegre, RS.). Activity V.SB.125
9. Advisory services provided for the proposal of adequated sectoral planning mechanisms to assure compatibility with the overall state-level planning (January 1, through June 30, 1978, Pôrto Alegre, RS.). Activity V.SB.126
10. Description of a regional agricultural planning methodology for PII-RS. (July 1, 1977 through June 30, 1978, Pôrto Alegre, RS.). Activity V.SB.129
11. Advisory services provided the central coordination team and the interinstitutional consultative group of the cooperative program (July 1, 1977 through June 30, 1978, Recife, Per.). Activity V.SB.211
12. Collaboration provided CODEVASF, DNOCS, and SUDENE on a diagnostic study of professional training (July 1, 1977 through June 30, 1978, Recife, Pe.). Activity V.SB.212
13. Support provided on the organization of the SUDENE, DNOCS and CODEFASF training departments and their annual work plans (July 1, 1977 through June 30, 1978, Recife). Activity V.SB.212
14. Support provided on a plan to up-grade the SUDENE, CODEVASF and DNOCS training department technicians, together with a university (July 1, 1977 through June 30, 1978, Brasilia DF). Activity V.SB.2111
15. Collaboration provided on a diagnostic study of the planning sector in SUDENE, CODEVASF and DNOCS (July 1, 1977 through June 30, 1978). Activity V.SB.215
16. Advisory services provided on the generation and perfecting of methodologies for the elaboration, analysis and evaluation of appropriate projects, in line with the physical, human and economic resources of each area (January through June, 1978, Brasilia, D.F.). Activity V.SB.216
17. Support provided on the formulation, accomplishment and evaluation of the planning units of CODEVASF, DNOCS and SUDENE (March 1978, Juazeiro, Ba.). Activity V.SB.217
18. Collaboration provided on the elaboration of a manual for the operation and conservation of irrigated areas (July 1, 1977 through June 30, 1978, Brasilia, D.F.). Activity V.SB.2111
19. Support provided on the installation of four experimental fields at agronomy faculties in the North-East (July 1, 1977 through June 30, 1978, Recife, Areia.). Activity V.SB.2114
20. Collaboration provided on the reformulation of curriculum and teaching methods in irrigation, in five agronomy faculties in the North-East (July 1, 1977 through June 30, 1978, Recife, Areia). Activity V.SB.2114
21. Support provided on in-service training for graduate students from the agronomy faculties in the North-East (July 1, 1977 through June 30, 1978, Recife, Areia). Activity V.SB.2116
22. Course on irrigation for recently graduated technicians (August 10, 1977, Areia, P.B.). Activity V.SB.2117
23. Collaboration provided on an initial training course (May 29, through June 2, 1978, Juazeiro, Ba.). Activity V.SB.2118
24. Coordination provided on available resources and a search for new ones to prepare FAMEF land for training, research and technology demonstration in irrigated agriculture (July 1, 1977 through June 30, 1978, Juazeiro, Ba.). Activity V.SB.221
25. Collaboration and advisory services provided on the formulation of an integral academic development project for FAMESF (July 1, 1977 through June 30, 1978, Juazeiro, Ba.). Activity V.SB.222
26. Institutional support provided on the preparation and implementation of an integrated rural development project (July 1, 1977 through June 30, 1978). Activity V.SB.233
27. Subsidy on the formulation of the general work program for IICA/CODEVASF agreement (June 1, 30, 1978, Rio de Janeiro). Activity V.SB.234
28. Collaboration provided on the supervision of the training of technicians to work on the first 12 nuclei of the Sertanejo Project (July 1, 1977 through June 30, 1978, Recife, Pe.). Activity V.SB.241

29. Collaboration provided the Sertanejo Project on training its first 12 "core" managers (July 1, 1977 through June 30, 1978, Recife, Pe.). Activity V.SB.242
  30. Support provided to evaluate a seminar on training technicians for the first 12 nuclei of the Sertanejo Project (June 23-26, 1978, Fortaleza, CE.). Activity V.SB.243
  31. Collaboration provided on programming and training technicians for the 14 contemplated nuclei for the Sertanejo Project in the second year (July 1, 1977 through June 30, 1978, Fortaleza, Ce.). Activity V.SB.244
  32. Compiling bibliographic information on the semi-arid North-East (April through June, 1978, Recife). Activity V.SB.247
  33. Cooperation provided on the formulation of a program for the implementation and operation of nuclei and on the selection of areas (May through June, 1978, Recife). Activity V.SB.248
  34. Organization of a system to evaluate the operation of the nuclei (May through June, 1978, Recife). Activity V.SB.249
  35. Formulation of the 1978/79 monitoring program (April through June, 1978, Recife). Activity V.SB.2410
  36. Teachers Training in Agricultural sciences (July 1, 1977 through February 28, 1978, Belo Horizonte, MG.). Activity V.SB.311
  37. Collaboration provided with the World Bank on ecological studies of the Brazilian Amazon (July 3, 1977 through June 30, 1978, Brasilia, Amazonia). Activity V.SB.312
  38. Technical assistance provided on the natural resources conservation programs for the Brazilian Amazon (July 1, through June 30, 1978, Amazonia). Activity V.SB.313
  39. National Coordination Committee (July 1, 1977 through June 30, 1978, Amazonia). Activity V.SB.313
  40. Multinational course in training in integrated production systems (May 15-25, 1978). Activity V.SB.322
- Line VII: Formulation and Administration of Agricultural Policy**
1. Advisory services provided on the elaboration of preliminary documents to modify the medium-term plans (July 1, 1977 through June 30, 1978, Brasilia). Activity VII.SB.111
  2. Advisory services provided on the elaboration of a production and supply program (July 1, 1977 through June 30, 1978). Activity VII.SB.112
  3. Advisory services provided on the establishment of methodologies to analyze the impact of the different policies on low income producers (April 17, through June 30, 1978). Activity VII.SB.113
  4. Support provided consultants on the elaboration of the respective documents (January 18, through April 30, 1978, Brasilia). Activity VII.SB.114
  5. Collaboration provided on holding meetings for the elaboration of medium-term plans for agricultural projects (July 1, 1977 through June 30, 1978, Brasilia). Activity VII.SB.116
  6. Support provided on the elaboration of a program to exchange experiences in agricultural planning at the continental (Latin American) level (July 1, 1977 through June 30, 1978, Brasilia). Activity VII.SB.117
  7. Coordination of the IICA-SUPLAN Agreement (January 18 through June 30, 1978 Brasilia). Activity VII.SB.118
  8. Coordination of SUPLAN (July 1, 1977 through June 30, 1978, Brasilia). Activity VII.SB.119
  9. Course on the preparation and evaluation of agricultural projects (February 10 through May 15, 1978, Ceará). Activity VII.SZ.113
  10. Course on the preparation and evaluation of Agricultural Development Projects (November 7, 1977 through February 4, 1978, Goiania, Zoiás). Activity VII.SZ.114

## COLOMBIA

### Line I: Information and Documentation on Rural Development

1. Training in automated library and bibliographic services (July 1, 1977 through June 30, 1978, Bogota). Activity I.AZ.211
2. Support provided for the participation of Colombia in AGRINTER (July 1, 1977 through June 30, 1978, Bogota). Activity I.AZ.211

### Line II: Education on Rural Development

1. Advisory services provided SENA on the structuring of personnel training units in rural development and "campesino" organization (July 1, 1977 through June 30, 1978, Bogota). Activity II.AC.211
2. Advisory services provided SENA on the elaboration of methodological guidelines for training personnel in rural development and "campesino" organization July through December 1977, Bogota). Activity II.AC.212
3. Advisory services provided SENA on the elaboration of a five-year personnel training program in rural development and "campesino" organization (July through December 1977, Bogota). Activity II.AC.213
4. Collaboration provided on organizing and giving three courses on rural development and "campesino" organization for "campesino" enterprise directors and instructors for SENA

- (August 1977 through February 1978, Bucaramanga and Manizales). Activity II.AC.214
5. Collaboration provided on organizing three courses on marketing and farm planning in "campesino" training enterprises (CEC) for SENA instructors (September through November, 1977). Activity II.AC.215
  6. Seminar-Course on Research-Action (October 3-7, 1977, Bogota). Activity II.AC.216
  7. Course on Communications and Extension (August 16-27, 1977, Medellin Antioquia). Activity II.AC.222
  8. Course on Communication Techniques (November 14-25, 1977, Restrepo, Valle). Activity II.AC.223
  9. Second Course in Education Psychology (October 5-7, 1977, Restrepo, Valle). Activity II.AC.224
  10. Psychopedagogic research to establish training curriculum for Colombian agricultural extensionists (July 1, 1977 through June 30, 1978, Bogota, Medellin). Activity II.AC.225
  11. Course on Agricultural Marketing (August 22 through September 2, 1977, Bogota). Activity II.AC.227
  12. Training Course in the Dynamics of Associative and Rural Extension Groups (July 11-19, 1977, Bogota). Activity II.AC.2213
  13. Course on Agricultural Marketing (July 4-15, 1977, Medellin). Activity II.AC.2214
  14. Course on Communications and Extension (August 29 through September 9, 1977, Bogota). Activity II.AC.2215
  15. Support provided ICFES— Seminar Workshop on Teaching Strategies for Technological Education Teachers (September 15-17, 1977, Bogota). Activity II.AC.2216a
  16. Training Course on the Dynamics of Associative Groups and Rural Extension (July 11-19, 1977, Bogota). Activity II.AC.2216b
  18. Course on Teaching Methodologies for Higher Education (November 28 through December 7, 1977, Bogota). Activity II.AC.2218
  19. Course on Grain Laboratory Techniques (November 21, through December 2, 1977, Bogota). Activity II.AC.2219
  20. Course on Rural Administration (November 28, through December 9, 1977, Bogota). Activity II.AC.2220
  21. Course on Rural and Financial Administration (November 28, through December 9, 1977, Bogota). Activity II.AC.2221
  22. Support provided ICBF on a methodology for technical assistance (December 12-13, 1977, Bogota). Activity II.AC.2222
  23. Course on agricultural marketing (August 22 through September 2, 1977, Bogota). Activity II.ZC.2222a
  24. Course in Grain Laboratories Techniques (February 20 through April 7, 1978, Bogota). Activity II.AC.2226
  25. Course on Silo Administration (May 15 through June 16, 1978). Activity II.AC.2227
  26. Course for agricultural product purchasers (June 6 through July 19, Bogota). Activity II.AC.2233
  27. Support provided on up-grading teaching levels. A visit to CIAT's Information and Audiovisual Aids Center (May 28 through June 3, 1978, Cali). Activity II.NM.211b
- Line III: Agricultural Research and the Transfer of Technology**
1. Integration and comparative analysis of the institutional models on generation-transfer of technology in selected countries (July 1, 1977 through June 30, 1978, Bogota). Activity III.AC.111
  2. Development of a methodology for case studies and its application (July 1, 1977 through June 30, 1978, Bogota). Activity III.AC.111
  3. Seminar on the Methodological Discussion and Coordination of Activities with participant teams (September 12-14, 1977, Bogota). Activity III.AC.119
  4. Reciprocal training in planning agricultural research (November 1977, Bogota). Activity III.AV.116
- Line V: Rural Regional Development**
1. Specialized documentation and information services on rural development (July 1, 1977 through June 30, 1978, Bogota). Activity V.AC.111
  2. Colombian Bibliography on rural development (July 1, 1977 through June 30, 1978, Bogota). Activity V.AC.112
  3. Analysis of rural development programs and areas of rural development concentration in Colombia (July 1, 1977 through June 30, 1978, Bogota). Activity V.AC.113
  4. Program Report on the integrated rural development program (July 1, 1977 through June 30, 1978, Pasto and Cali). Activity V.AC.114
  5. Application of research to the technological production process (July 1, 1977 through June 30, 1978, Pasto and Cali). Activity V.AC.123
  6. Support provided on the analysis of the marketing and agroindustry situation in traditional agriculture areas (July 1, 1977 through June 30, 1978, Department of Nariño). Activity V.AC.124

7. Support provided on research into small farmers production (August 20 through November 25, 1977). Activity V.AC.127
8. Course on the formulation and evaluation of the agriculture marketing analysis of traditional agriculture areas (October 1977 through June 1978). Activity V.AP.128
9. Collaboration provided on three courses in the organization of "campesino" community enterprises for "campesino" enterprise instructors, of the CEC and technical instructors for the mobile rural program (March and May, 1978, Cucuta and Anolaima). Activity V.AC.133
10. Institutional study of the public agricultural sector (February through June, 1978, Bogota). Activity V.AC.145
11. Internal regional meeting on the IICA-TROPICOS Program (July 1, 1978 through June 30, 1978, Bogota). Activity V.AC.311
12. Support provided on the institutionalization of the IICA-TROPICOS Program (July 1, 1977 through June 30, 1978). Activity V.AC.312
13. Techno-professional Training (April 13 through May 13, 1978). Activity V.XAE.322

**Line VI: Structural Change and "Campesino" Organization**

1. Compiling, analysis, publication and diffusion of information for national legal institutions and instruments in agrarian reform with emphasis on "campesino" associative enterprises (July 1, 1977 through June 30, 1978, Bogota). Activity VI.AC.115
2. Collaboration provided in the training of INCORA functionaries responsible for associative forms of production (July through December, 1977, Bogota). Activity VI.AC.211
3. Elaboration of criteria to determine the organization methods for associative forms of productions, as a function of the specific characteristics on each region (August through November, 1977). Activity VI.AC.213
4. In-service training in agrarian reform planning (June 18-28, Bogota). Activity VI.AV.112
5. Evaluation of rural development strategies in Latin America (September 1977 through March 1978). Activity VI.AZ.221
6. Publication and diffusion of results of the analysis of rural development strategies in Latin America (March through June 1978, Bogota). Activity VI.AZ.222
7. Specialized bibliography services on rural development for Latin America and the Caribbean (July 1, 1977 through June 30, 1978, Bogota). Activity VI.AZ.224

**Line VII: Formulation and Administration of Agricultural Policy**

1. Up-dating and analysis of information on the evaluation of agriculture and the institutions in the Colombian agricultural sector (July 1, 1977 through June 30, 1978, Bogota). Activity VII.AC.211
2. Elaboration of country-level action plans (July 1, 1977 through June 30, 1978, Bogota). Activity VII.AC.312
3. Institutional analysis of the linkage of the Animal Husbandry Program Unit (UPG) and the public and private sectoral entities (July 1, 1977 through June 30, 1978, Bogota). Activity VII.AC.313

**COSTA RICA**

**Line I: Information and Documentation on Rural Development**

1. Collaboration with the National Coordination Committee on the Agricultural Information Program for the Central American Isthmus (PIADIC) (July 1, 1977 through June 30, 1978). Activity I.NCR.311
2. Provision of Advisory Services to the agricultural research agencies on the standardization of design and reports on technological results. (July 1, 1977 through June 30, 1978). Activity I.NCR.313
3. Provision of advisory and training services to the agricultural agencies; to improve and strengthen documentation centers and structure a Data Bank. (July 1, 1977 through June 30, 1978). Activity I.NCR.315
4. Collaboration provided the Census and Statistics Office on the regional planning and coordination of the 1980 agricultural census. (July 1, 1977 through June 30, 1978). Activity I.NCR.317
5. Advisory services and collaboration provided on the establishment of a national marketing information system. (July 1, 1977 through June 30, 1978). Activity I.NCR.319
6. Joint Meeting of the PIADIC advisory committees (August 22-24, 1977). Activity I.NZ.314
7. Joint Meeting of CCSR and CRIA (March 30 of 31, 1978, San Jose). Activity I.NZ.316
8. Continuous revision and-improvement of the manuals and guides for the Central American Isthmus agricultural information system. (July 1, 1977 through June 30, 1978, San Jose). Activity I.NZ.317
9. Training in Inter-American Agricultural Information System (AGRINTER) Methodology and Operations (April 4-30, 1978, San Jose). Activity I.AV.113
10. Coordination and supervision of Input/output operations of the AGRINTER and AGRIS systems. (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.113

11. IX Round-table on the Implementation and Coordination of AGRINTER (April, 1978, San Jose). Activity I.D.114
12. A training plan for Line I personnel in the country offices. (July 1 through September 30, 1977, San Jose). Activity I.D.115
13. Preparation of a generic model of the Course on the Administration of Information Systems (February through April 1978, San Jose). Activity I.D.117
14. XXI International Course on Agricultural Documentation: the Administration of Information Systems (April 1978, San Jose). Activity I.D.119
15. V Inter-American Meeting of Agricultural Librarians and Documentalists. (V RIBDA) (April 10-14, 1978, San Jose). Activity I.D.1111
16. Course on organizing "Specialized Information Centers" (March 1 through June 30, 1978, San Jose). Activity I.D.1115
17. Documentation Course, University of Costa Rica (February 28 through June 4, 1978, San Jose). I.D.1116
18. Participation in the I National Congress of Library Science, Documentation and Information" (November, 1978, San Jose). Activity I.D.1117
19. Fostering interest in the AGRINTER System and utilization of the "Agricultural Index for Latin America and the Caribbean" (March 1978, San Jose). Activity I.D.1118
20. Identification and retrieval of a minimum of at least 13,000 documents on Latin America and the Caribbean (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.121
21. Selection of Latin American and Caribbean documents (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.122
22. Categorization, translation, enrichment of titles, and indexing of a minimum of 13,000 current documents on Latin America and the Caribbean (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.123
23. Bibliographic Description of a minimum of 13,000 current documents from Latin America and the Caribbean (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.124
24. Conversion of a minimum of 13,000 inputs into machine-readable format (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.125
25. Production and reproduction of magnetic tapes on AGRINTER base data (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.126
26. Publication of listed bibliographic references, subject indexes, and author indexes (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.127
27. Generation, up-dating and improving computerized "normative" programs for the AGRINTER and AGRIS input/output operation (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.128
28. Revision, up-dating and publication of title-enrichment regulations (April 24, 1978, San Jose). Activity I.D.1213
29. Publication of the "Agricultural Vocabulary in Spanish" (July 1977 through February 1978, Turrialba). Activity I.D.1214
30. Coordination and implementation of the Latin American agricultural bibliographies Data Bank (July 1, 1977 through June 30, 1978, Turrialba). Activity I.D.1215
31. Publication of a catalog of the bibliographies available in the Latin American and Caribbean Agricultural Bibliography Data Bank (July through September 1977, Turrialba). Activity I.D.1216
32. Compiling and Publishing a catalog of periodic publications available at CIDIA (July 1977 through March 1978, Turrialba). Activity I.D.1217
33. Distribution of the AGRINTER input/output manuals according to national needs (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.1218
34. Upgrading sessions for librarians, documentalists and agricultural information specialists (July 1, 1977 through June 30, 1978, San Jose, Turrialba). Activity I.D.1219
35. Formulation of a key list of useful references for AGRIS/AGRINTER input processing (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.1220
36. Installation of ISIS (Integrated Set of Information Systems) software at the Technological Institute of Costa Rica (January 16 through February 24, 1978, Cartago). Activity I.D.1221
37. Publication and Distribution of Specialized Bibliographies on the introduction to subjects requested specifically by researchers, teachers, students, farmers and general information users (July 1, 1977 through June 30 1978, Turrialba). Activity I.D.132
38. Publication of Bibliographies of Interest for the Tropics (July 1, 1977 through June 30, 1978, Turrialba). Activity I.D.132
39. Preparation and Publication of a Bibliography on the Coffee Rust Disease (July through August, 1977, Turrialba). Activity I.D.133
40. Preparation and Publication of "IICA's Contributions to Literature in the Agricultural Sciences" (July through October 1977, Turrialba). Activity I.D.134
41. Publication of the Agricultural Index for Latin America and the Caribbean, Vol. 12 nos. 3-4 and Vol. 13, nos. 1-2 (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.135

42. Dissemination of Documents by means of Photo and other copying systems (July 1, 1977 through June 30, 1978, Turrialba). Activity I.D.136
43. Preparation and Dissemination of the Alert Services in Agronomy, Forestry and Tropical Animal Husbandry (July 1, 1977 through June 30, 1978, Turrialba). Activity I.D.139
44. Publication of the Bulletin "Development of the American Tropics" (July 1, 1977 through June 30, 1978, Turrialba). Activity I.D.1310
45. Documentation and Information for Agricultural Development (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.1311
46. Organization and operation of the Library and Services Terminal (July 1, 1977 through June 30, 1978, Turrialba). Activity I.D.1314
47. Organization and operation of the specialized planning and development library (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.1315
48. Elaborating a Structural and Organizational plan for an AGRINTER Services Network and a draft Agreement to engage the countries' participation (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.141
49. Organize a meeting with the staff from presumably participant countries for a final revision and signature of the Agreement (July 1, 1977 through June 30, 1978, San Jose). Activity I.D.143
50. Fostering interest in Network Services; how it works, advantages, purposes and the agreement governing its functions (January 1, through June 30, 1978, San Jose). Activity I.D.146
51. Production, publication and distribution of an information bulletin on network services provided users (February 1-28, 1978, San Jose). Activity I.D.145
52. Participation in the "Special AGRINTER Round-Table Meeting on Network Services". (September 1977 through April, 1978, San Jose). Activity I.D.146
53. Workshop and coordination of IICA's Line of Action I (November 21, 22, and 25, 1977, San Jose). Activity I.D.147
54. Information Sciences Bibliography (IICA Contribution) (April through June 1978, Turrialba). Activity I.D.

## **Line II: Education for Rural Development**

1. Organization of a technical group to provide support to the permanent agricultural sciences commission; basic study reports and preparation of an agricultural education development plan (January through June 1978, San Jose). Activity II.NCR.111

2. Teachers trained in specific areas (January through March, 1978). Activity II.NES.212
3. Collaboration provided the rural education sub-system agencies by training planning staff (May 25, a June 4, 1977, Heredia). Activity II.AE.113
4. Preparation of the document "Bases for the creation of an Inter-American Rural Youth Fund" (December, 1977 through January 1978, San Jose). Activity II.NCR.
5. Basis for a project to train the staff working in Latin American rural youth programs. Strengthening the Inter-American Rural Youth Secretariat (October through November 1977, San Jose). Activity II.NCR.
6. Collaboration provided the Programming and Studies Unit of the Ministry of Culture, Youth and Sports in preparing a National Youth Enterprise Program (November 1977, San Jose). Activity II.NCR.
7. Inter-American Meeting of Directors of National Rural Youth Programs (December 1977, San Jose). Activity II.NCR.
8. Provision of support to the Youth Enterprises Program of the Ministry of Culture, Youth and Sports (November, 1977). Activity II.NCR.

## **Line III: Agricultural Research and Transfer, Technology**

1. Training in communications (April 1978, San Jose). Activity III.AB.118
2. Training of two technicians in agricultural production systems for small farmers (March 27-31, Turrialba). Activity III.AE.112

## **Line IV: Agricultural Production, Productivity and Marketing**

1. Advisory Services provided the National Production Council in studies leading to project and policy definition (July 1, 1977 through June 1978, San Jose). Activity IV.NCR.211
2. Collaboration provided ITCO on its marketing program (July 1, 1977 through June 1978). Activity IV.NCR.212
3. Cooperation provided on sectoral planning activities in marketing (July 1, 1977 through June 30, 1978, San Jose). Activity IV.NCR.214
4. Marketing Course for ITCO Technicians (June 19-24, San Jose). Activity IV.NCR.214

## **Line V: Regional Rural Development**

1. Final stage in the preparation of the research, training and final irrigation design program at the Enrique Jimenez Nuñez Experiment Station. Advisory Services getting underway (July 1, 1977 through June 30, 1978, San Jose). Activity V.NCR.211
2. Advisory services provided for the irrigation of 60 Has at the Enrique Jimenez Nuñez Experiment Station (March through June, 1978, Guanacaste). Activity V.NCR.214

**Line VI: Structural Change and "Campesino" Organization**

1. Cooperation provided the "campesino" training and organization program (July 1, 1977 through June 30, 1978). Activity VI.NCR.112
2. Line VI Meeting and Seminar on the Evaluation of Experimental Laboratories in "Campesino" Enterprise Organization (December 12-16, 1977, San Jose). Activity VI.NH.215
3. Experimental Laboratory on the Entrepreneurial organization of "Campesinos" (September 1977, Heredia). Activity VI.NZ.112a
4. Seminar on the Analysis and Evaluation of Experimental Laboratories (December 12-16, 1977, San Jose). Activity VI.NZ.114
5. Provision of support on the use of methodologies in "campesino" training at the project level (December 11 through December 16, 1977, San Jose). Activity VI.AC.212

**Line VII: Formulation and Administration of Agricultural Policy**

1. Collaboration provided OPSA on the conclusion, discussion, and publication of the agricultural sectoral analysis (July 1, 1977 through June 30, 1978, San Jose). Activity VII.NCR.111
2. Collaboration provided OPSA on preparing a 1977-1978 pre-plan for agricultural development in Costa Rica (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.113
3. Collaboration provided OPSA on preparing the 1978 annual operative program for the agricultural sector (July 1, 1977 through June 30, 1978, San José)
4. Design of project formulation and evaluation methodologies for the public agricultural sector (January through March 1978). Activity VII.XNC.116
5. Collaboration provided OPSA on the analysis and testing of the designed methodology, with national sectoral agencies (January through June 1978). Activity VII.XNC.117
6. Collaboration provided OPSA on the identification of investment projects in the agricultural sector (January through June 1978). Activity VII.XNC.118
7. Collaboration provided on the preparation of specific projects (January through June 1978). Activity VII.XNC.119
8. Collaboration provided OPSA and SIPSA on project supervision (January through June 1978). Activity VII.XNC.1110
9. Revision and up-dating of the institutional analysis of the public agricultural sector (July through October, 1977, San Jose). Activity VII.XNC.1111
10. Discussion on diagnosis and problem identification (August through December, 1977, San Jose). Activity VII.XNC.1112

11. Design and preparation of institutional projects for the sector (January through March, 1978, San Jose). Activity VII.XNC.1113
12. Meeting of specialists on institutional aspects of the agricultural sector (November 1977, San Jose). Activity VII.XNC.1114
13. Preparation of national training program for the public agricultural sector (October through December, 1977, San Jose). Activity VII.XNC.1116
14. Technical cooperation provided planning units of the public agricultural sector (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.1117
15. Provision of support to OPSA's administration (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.1118
16. Training of OPSA and SIPSA personnel (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.1119
17. Preparing the 1978 annual operative plan of the Ministry of Agriculture and Animal Husbandry (July through August 1977, San Jose). Activity VII.XNC.1120
18. Cooperation provided OPSA and the MAG Fisheries Office, in the elaboration of an integral analysis of the fisheries sub-sector (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.1121
19. Evaluation of the impact of goals and policies of the 1978-82 national development plan for the agricultural sector (August 1977, 1978, San Jose). Activity VII.XNC.1122
20. Cooperation provided OPSA on the identification of main sectoral problems programs and projects at regional levels (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.1123
21. Cooperation provided OPSA and the OAS-OFIPLAN Agreement on preparing an agricultural diagnosis of the Atlantic area (July 1, 1977 through June 30, 1978, San Jose, and Limon). Activity VII.XNC.1124
22. Cooperation provided OFIPLAN on the structuring and formulation of the forestry development program (January through March, 1978). Activity VII.XNC.1126
23. Cooperation provided OPSA on the identification of agricultural technology problems of the country and on formulating solutions (July 1, 1977 through June 30, 1978, San Jose). Activity VII.XNC.1127

**CHILE**

**Line I: Information and Documentation on Rural Development**

1. Support provided on the activities and publication of the national agricultural and forestry information sub-system (July 1, 1977 through June 30, 1978, Santiago). Activity I.SC.111



2. Course on perfecting agricultural and forestry information for librarians from national sub-system units. Training scholarships provided (July 1, 1977 through June 30, 1978, Santiago). Activity I.SC.112

#### **Line II: Education for Rural Development**

1. Support provided on the functioning of the Agricultural Education Coordination Committee in Chile and collaboration on the development of its activities (July 1, 1977 through June 30, 1978, Santiago). Activity II.SC.111
2. Continued support provided on the functioning of the Agricultural and Forestry Committee on the provision of advisory services to the Agricultural Education Sub-system at the University level (July 1, 1977 through June 30, 1978). Activity II.SC.211
3. Strengthening the technical, middle-level agricultural education sub-system in support of the development of staff training and follow-up projects (July 1, 1977 through June 30, 1978). Activity II.SC.212
4. Intensification of relations between the Agricultural Education Sub-system agencies and their linkage with the rural milieu (July 1, 1977 through June 30, 1978). Activity II.SC.213
5. Advisory services and support provided on the Coordination of the Permanent Postgraduate Program during the process of transfer (July 1, 1977 through June 30, 1978, Santiago). Activity II.SC.221
6. Continued support on improving postgraduate courses (July 1, 1977 through June 30, 1978). Activity II.SC.222
7. Advisory services provided the Postgraduate Program Executive Committee on the organization of seminars and conferences on the relation of postgraduate studies and national problems and fostering the participation of other agencies (July 1, 1977 through June 30, 1978, Santiago). Activity II.SC.223
8. Encouraging curricula planning, especially including evaluation as a follow-up on former seminars emphasizing the final objectives of rural development (December 1-30, 1977, Codegua). Activity II.SC.224
9. Advisory services provided the Teaching Support Unit at the Faculty of Veterinary Sciences (July 1, 1977 through June 30, 1978, Santiago). Activity II.SP.217

#### **Line V: Regional Rural Development**

1. Formulation, application and methodologies for the determination and selection of development areas and pertinent planning and participation (July 1, 1977 through June 30, 1978). Activity V.SC.111
2. Formulation, application and dissemination of methodologies on the preparation, implementation, management or administration of projects (July 1, 1977 through June 30, 1978). Activity V.SC.112
3. Support and advisory services provided the Executive Secretariat of the National Irrigation Committee on the organization and structuring of districts for the conserva-

tion and management of lands and water (July 1 through December 3, 1977, Santiago). Activity V.SC.211

4. Training cycle for middle-level technical personnel from the land and water conservation and management districts (November through December, 1977). Activity V.SC.213
5. Support provided on the consolidation and development of the Digua-Parral Pilot District (July through December, 1977). Activity V.SC.214
6. Advisory services provided the national committee in charge of revising the preliminary draft of the Legal Decree on the conservation of national renewable resources (July 1, 1977 through June 30, 1978, Santiago). Activity V.SC.215
7. Agro-socio-economic studies (July 31 through November 30, 1977, Santiago). Activity V.XSC.211
8. Design and getting a program underway to relate the San Fernando Agricultural School with the community in its area of influence (March 1 through June 30, 1978, Santiago). Activity V.XSC.221

#### **Line VI: Structural Changes and "Campesino" Organization**

1. Second Meeting of the Advisory Council of the Cooperative Regional Agrarian Reform and Colonization Program (December, 1977, Santiago). Activity VI.SZ.115

#### **Line VII: Formulation and Administration of Agricultural Policy**

1. Analysis and trend of the institutional, forestry and agricultural sector responsible for rural development in Chile (July 1, 1977 through June 30, 1978, Santiago). Activity VII.SC.311
2. Revision of IICA's Action Plan in Chile (July 1, 1977 through June 30, 1978, Santiago). Activity VII.SC.312
3. Reciprocal Training in Statistics for Planning and Agricultural Policies (participation of two technicians from MAC-Venezuela) (April 3-12, 1978, Santiago). Activity VII.AV.1110

### **DOMINICAN REPUBLIC**

#### **Line I: Information and Documentation on Rural Development**

1. Cooperation provided on the creation of a Documentation Center for the agricultural sector (July 1, 1977 through June 30, 1978, Santo Domingo). Activity I.LD.111

#### **Line II: Education for Rural Development**

1. Support provided CONACA on the organization of three regional workshops on training planning (November 21-25, 1977, Santiago). Activity II.LD.211

2. Support provided on the development of "campesino" training methodologies (July 1, 1977 through June 30, 1978). Activity II.LD.213

### **Line III: Agricultural Research and the Transfer of Technology**

1. Support and follow-up on the action undertaken in compliance with the General Advisory Plan of the IICA/SEA/FEDA (PIDAGRO) Agreement (July 1, 1977 through June 30, 1978, San Cristóbal). Activity III.LD.111
2. Administration and management of technical resources financed with extra-Quotas for continued technical cooperation in the areas selected by SEIECA (July 1, 1977 through June 30, 1978, Santo Domingo and San Cristobal). Activity III.LD.112
3. Training for SEIECA and SEA technicians on procedures and use of required methods for planning the research and technology transfer sub-system (July 1, 1977 through June 30, 1978, Santo Domingo). Activity III.LD.113

### **Line IV: Agricultural Production, Productivity and Marketing**

1. Collaboration provided on the implementation of the national marketing plan (July 1, 1977 through June 30, 1978, Santo Domingo).
2. Collaboration provided on the implementation of the "Integrated Rural Services Centers" (CENSERI) project (July 1, 1977 through June 30, 1978, Santo Domingo). Activity IV.LD.212
3. Collaboration provided on the implementation of the project to reduce post-harvest losses (July 1, 1977 through June 30, 1978, Santo Domingo). Activity IV.LD.213
4. Advisory services provided on expanding the system to disseminate marketing and prices information (January through June, 1978, Santo Domingo). Activity IV.LD.214
5. Technical cooperation provided the Statistics Division Office (July 1, 1977 through June 30, 1978, Santo Domingo). Activity IV.LD.215
6. Organization of a seminar on reducing post-harvest losses in the Antilles Zone (August 8-11, 1977, Santo Domingo). Activity IV.LZ.211
7. Fostering interest in and financing a program to reduce post-harvest losses in the Antilles Zone, and getting it underway (August, 1977 through March, 1978, Santo Domingo). Activity IV.LZ.212

### **Line V: Regional Rural Development**

1. Institutional analysis of agencies concerned with management and conservation of land and waters (September through November, 1977, Santo Domingo). Activity V.LD.211

2. Diagnostic study of the land and waters management problem in the Dominican Republic (November 1977 through January 1978, Santo Domingo). Activity V.LD.212
3. Elaboration of a strategy proposal to assure institutional strengthening in the management and conservation of land and waters (January through June, 1978, Santo Domingo). Activity V.LD.213
4. Support provided on government activities concerning the management and conservation of land and waters resources (September, 1977 through June, 1978, Santo Domingo). Activity V.LD.214

### **Line VI: Structural Changes and "Campesino" Organization**

1. Advisory services provided the U.O.R. in social research and "campesino" self-management (August 1 through June 30, 1978, Santo Domingo). Activity VI.LD.211
2. Support provided on training promoters and the personnel in charge of rural organization aspects (July 1, 1977 through June 30, 1978, Santo Domingo). Activity VI.LD.212
3. Support provided on the preparation and dissemination of teaching material on "campesino" organization (October 17-21, 1977, Santo Domingo). Activity VI.LD.213

### **Line VII: Formulation and Administration of Agricultural Policy**

1. Cooperation provided SEAPLAN on the elaboration of sectoral and sub-sectoral plans and programs (September 5, 1977 through June 30, 1978, Santo Domingo). Activity VII.LD.121
2. Collaboration provided SEAPLAN on the preparation and evaluation of specific projects (September 5, 1977 through February 28, 1978, Santo Domingo). Activity VII.LD.122
3. Cooperation provided on strengthening regional planning mechanisms (May 1, through June 30, 1978, Santo Domingo). Activity VII.LD.123
4. Cooperation provided other agencies of the sector on improving planning mechanisms (March 1, through June 30, 1978, Santo Domingo). Activity VII.LD.123
5. Cooperation provided on training human resources from the sectoral planning system (September 5, 1977 through June 30, 1978, Santo Domingo). Activity VII.LD.215
6. Compiling and analysis of information on the rural sector and its institutions (July 1, 1977 through June 30, 1978, Santo Domingo). Activity VII.LD.311
7. Preparation of the country-level action plan and elaboration of policies and strategies for IICA's action in Dominican Republic (July 1, 1977 through June 30, 1978, Santo Domingo). Activity VII.LD.312

- Participation in the Regional Coordination Annual Programming Meeting (June, 1978, Santo Domingo). Activity VII.LH.213

## ECUADOR

### Line I: Information and Documentation on Rural Development

- Advisory services and training on administration and methodology provided the central agency and participants of the national agricultural information system (November 1977 through February 1978, Quito). Activity I.AE.111

### Line II: Education for Rural Development

- Support provided on expanding the planning system for agricultural and rural education (October through December 1977, Quito). Activity II.AE.111
- Planning and coordination meeting on rural and agricultural education in Ecuador (March 27-31, 1978, Ambato). Activity II.AE.112

### Line III: Agricultural Research and the Transfer of Technology

- Advisory services on production systems for farmers with limited resources (February 27 through March 1, 1978). Activity III.AE.111
- Support provided INIAP on a training course in coffee production aspects (March 6-17, 1978). Activity III.AE.113

### Line IV: Agricultural Production, Productivity and Marketing

- Technical Cooperation provided the Marketing Office and MAG agencies on defining marketing policies and assigning the basic programs in this area (July 1, 1977 through June 30, 1978, Quito). Activity IV.AE.211

### Line V: Regional Rural Development

- Support provided the agencies in charge of developing the American tropics on their programming systems (July 1, 1977 through June 30, 1978, Quito). Activity V.AE.311
- Support provided on the coordination of work done by the agencies in charge of developing the Tropics (August 1977 through June 1978). Activity V.AE.312
- Design and getting underway of mechanisms leading to up-dating, readjustment and accomplishment of the PIDA Quimiag-Penipe project (January 15, through April 15, 1978, Riobamba). Activity VX.AE.321
- Organization, management and support activities (January through June, 1978). Activity VX.AE.323
- Identification of Production Systems (June 1-30, 1978). Activity VX.AE.324

### Line VI: Structural Change and "Campesino" Organization

- A study of "campesino" associative enterprises (April 1 through June 30, 1978). Activity VI.AE.111

### Line VII: Formulation and Administration of Agricultural Policy

- Cooperation provided the MAG Planning Office in the area of formulating agricultural sectoral policies (July 1, 1977 through June 30, 1978, Quito). Activity VII.AE.111
- Cooperation provided the MAG Zonal Offices on strengthening their programming units (July 1, 1977 through June 30, 1978, Quito). Activity VII.AE.112
- Training in the Preparation of Agricultural Projects. PEPA Courses (July through December 1977, Quito). Activity VII.AE.113
- Support provided MAG on the implementation of work schedules, at operational levels (March 1978). Activity VII.AE.211
- Diagnosis of Ecuador's institutional and agricultural development systems (July 1, 1977 through June 30, 1978). Activity VII.AE.311

## EL SALVADOR

### Line I: Information and Documentation on Rural Development

- Support provided the National Agricultural Information System (July 1, 1977 through June 30, 1978). Activity I.NES.311
- Advisory services provided on the standardization of the design of agricultural research and the presentation of results (July 1, 1977 through June 30, 1978). Activity I.NES.312
- Advisory services provided on establishing a Data Bank (MAG) and Documentation Centers (July 1, 1977 through June 30, 1978). Activity I.NES.314
- Basic Course on Statistical Methods, with emphasis on the application of the sampling frame (November through December, 1977, San Salvador). Activity I.NES.315
- Course on Crop Forecasting Methodologies (September, 1977, San Salvador). Activity I.NES.316
- Advanced Course on Statistical Analysis with emphasis on the use of the sampling frame (February, 1978, San Salvador). Activity I.NES.317
- Advisory services provided on perfecting, testing and application of the sampling frame (July 1, 1977 through June 30, 1978). Activity I.NES.318

8. National Course on Marketing and Market Information (May, 1978, San Salvador). Activity I.NES.3110
9. Advisory services provided on the establishment of a Marketing Information System (July 1, 1977 through June 30, 1978, San Salvador). Activity I.NES.3111

**Line II: Education for Rural Development**

1. Advisory services and training provided UCA (Faculty of Agronomy Sciences) and ENA on curricular planning (December, 1977 through March, 1978). Activity IL.NES.211
2. Seminar-Workshop on the articulation, integration and development of agricultural education in San Salvador (January 24-25, San Salvador). Activity IL.NES.213
3. Course on Scientific Communication (May 8-12, 1978, San Salvador). Activity IL.NES.215

**Line III: Agricultural Research and the Transfer of Technology**

1. Collaboration provided on the publication of an information bulletin on "Pulses" (June, 1978). Activity IIL.NZ.213

**Line IV: Agricultural Production, Productivity and Marketing**

1. Advisory services provided the CENTA Research Division on the revision of the basic grains technological packages (August, 1977 through June, 1978). Activity IV.NES.111
2. Advisory services and training provided the CENTA Extension Office on up-grading mechanisms and instruments for the transfer and dissemination of technologies (March through June, 1978). Activity IV.NES.112
3. Advisory services provided the Coordinating Committee of the Technological Production Program in Basic Grains, on the design of coordination and administrative mechanisms and instruments for implementation purposes (March through June 1978). Activity IV.NES.113
4. Study of the basic grains situation in El Salvador (August 1977 through June 1978). Activity IV.NES.116
5. Cooperation provided CENTA on the programming and implementation of its institutional analysis (August 1977 through June 1978). Activity IV.NES.117

**Line VI: Structural Changes and "Campesino" Organization**

1. Advisory services provided ISTA and FOCCO projects on the preparation and implementation of production plans (August, 1977 through February, 1978). Activity VI.NES.111

**Line VII: Formulation and Administration of Agricultural Policy**

1. Advisory services provided FOCCO production projects on "campesino" organization (November 7-11, 1977). Activity VII.NES.111

2. Technical cooperation provided MINIPLAN and O'PSA on the identification of investment projects related to the 1978-1982 sectoral plan objectives (April through June, 1978). Activity VII.NES.112
3. Technical cooperation provided OSPA on the elaboration of annual operative plans (April, through June 1978). Activity VII.NES.115
4. Fostering the adoption and implementation of institutional analysis methodologies (August 1977 through June 1978). Activity VII.NES.115
5. Up-dating and analysis of basic information and reformulation of IICA's Action Plan El Salvador (July 1, 1977 through June 30, 1978). Activity VII.NES.311
6. Institutional Diagnosis of OPSA (October 1977 through February 1978). Activity VII.NES.313

**GUATEMALA**

**Line I: Information and Documentation on Rural Development**

1. Collaboration provided the National Coordination Committee of PIADIC (July 1, 1977 through June 30, 1978). Activity I.NG.311
2. Advisory services provided on the preparation and use of agricultural information packages (July 1, 1977 through June 30, 1978). Activity I.NG.312
3. Advisory services provided on the standardization of agricultural research designs and the presentation of results (July 1, 1977 through June 30, 1978). Activity I.NG.313
4. Advisory services provided on the centralization and storage of agricultural information (Data bank and documentation centers) (July 1, 1977 through June 30, 1978). Activity I.NG.314
5. Collaboration provided the Statistics and Census Office in regional planning and coordination of the 1978 agricultural census (July 1, 1977 through June 30, 1978). Activity I.NG.315
6. Course on Crop Forecasting Methodology (June 14-17, 1978). Activity I.NG.316
7. Basic Course on Statistical Methods emphasizing the application of a sampling frame (November 21 through December 2, 1977). Activity I.NG.317
8. Collaboration and advisory services provided to carry out a study on marketing information requirements at the producer level (September 1977 through February 1978). Activity I.NG.318
9. Advisory services provided on upgrading the marketing information services

- (July, 1977 through February, 1978). Activity I.NG.3110
10. Advisory services provided ICTA on the creation and organization of a Communications and Information Unit (July 1, 1977 through June 30, 1978). Activity I.NG.3112
  11. Editing publications (July 1, 1977 through June 30, 1978). Activity I.NZ.211
  12. Information for the press, radio and television (July 1, 1977 through June 30, 1978). Activity I.NZ.212

**Line II: Education for rural development**

1. Advisory services provided on the reorganization of the SPA agency training unit (October 1977 through June, 1978). Activity II.NG.212
2. Advisory services provided DECA on methodologies for identifying training needs (November 1977 through April 1978). Activity II.NG.213
3. Institutional diagnosis of DECA (August 1977 through June 1978). Activity II.NG.214
4. Technical support provided on the elaboration of an SPA technical personnel training plan (March through May, 1978). Activity II.NG.215
5. Support provided on the implementation of the SPA technical personnel training plan (July 1, 1977 through June 30, 1978). Activity II.NG.216
6. Advisory services and training provided DIGESA promoters on the organization of producers (November 1977 through June 1978). Activity II.NG.217
7. Analysis and evaluation of the implementation of a human resources policy (November 1977 through June 1978) Activity II.NG.218
8. Advisory services provided the Faculty of Agronomy on the organization of a Training Unit (April through May, 1978). Activity II.NG.219
9. Cooperation provided on the functioning of the Faculty of Agronomy's Training Unit (April through May 1978). Activity II.NG.2110
10. Advisory services provided for a review of the Faculty of Agronomy study plans (March through May, 1978). Activity II.NG.2111
11. Advisory services provided DIGESA on up-grading its home improvement program (April through June 1978). Activity II.NG.2112

**Line VI: Structural changes and "Campesino" organization**

1. Course on Cooperatives for INTA functionaries (October 10-13, 1977). Activity VI.NG.112

2. Cooperation provided INTA through the IICA-INTA Permanent Consultation Commission (July 1, 1977 through June 30, 1978). Activity VI.NG.114
3. Advisory services provided INTA on the formulation of the Chocón Farm Development Sub-program (July 1, through October 28, 1977). Activity VI.NG.117

**Line VII: Formulation and Administration of Agricultural Policy**

1. Advisory services provided USPA on getting the regional organization for the agricultural public sector underway (October 1977 through June 1978). Activity VII.NG.211
2. Advisory services provided USPA on intra-sectoral coordination mechanisms and instruments for the agricultural public sector (October 1977 through June 1978). Activity VII.NG.212
3. Advisory services provided DIGESA on specific coordination mechanisms and instruments with respect to ICTA (October, 1977 through May, 1978). Activity VII.NG.213
4. Seminar on the Administration of Agricultural Policy (June 1-3, 1978, Antigua). Activity VII.NG.215
5. Retrospective analysis of institutional development of the public agricultural sector as a result of the 1971 Reform (November 1977 through June 1978). Activity VII.NG.311
6. Analysis and evaluation of the implementation of institutional adjustment policies (November 1977 through June 1978). Activity VII.NG.312
7. Up-dating IICA's Action Plan in Guatemala (October 1977 through June 1978). Activity VII.NG.313
8. Elaboration and presentation of the draft Program-Budget for 1978-1979 (August through October, 1977). Activity VII.NG.314
9. Half-year reprogramming and budget readjustment for the 1977-1978 period (January 23-26, 1978). Activity VII.NG.315
10. Programming meeting to revise the 1978-79 Program-Budget (January 23-26, 1978). Activity VII.NG.316
11. Elaboration of the 1978-79 Operative Program in Guatemala (November 1977 through January 1978). Activity VII.NG.317
12. Annual programming meeting to present the Operative Program (June 19-23, 1978). Activity VII.NG.318
13. Preparation of the final activity project and country reports for 1977-78 (July 1, 1977 through June 30, 1978). Activity VII.NG.319

## GUYANA

### Line IV: Agricultural Production, Productivity and Marketing

1. Cooperation provided the Ministry of Agriculture on the development of appropriate technologies for pulses and cassava production purposes (July 1, 1977 through June 30, 1978). Activity IV.XLG.111
2. Cooperation provided the Ministry of Agriculture on fostering cassava and pulses production (July 1, 1977 through June 30, 1978). Activity IV.XLG.112
3. Advisory services provided the Ministry of Agriculture and the Guyana Marketing Corporation on strengthening the internal marketing system (July 1, 1977 through June 30, 1978). Activity IV.XLG.113

### Line VI: Structural Changes and "Campesino" Organization

1. Fostering and preparation of an *in situ* "campesino" organization study for new settlement schemes (January through June, 1978). Activity VI.LG.211
2. Study of associative production forms (July 1, 1977 through June 30, 1978). Activity VI.LG.212

### Line VII: Formulation and Administration of Agricultural Policy

1. Personnel training for the Resources Development and Planning Office of the Ministry of Agriculture on the design and implementation of surveys (September, 1977 through June, 1978). Activity VII.LG.111
2. Cooperation provided the Resources Development and Planning Office Division on the processing and publication of the agricultural census (July 1, 1977 through June 30, 1978). Activity VII.LG.112
3. Compiling information and preparing the first draft of IICA's Action Plan in Guyana (July 1, 1977 through June 30, 1978). Activity VII.LG.113
4. Support provided the Resources Development and Planning Office of the Ministry of Agriculture, on the analysis and up-grading of the coordination mechanism of the agricultural programs (July 1, 1977 through June 30, 1978). Activity VII.LG.211

## HAITI

### Line II: Education for Rural Development

1. Support provided on the reorganization of the Faculty of Agronomy and Veterinary Medicine (FAMV) (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity II.LH.111
2. Support provided on the reorganization of the agricultural teaching coordination committee

(July 1, 1977 through June 30, 1978, Port-au-Prince). Activity II.LH.112

3. Support provided on the organization and planning of integral education centers for rural development (CEIDER) (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity II.LH.113
4. Support provided on the organization of the DARNDR Audiovisual Education Center in the area of agricultural communication (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity II.LH.114

### Line III: Agricultural Research and the Transfer of Technology

1. Organization of a regional technical meeting on the agricultural research situation in the Antilles Zone (November 28 through December 2, 1977, Port-au-Prince). Activity III.LZ.212

### Line IV: Agricultural Production, Productivity and Marketing

1. Collaboration provided on the elaboration of a national marketing project (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity IV.LH.211
2. Reformulation of IICA's Project as a function of the national project (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity IV.LH.212
3. Cooperation provided to up-grade SENASA's human resources (Port-au-Prince). Activity IV.LH.213
4. Collaboration provided on the organization of SENASA (September through November, 1977, Port-au-Prince). Activity IV.LH.311
5. Collaboration provided on the preparation and analysis of the present seed situation in Cul-de-sac, Les Cayes and Cas-Tracas (January through February, 1978). Activity IV.LH.312
6. Collaboration provided on programming an operative model for improved and/or certified seed in Cul-de-Sac, Les Cayes and Cas-Tracas (November, 1977 through March, 1978). Activity IV.LH.313
7. Collaboration provided on the organization of SENASA's human resources training system (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity IV.LH.314
8. Support provided on the design and operation of a mechanism for the coordination, supervision and evaluation of the activities of national, international, public and private institutions working in research production, promotion and marketing of seed (May, 1978, Port-au-Prince). Activity IV.LH.315
9. Collaboration provided on defining rules for production and marketing food crop seed, mainly corn and beans (April, 1978). Activity IV.LH.316

10. Collaboration provided on the elaboration of an improved national seed program (May, 1978). Activity IV.LH.317

**Line V: Regional Rural Development**

1. Collaboration provided on the organization of a training workshop for research and action methodology for technicians of the development "islets" (October, 1977 through June, 1978, Port-au-Prince). Activity V.LH.211
2. Collaboration on a study, and implementation of recommendations concerning marketing, storage, and consumption problems within the development "islets" (October, 1977 through June, 1978, Port-au-Prince). Activity V.LH.212
3. Collaboration provided SIID and development "islet" technicians on cropping systems applied to the "islets" and the application of the knowledge obtained (January through July, 1978, Port-au-Prince). Activity V.LH.213
4. Collaboration provided on the organization of a training workshop for "campesino" leaders on management, feeding, prevention and treatment techniques for cattle and poultry diseases (August through September, 1977, Damien). Activity V.LH.214
5. Collaboration provided on the supervision of technical and material support and implementation of the "islet" development programs (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity V.LH.216
6. Collaboration provided on a study and implementation of recommendations on savings, credit and financing models used at local levels in Haiti, and applicable to the development "islets" (January through June, 1978, Port-au-Prince). Activity V.LH.217
7. Support provided on the elaboration, control and evaluation of the national "islets" development program (August, 1977 through June, 1978, Port-au-Prince). Activity V.LH.219
8. Collaboration provided on the organization of a training workshop on the preparation and use of audiovisual material and equipment (November, 1977 through June, 1978, Port-au-Prince). Activity V.LH.2110
9. Collaboration provided to train "campesinos" in the different important techniques for their organization and management and the operation of their work programs (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity V.LH.2113

**Line VII: Formulation and Administration of Agricultural Policy**

1. Collaboration on the elaboration of a control and evaluation procedure for the five-year agricultural plan (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity VII.LH.111
2. Cooperation provided on the elaboration, control and evaluation of the annual DARNDR programs

(July 1, 1977 through June 30, 1978, Port-au-Prince). Activity VII.LH.112

3. Cooperation provided the Programming Unit on the evaluation and supervision of agricultural projects (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity VII.LH.113
4. Organization of a second PEPA course (July through December, 1977, Port-au-Prince). Activity VII.LH.114
5. Cooperation provided on up-grading the capability to adjust, modify and condition institution building aspects in the sectoral agencies (July 1, 1977 through June 30, 1978, Port-au-Prince). Activity VII.LH.116
6. Cooperation provided the Programming Unit for occasional studies (July 1, 1977 through June, 1978, Port-au-Prince). Activity VII.LH.116
7. Institutional study of IDAI (Institute of Agricultural and Industrial Development) (January through June, 1978, Port-au-Prince). Activity VII.LH.211
8. Up-dating the Country-level Action Plan in Haiti (February, 1978, Port-au-Prince). Activity VII.LH.212

**HONDURAS**

**Line I: Information and Documentation on Rural Development**

1. Collaboration provided the National Coordination Committee of PIADIC (July 1, 1977 through June 30, 1978, Tegucigalpa). Activity I.NH.311
2. Advisory services and personnel training provided on the establishment and up-grading of a documentation center and data bank (July 1, 1977 through June 30, 1978). Activity I.NH.312
3. Support provided the National Resources Secretariat on the establishment of a TERMATER system in collaboration with the Central Bank (August through December, 1977, Tegucigalpa). Activity I.NH.313
4. Advisory services and support provided on the preparation and use of agricultural information packages in specific areas (July 1, 1977 through June 30, 1978). Activity I.NH.314
5. National course on crop forecasting methodology and advisory services on the application of the sampling framework (July 1, 1977 through June 30, 1978). Activity I.NH.315
6. Advisory services and training provided on the establishment of a marketing information service (March through June, 1978, Tegucigalpa). Activity I.NH.316

**Line II: Education for Rural Development**

1. Finalization of an institutional structure proposal for the National School agriculture (GNA)  
(July 1-31, 1977, Catacamas and Tegucigalpa). Activity II.NH.211
2. Elaboration of a proposal for a new study plan and analytical programs for ENA  
(July 15, 1977 through January 21, 1978, Catacamas). Activity II.NH.212
3. Collaboration provided on preparing a 1978 budget for ENA at the newly established level  
(July 1 through August 26, 1977, Catacamas). Activity II.NH.214
4. Collaboration provided on preparing internal regulations for the National School of Agriculture, including rules and procedures  
(November 15, 1977 through January 31, 1978, Catacamas). Activity II.NH.215
5. Training of teaching staff in communications and teaching methodologies  
(November through December, 1977, Catacamas). Activity II.NH.216
6. Collaboration provided on planning and projecting the agricultural exploitations of the National School of Agriculture  
(July 15, 1977, Catacamas). Activity II.NH.217
7. In-service training for the National School of Agriculture teaching staff  
(January 1, through June 30, 1978, Catacamas). Activity II.NH.218
8. Cooperation provided on the establishment of a system to evaluate the Teaching Staff at the National School of Agriculture  
(January 1 through March 30, 1978, Catacamas). Activity II.NH.219
9. Seminar-Workshop on Teaching Methodology in Agricultural Sciences  
(May 15-19, 1978, Catacamas). Activity II.NH.2110

**Line III: Agricultural Research and the Transfer of Technology**

1. Collaboration and advisory services provided the Natural Resources Secretariat on the evaluation of the first stage for the research and extension development project  
(July 11 through August 1977, Tegucigalpa). Activity III.NH.111
2. Collaboration and advisory services provided the Natural Resources Secretariat on the formulation of the second stage of the research and extension development project  
(August through September, 1977, Tegucigalpa). Activity III.NH.112

**Line IV: Agricultural Production, Productivity and Marketing**

1. Cooperation provided COHDEFOR on the operation of the Forestry Social System  
(April through June, 1978, Tegucigalpa). Activity IV.NH

**Line V: Rural Regional Development**

1. Support provided the Natural Resources Secretariat on the organization and institutional consolidation of the National Hydric Resources Unit (UNRH)  
(July 1, 1977 through June 30, 1978, Tegucigalpa). Activity V.NH.211
2. Collaboration provided the National Hydric Resources Unit on the technical management of irrigation districts in Flores and Selguapa, to up-grade their operation  
(July 1, 1977 through June 21, 1978). Activity V.NH.212
3. Technical collaboration provided COHDEFOR on the diagnosis and organization of the Los Laureles watershed  
(July 1, 1977 through June 30, 1978, Tegucigalpa). Activity V.NH.213
4. Technical cooperation provided COHDEFOR on the implementation of a hidrometeorology station in the watershed of the Bonito, Corocito and Aguan rivers  
(March 31, 1978). Activity V.NH.213
5. Cooperation provided COHDEFOR to train personnel in watershed management aspects  
(February 27 through March 2, 1978). Activity V.NH.215
6. Technical cooperation provided COHDEFOR-ESNACIFOR on programming a Seminar at Lancetilla Experimental Station  
(May 20-24, 1978). Activity V.NH.217
7. Strengthening COHDEFOR-ESNACIFOR on the analysis of training programs for medium-level technicians on watershed aspects  
(March 15-18, 1978, Tegucigalpa). Activity V.NH.218
8. Economic and social studies of the initial stage of the agricultural Development Project for the rural frontier areas  
(July 1, 1977 through June 30, 1978). Activity V.XNH.111
9. Diagnosis of the area for project expansion  
(July 1, 1977 through June 30, 1978, Marcala). Activity V.XNH.112
10. Elaboration of agricultural development sub-projects for rural frontier areas  
(July 1, through December 7, 1977). Activity V.XNH.113
11. Evaluation on the implementation of sub-projects  
(October 1, 1977 through March 30, 1978). Activity V.XNH.114
12. "Campesino" Organization in rural frontier areas  
(July 1, through December 30, 1977). Activity V.XNH.115
13. Studies on "campesino" organization and social and cultural aspects  
(July 1, 1977 through June 30, 1978). Activity V.XNH.116
14. Agricultural experimentation  
(July 1, 1977 through June 30, 1978). Activity V.XNH.117



15. Promotion of Agriculture (July 1, 1977 through June 30, 1978). Activity V.XNH.118
16. Agricultural Production (July 1, 1977 through June 30, 1978). Activity V.SNH.119
17. Inter-institutional organization (July 1, 1977 through June 30, 1978). Activity V.XNH.1110
18. Internal Organization of the Agricultural Development Project for rural frontier areas (July 1, 1977 through June 30, 1978). Activity V.XNH.1111
19. Elaboration of the 1978-79 Operative Plan for PRODAARFROH (July 1, 1977 through May 3, 1978, Marcala and Tegucigalpa). Activity V.XNH.1112

**Line VI: Structural Changes and "Campesino" Organization**

1. Course on planning and programming for INA's national, regional and sectoral supervisors (June 5-12, 1978). Activity VI.NH.214
2. "Campesino" training project for INA (March through June, 1978, Tegucigalpa). Activity VI.NH.

**Line VII: Formulation and Administration of Agricultural Policy**

1. Technical support provided the Higher Economic Planning Council on up-dating the sectoral diagnosis (November through December, 1977, La Ceiba). Activity VII.NH.111
2. Cooperation provided the public agricultural sector on conducting basic studies for planning the production and programming services in a pilot area (July 1, 1977 through June 30, 1978, Danlí and Tegucigalpa). Activity VII.NH.112
3. Course on the Preparation and Evaluation of Agricultural Projects (February through March, 1978, Tegucigalpa). Activity VII.NH.115
4. Course on Cacao Production (June 5-10, 1978, San Juan). Activity VII.NH.1110
5. Technical cooperation provided the Higher Economic Planning Council on the elaboration of a National Agricultural Development Plan (February 15 through June 30, 1978, Tegucigalpa). Activity VII.NH.1112
6. Overall analysis of Honduras' rural development (July through August, 1977). Activity VII.NH.311
7. Institutional analysis of the public agricultural sector and up-dating of IICA's Action Plan in Honduras (October through December, 1977, Tegucigalpa). Activity VII.NH.312
8. Collaboration provided the Agricultural Planning Office on the formulation of the 1978/83 National Agricultural

tural Development Plan for the animal husbandry sector (January through June, 1978, Tegucigalpa). Activity VII.XNH.117

9. Reciprocal technical training on regionalization (May, 1978, Tegucigalpa). Activity VII.NN.115

**JAMAICA**

**Line IV: Agricultural Production, Productivity and Marketing**

1. Organization of a work group for the elaboration of a hillside farming project (PNDAL) (August through December 1977, Kingston). Activity IV.XLJ.111
2. Development of methodologies for the elaboration of a national development program on hillside farming (October 1977 through May 1978). Activity IV.XLJ.112
3. Formulation and approval of the national hillside farming development program (December 1977 through May 1978, Kingston). Activity IV.XLJ.113
4. Elaborating a plan for the implementation of a national hillside farming development program (January through June 1978, Kingston). Activity IV.XLJ.114
5. Analysis of the agricultural systems in the Allsides area and neighboring zones (July 1, 1977 through June 30, 1978, Kingston and Allsides). Activity IV.XLJ.115
6. Establishment and support of observations and demonstration plots of the production systems appropriate for hillside farming (July 1, 1977 through June 30, 1978). Activity IV.XLJ.117
7. Strengthening the Allsides operative units in programming, coordination and administration aspects (July 1, 1977 through June 30, 1978, Allsides and Kingston). Activity IV.XLJ.118
8. Training national personnel in hillside farming technology (July 1977 through March 1978, Allsides and Kingston). Activity IV.XLJ.119
9. Design and testing of alternative farmer organization models (September 1977 through March 1978, Allsides and Kingston). Activity IV.XLJ.1110
10. Training in technology transfer (July 1977 through May 1978). Activity IV.XLJ.1111
11. A study of the marketing conditions for the main hillside farming food products, specially in the Allsides area (July 1, 1977 through June 30, 1978). Activity IV.XLJ.1112
12. Improving the marketing system of purchasing, management and distribution of hillside farming products, specifically in the Allsides area (August 1977 through July 1978). Activity IV.XLJ.1113

13. Definition and application of criteria in the selection of areas for the implementation of the first stage of PNDAL (August 1977 through June 1978). Activity IV.XLJ.1114
14. Increase the capacity of existing research institutions to develop and implement agricultural systems (September 1977 through June 1978, Kingston). Activity IV.XLJ.1115
15. Organization of new operative units in the areas selected for enlarging the PNDAL program (September 1977 through June 1978). Activity IV.XLJ.1116
16. Collaboration provided in obtaining external resources for the national hillside farming development program (November 1977, Allsides and Kingston). Activity IV.XLJ.1117

**Line VI: Structural Changes and "Campesino" Organization**

1. Analysis of the role and function of agrarian reform and the organization of "Campesino" community enterprises (September 1977 through May 1978, Kingston). Activity VI.LJ.1111

**Line VII: Formulation and Administration of Agricultural Policy**

1. Strengthening the sectoral planning system (July 1, 1977 through June 30, 1978, Kingston). Activity VII.LJ.111
2. Up-dating information on the evolution of the agricultural process, and review of IICA's Action Plan for Jamaica (July, 1977 through June 30, 1978, Kingston). Activity VII.LJ.112

**MEXICO**

**Line I: Information and Documentation on Rural Development**

1. Course on Agricultural Information (October 24 through November 11, 1977, Chapingo). Activity I.D.1114

**Line II: Education for Rural Development**

1. Report on the National Encounter, Higher Agricultural Education Institutions, Linkage with the community (March, 1978). Activity II.NM.111a
2. New approach on education and research in higher agricultural education schools (May, 1978). Activity II.NM.111b
3. First National Meeting of Academic Directors and Secretaries of Higher Agricultural Education Institutions (August 28-31, 1977, Jalapa). Activity II.NM.112a
4. National Meeting of Directors of Higher Agricultural Education Institutions (AMEAS) (May 1978, Querétaro). Activity II.NM.112b

5. Regional Encounter (Southeast) on the linkage of higher agricultural education and the rural community (November 23-25, 1977, Cardenas, Tabasco). Activity II.NM.113a
6. Report on the III Special Meeting of ALEAP (June 1 through November 6, 1977). Activity II.NM.113b
7. Meeting on linkage with the community (October 14, 1977, Chapingo). Activity II.NM.113c
8. Regional Encounter (North-Center) of Higher Agricultural Education Institutions; Linkage with the community (April 26-28, 1978, San Luis de Potosí). Activity II.NM.113d
9. Course on Agricultural Information (October 24 through November 11, 1977, Chapingo). Activity II.NM.212
10. Meetings on the Rural Development Programs (February 21, 1978). Activity II.NM.214
11. Advisory services provided ITA No. 2 of Merida, on carrying out its institutional diagnostic study (November 28 through 30, 1977, Merida, Yucatan). Activity II.NM.215a
12. Provision of advisory services on self-study aspects (Higher Agricultural Education School of Juarez University) (October 19-22, 1977, Durango). Activity II.NM.215b
13. Advisory services provided on self-study aspects (Agricultural School of Monterrey) (January 25-27, 1978, Monterrey, N.L.). Activity II.NM.215c
14. Advisory services provided the Agricultural Extension Head Office (SARH) (July 1, 1977 through June 30, 1978). Activity II.NM.221
15. Collaboration provided on the Training Program of D.G.P.E.A. (July 1, 1977 through June 30, 1978). Activity II.NM.222

**Line IV: Agricultural Production, Productivity, and Marketing**

1. Technical cooperation provided the key agencies of the institutional marketing subsystem on structural design and operative planning (July 1, 1977 through June 30, 1978). Activity IV.NM.211
2. Technical cooperation provided the key agencies of the institutional marketing sub-system on the design and implementation of training programs (July 1, 1977 through June 30, 1978). Activity IV.NM.212
3. Advisory services provided SARH through its training agencies, on fruit marketing (July 1, 1977 through June 30, 1978). Activity IV.NM.213
4. Diagnostic study of post-harvest problems (July 1, 1977 through June 30, 1978). Activity IV.NM.231

- In-service training of two Venezuelan technicians in popular markets (August, 1977). Activity IV.AV.2110

#### **Line V: Regional Rural Development**

- Advisory services provided the SARH delegation on the implementation of a regional development plan (July 1, 1977 through June 30, 1978, Yucatan). Activity V.NM.211
- Advisory services and technical assistance provided on the implementation of a "campesino" dairy cattle training center (July 1, 1977 through June 31, 1978, Yucatán). Activity V.NM.212
- Technical working meetings with SARH and sectoral institutions (July 1, 1977 through June 30, 1978, Yucatán). Activity V.NM.213

#### **Line VI: Structural Changes and "Campesino" Organization**

- Advisory services and cooperation provided the Programming and Evaluation Office, of the Agrarian Reform Secretariat (July 1977 through January, 1978, Mexico City). Activity VI.NM.214
- Up-dating the diagnosis study on "campesino" training and organization (July 1, 1977 through June 30, 1978). Activity VI.NM.215
- Study on the organization of seed producers within the area of influence of the IICA-PRONASE Project (August 1, 1977 through January 31, 1978, Mexico City and Veracruz). Activity VI.NM.

#### **Line VII: Formulation and Administration of Agricultural Policy**

- Determining the demand for improved seed of corn, beans, soybean, sorghum and rice in the State of Veracruz and the potential demand in the South-east (September through November, 1977). Activity VII.XNM.111
- Determining changes and necessary additional construction equipment and industrial flow to assure an efficient process of resulting benefits, in line with the latest advances in technology for the tropics (September through November, 1977). Activity VII.XNM.112
- Design programs oriented toward creating or strengthening the seed producer associations which will contribute to the production, marketing and distribution of seed, as needed in the region (September through November, 1977). Activity VII.XNM.113
- Development of alternative systems for the distribution and marketing of improved seed with the aim of overcoming limitations to its use and availability (September through November, 1977). Activity VII.XNM.114
- Design of production and technical credit assistance plans for improved seed producer associations

(September through November, 1977). Activity VII.XNM.115

- Structuring personnel organization and the design of training programs on production, management and operation of processing plants and the distribution of improved seed (September through November, 1977). Activity VII.XNM.116
- Creation of an institutional mechanism for the eventual implementation of the feasibility study (September through November, 1977). Activity VII.XNM.117
- Technical, economic and financial evaluation of the feasibility study to encourage the production, processing and distribution of improved seed (September through November, 1977). Activity VII.XNM.118
- Compiling and up-dating basic information for IICA's Action Plan in Mexico (August, 1977 through May, 1978). Activity VII.NM.311

### **NICARAGUA**

#### **Line I: Information and Documentation on Rural Development**

- Advisory services provided on standardization of agricultural research designs and reports on the results (July 1, 1977 through June 30, 1978). Activity I.NN.312
- Advisory services provided on the preparation and use of agricultural information packages (July 1, 1977 through June 30, 1978). Activity I.NN.313
- Advisory services and personnel training provided on the development and functioning of a documentation center and data bank of DIPSA (March through June, 1978). Activity I.NN.314
- Advisory services provided the Executive Survey and Census Office to test and adjust the sampling frame (July 1, 1977 through June 30, 1978). Activity I.NN.315
- Advisory services provided on the establishment of a system for price information and marketing news (July 1, 1977 through June 30, 1978, Managua). Activity I.NN.318

#### **Line III: Agricultural Research and the Transfer of Technology**

- Technical cooperation provided on the design and implementation of the INTA project (July 1977 through March, 1978). Activity III.NN.111
- Technical cooperation provided INTA in organization and programming (June, 1978 through March, 1978). Activity III.NN.112
- Seminar on the supervision of extension at INTA (March through May, 1978, Managua). Activity III.NN.114

**Line IV: Agricultural Production, Productivity and Marketing**

1. National course on intensive coffee cultivation (March, 1978). Activity IV.NN.111
2. Analysis of the coffee situation in the area affected by the coffee rust (September, 1977 through March, 1978, Managua). Activity IV.NN.112
3. Advisory services and training provided IAN on the design and implementation of production programs for the agricultural colonies (January through June, 1978, Ticuantepe). Activity IV.NN.122
4. Technical cooperation provided the National Bank of Nicaragua's (BNN) rural credit program for small farmers (January through June, 1978, Managua). Activity IV.NN.212
5. Technical cooperation provided INCEI on their reorganization (January through June, 1978, Managua). Activity IV.NN.211
6. Support provided IAN, BNN, and INBIERNO on up-grading the marketing mechanism of their production programs (January through June, 1978, Managua). Activity IV.NN.212

**Line VII: Formulation and Administration of Agricultural Policy**

1. Technical cooperation provided DIPSA and the IAN Planning Office on the elaboration of colonization projects (October, 1977 through June, 1978, Managua). Activity VII.NN.112
2. Collaboration and advisory services provided DIPSA on the formulation of agricultural projects in coordination with entities of the public agricultural sector (October, 1977 through June, 1978, Managua). Activity VII.NN.113
3. In-service training – Nicaragua PEPA Cycle (May 30 through October 21, 1977, Managua). Activity VII.NN.114
4. Up-dating of the PAMP for the 1978/79 Operative Program Proposal (September, 1977 through June, 1978). Activity VII.NN.311
5. Advisory services provided on the elaboration of graduation theses (November, 1977 through June, 1978, Managua). Activity VII.NN.313
6. In-service training in the PEPA Course (August 29 through September, 1977, Managua). Activity VII.NN.
7. Support provided DIPSA on the study of sectoral planning functions and their relationships with the other agencies (July 1, 1977 through June 30, 1978, Managua). Activity VII.XNN.111

8. Support provided IAN on strengthening its Programming and Study Department (July 1, 1977 through June 30, 1978, Managua). Activity VII.XNN.112
9. Support provided INTA on the organization and opening of its Planning Office (July 1, 1977 through June 30, 1978, Managua). Activity VII.XNN.113
10. Support provided INTA on the establishment of an operative plan and program-budget system (July 1, 1977 through June 30, 1978, Managua). Activity VII.XNN.113
11. Support provided CENCA on the structuring of training programs (July 1, 1977 through June 30, 1978, Managua). Activity VII.XNN.115
12. Technical cooperation provided INTA to determine its institutional role and structure (March through June, 1978, Ticuantepe). Activity VII.XNN.1110
13. Support provided the BNN on the reorientation and revision of the rural credit program systems (March through June 1978, Managua). Activity VII.XNN.1111
14. Course in accounting and planning for agricultural enterprises (May, 1978, Managua). Activity VII.XNN.1112
15. Support provided on the preparation of the INTA project (July through December, 1977, Managua). Activity VII.XNN.1113

**PANAMA**

**Line I: Information and Documentation on Rural Development**

1. Collaboration provided the National Coordination Committee of PIADIC (August 12, 1977 and May 11, 1978). Activity I.NP.311
2. Collaboration provided the agricultural research agencies on project control and standardization and presentation of reports on results (July 1, 1977 through June 10, 1978). Activity I.NP.312
3. Advisory services provided researchers and planners on the preparation and use of agricultural information packages (July 1, 1977 through June 30, 1978). Activity I.NP.313
4. Advisory services and training provided on up-grading scientific and technology documentation methods and practices (July 1, 1977 through June 30, 1978). Activity I.NP.316
5. Advisory services provided the Survey and Census Office to test and adjust the sampling frame (July 1, 1977 through June 30, 1978). Activity I.NP.317

6. Practical-Theory Course on conducting a survey based on samples and the construction of sampling frames and crop forecasting (April 10-21, 1978). Activity I.NP.318
7. Advisory services provided on the establishment of a system for price information and marketing news (July 1, 1977 through June 30, 1978). Activity I.NP.3110

**Line III: Agricultural Research and the Transfer of Technology**

1. Advisory services provided on the design of the administrative system for the implementation of agricultural research projects (July 1977 through March 1978, Gualaca). Activity III.NP.111
2. Advisory and training services provided on getting the administrative system underway for research projects (July, 1977 through March 1978, Gualaca). Activity III.NP.112
3. Advisory services provided for the economic analysis of experimental results (July 4-29, 1977, Gualaca and Santiago de Veraguas). Activity III.NP.116

**Line IV: Agricultural Production, Productivity and Marketing**

1. Advisory services provided IMA on its integration to the production plan (July and October, 1977). Activity IV.NP.113

**Line V: Regional Rural Development**

1. Revision of existing laws for the conservation and management of natural resources (Index on Panama's natural resource laws) (July 1, 1977 through June 30, 1978). Activity V.NP.218
2. Collaboration provided on the institutional analysis of RENARE (January through June, 1978). Activity V.NP.219
3. In-service training of RENARE technicians in aspects related to watershed management (July 1, 1977 through June 30, 1978). Activity V.NP.2110
4. Collaboration provided RENARE on the elaboration of watershed management plans for the Alajuela Lake and La Yeguada Reservoir (July 1, 1977 through June, 30, 1978). Activity V.NP.2111
5. Collaboration provided RENARE on the revision and up-dating of the Water Department's programs (January through June, 1978). Activity V.NP.2112
6. Collaboration provided RENARE on higher education aspects for the natural resources area (March 8-12, 1978). Activity V.NP.2113
7. In-service training provided the functionaries at the Institute of Hydraulic Resources and Electricity (October 1, 1977 through March 31, 1978). Activity V.NP.2114

8. Revision of the existing laws concerning the conservation and management of natural resources (July 1, 1977 through June 30, 1978). Activity V.NP.2115
9. Collaboration provided RENARE on structuring and elaborating a working plan oriented toward obtaining appropriate organization and management of the forest in the La Yeguada Laguna Watershed (June, 1978). Activity V.NP.2116

**Line VI: Structural Changes and "Campesino" Organization**

1. Advisory services provided on the elaboration and implementation of the settlements regulations and on the modification of the Agrarian Code (November, 1977 and May, 1978, Santiago and Panama City). Activity VI.NP.211
2. Organization and development of a rural workshop on "campesino organization" (February 20, through March 6, 1978, Chiriqui). Activity VI.NP.212
3. Advisory services provided on Rural Cadastral and Appraisal methods (August 29, through September 1, 1977 and January 25 through February 1978, Santiago de Veraguas). Activity VI.NP.213
4. National Workshop on "Campesino" Training (April 26 through May 10, 1978, Guararé). Activity VI.NP.216
5. Advisory and training services provided on the implementation of exploitation plans and registries (July through October, 1977). Activity VII.XNP.211
6. Permanent evaluation of models for agricultural producer associative enterprises (April through June, 1978). Activity VI.XNP.212
7. Consolidation at national information level, for agricultural producer associative enterprises (November, 1977, Santiago de Veraguas). Activity VI.XNP.213
8. Workshop on teaching methodology (July 11-15, 1977, Divisa). Activity VI.XNP.214
9. Courses on planning agricultural producer associative enterprises (July through December, 1977). Activity VI.XNP.215
10. Support provided the Organization Department (August 7 through September 30, 1977, Santiago de Veraguas). Activity VI.XNP.216
11. Experimental Laboratory on the organization of "campesino" enterprises (February 2 through March 6, 1978, Chiriqui). Activity VI.NZ.112b
12. Seminar on the strategy and implementation of integrated rural development (January 23-28, 1978). Activity VI.NZ.1111

**Line VII: Formulation and Administration of Agricultural Policy**

1. Advisory services provided the project preparation team of MIDA

(July 1, 1977 through June 30, 1978, Santiago de Veraguas). Activity VII.NP.111

2. Course on the preparation and evaluation of agricultural projects at a regional level (June 12, 1977 through April 20, 1978, Santiago de Veraguas). Activity VII.NP.112
3. Complete up-dating of the PANP. (Country-Level action plan) (July 4-8, 1977). Activity VII.NP.311

## PARAGUAY

### Line I: Information and Documentation on Rural Development

1. Presentation and discussion of the study of the current situation in agricultural information and documentation in Paraguay (July 1, 1977 through June 30, 1978, Asuncion). Activity I.SP.111
2. Advisory services provided on the organization and functioning of the national agricultural and forestry information sub-system (July 1, 1977 through June 30, 1978, Asuncion). Activity I.SP.113
3. Training of personnel of the national agricultural and forestry information sub-system and of AGRINTER (July 1, 1977 through June 30, 1978, Asuncion). Activity I.SP.113

### Line II: Education for Rural Development

1. Cooperation provided DEAF on the elaboration of occupational profiles and estimates of the demand for agricultural technicians (March through June, 1978, Asuncion). Activity II.SP.212
2. Cooperation provided the DEAF Supervision and Planning Offices (July 1, 1977 through June 30, 1978). Activity II.SP.213
3. Support provided on the DEAF teacher training program (February through June, 1978, Asuncion). Activity II.SP.215
4. Support provided the Faculty of Agricultural Engineering on the implementation of a forestry orientation (July 1, 1977 through June 30, 1978, San Lorenzo). Activity II.SP.218

### Line III: Agricultural Research and the Transfer of Technology

1. Advisory services provided DEAF on programming agricultural research (July 1, 1977 through June 30, 1978, Asuncion). Activity III.SP.111
2. Cooperation provided DEAF on an inventory of available information and on gathering new information on social, economic and technical aspects of Production Systems at a regional level (July 1, 1977 through June 30, 1978). Activity II.SP.112

3. VIII Meeting of the Advisory Committee of the Regional Cooperative Program (August 28 through October 2, 1977, Asuncion). Activity III.SZ.211

### Line V: Regional Rural Development

1. Fostering of a more detailed explanation of the rural development policy at a national level as a framework for regionalization (July 1, 1977 through June 30, 1978, Asuncion). Activity V.SP.111
2. Support provided on compiling, expanding and organizing regional information (July 1, 1977 through June 30, 1978, Asuncion). Activity V.SP.112
3. Collaboration provided on the elaboration of a diagnostic study on regional rural development (July 1, 1977 through June 30, 1978, Asuncion). Activity V.SP.113
4. Advisory services provided on the formulation of a preliminary regionalization proposal and on the allocation of national priorities (July 1, 1977 through June 30, 1978, Asuncion). Activity V.SP.114
5. Advisory services provided on the strengthening of the colonization planning process (July 1, 1977 through June 30, 1978, Asuncion). Activity V.SP.116
6. Advisory services provided on the strengthening of marketing and credit planning in small farmer areas (July 1, 1977 through June 30, 1978, Asuncion). Activity V.SP.117
7. Advisory services provided on the elaboration of "A Feasibility study for installing a cotton seed cleaning and processing plant" (March through April, Asuncion). Activity V.SP.118

### Line VI: Structural Changes and "Campesino" Organization

1. Psycho-social study of the 1977-78 Group of Conscripts (November, 1977 through June, 1978, Ybyrarobana, Asuncion). Activity VI.XSP.211
2. Literacy training given the 1977-78 Group of Conscripts (October through December, 1977, Ybyrarobana). Activity VI.XSP.212
3. Conscript Training in rehabilitating land and in agricultural production for the first associative enterprise (June 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.214
4. Conscript training to assure their participation in the first associative production enterprise (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.215
5. Elaboration and implementation of land rehabilitation and production plan for the first associative enterprise (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.216
6. Promoting the first associative enterprise, at a family level (July 1, 1977 through June 30, 1978). Activity VI.XSP.217

7. Building the necessary physical and social infrastructure of the first associative enterprise (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity XSP.218
8. Housing for the first associative enterprise (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.219
9. Formal constitution of the first associative enterprise (September through October, 1977, Ybyrarobana). Activity VI.XSP.2110
10. Land granting and financing procedures for the first associative enterprise (September-December, 1977 and May-June, 1978, Asuncion). Activity VI.XSP.2111
11. Support provided on the functioning and operation of the first associative enterprise (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.2112
12. Creation of a consumer unit for the first associative enterprise (September, 1977 Ybyrarobana). Activity VI.XSP.2113
13. Creation of a mechanization unit for the first associative enterprise (June, 1978 Ybyrarobana). Activity VI.XSP.2114
14. Creation of an accounting control unit for the first associative enterprise (December, 1977 through June, 1978, Ybyrarobana and Asuncion). Activity VI.XSP.2115
15. Creation of a marketing unit for the first associative enterprise (July through December, 1977, Ybyrarobana). Activity VI.XSP.2116
16. Creation and organization of a recreation and social activity unit for the first associative enterprise (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.2117
17. Literacy training given the 1978-79 Group of Conscripts (April, through June, 1978, Ybyrarobana). Activity VI.XSP.2121
18. Training the 1978/79 Group of Conscripts on rehabilitating land and in agricultural production aspects (April through June, 1978, Ybyrarobana). Activity VI.XSP.2122
19. Design of the population center, housing and physical and social infrastructure for the second associative enterprise (February through June, 1978, Asuncion). Activity VI.XSP.2125
20. Reciprocal technical training (August through October, 1977). Activity VI.XSP.2127
21. Training of technical personnel (July 1, 1977 through June 30, 1978, Ybyrarobana). Activity VI.XSP.2128
22. Elaboration of a study to integrate associative enterprises at a second level (November, 1977 through June, 1978, Ybyrarobana). Activity VI.XSP.2129

23. Preparation of a prefeasibility project for the Gral. Bernardino Caballero Colony (February through June, 1978, Asuncion, Ybyrarobana). Activity VI.XSP.2129
24. Supervision and progress report on the project (July 1, 1977 through June 30, 1978, Asuncion, Ybyrarobana). Activity VI.XSP.2132

**Line VIII: Formulation and Administration of Agricultural Policy**

1. Institutional analysis of the rural sector (July 1, 1977 through June 30, 1978, Asuncion). Activity VII.XSP.311
2. Revision and up-dating of IICA's Action Plan (October, 1977 through June, 1978, Asuncion). Activity VII.SP.312
3. Preparation of project and country reports as scheduled in the 1977/78 Operative-Program (November, through December, 1977, April through June, 1978, Asuncion). Activity VII.SP.313

**PERU**

**Line I: Information and Documentation on Rural Development**

1. Support provided on the II National Course of Library Science (Cooperative AGRINTER core groups) (January 30 through February 24, 1978, Lima). Activity I.AP.111
2. Collaboration provided on policy elaboration and formulation for a National agricultural documentation and information sub-system, and its linkage with AGRINTER (July 1, 1977 through June 30, 1978). Activity I.AP.112

**Line II: Education for Rural Development**

1. Training of professionals from the Basic Workman's Education and Improvement Office of the Ministry of Education (July 1, 1977 through June 30, 1978, Lima e Iquitos). Activity II.AP.111
2. Cooperation and direct support provided the National Agrarian University, La Molina (July 1, 1977 through June 30, 1978, Lima). Activity II.AP.211
3. Working meeting on the organization and management of higher education at the "Pedro Ruiz Gallo" National University (July 1, 1977 through June 30, 1978, Lambayeque, Chiclayo). Activity II.AP.213
4. Study of the job market for agricultural science professionals in Cuzco and its areas of influence (July 1, 1977 through June 30, 1978, Cuzco). Activity II.AP.214
5. Cooperation and direct support provided the agricultural sciences academic program at the National University of "San Antonio Abad at Cuzco" (July 1, 1977 through June 30, 1978, Cuzco). Activity II.AP.215

6. Cooperation and direct support provided on the agricultural science program at the National University of the Amazonia (July 1, 1977 through June 30, 1978, Iquitos). Activity II.AP.216

### **Line III: Agricultural Research and the Transfer of Technology**

1. Support provided the Research Office (DGI) to help create an institutional mechanism for research and the transfer of technology (July 1, 1977 through June 30, 1978, Lima). Activity III.AP.111
2. Collaboration provided the Research Office (DGI) for the annual research plan (July 1, 1977 through June 30, 1978, Lima). Activity III.AP.112
3. Cooperation provided the Research Office (DGI) on a study of production techniques and the conservation and utilization a food by the lowland 'jungle' "campesino" (January 2 through June 30, 1978, Iquitos). Activity III.AP.113
4. Technical assistance provided Cria III on agricultural communication (December 13-16, 1977 Tarapoto). Activity III.AP.114
5. Projection of Cria III research results to the producers of the zone (August 1977 through January 1978). Activity III.AP.116
6. Cria IV research priorities (January 23 through June 7, 1978). Activity III.AP.117
7. Consolidation of the organization and management of the Cria IV region (November 7-12, 1977 Arequipa). Activity III.AP.118
8. Technical assistance on agricultural communication provided the Cria IV region (August and November 1977, Arequipa). Activity III.AP.119
9. Projection of Cria IV research results to production agents in the region (August 1 through October 6, 1977, Lima and Arequipa). Activity III.AP.1110
10. Intensive course in Technical Writing (May 29 through June 2, 1978, Lima). Activity III.AP.1111
11. Coordination provided on the agricultural research program in Andean crops (October 25-28, 1977, Ayacucho). Activity III.AP.122
12. Meeting on Andean crop research development (October 25-28, 1977). Activity III.AP.122
13. Regional Research Coordination Meeting of the Andean Zone (September 1-30, 1977, Lima). Activity III.AZ.211

### **Line IV: Agricultural Production, Productivity and Marketing**

1. National Course on Forest Plantation Management (May 2-12, 1978, Huancayo). Activity IV.AP.111
2. Collaboration provided the Forestry Research Office of the Forestry Bureau on programming and the coordination of forest research (July 1, 1977 through June 30, 1978). Activity IV.AP.112
3. Technical meetings with the Forest Plantation Working Group (September 1977 through May 1978). Activity IV.AP.113
4. Support provided on the organization of the First Forestry Congress in Peru (November 28 through December 2, 1977, Lima). Activity IV.AP.114
5. Cooperation provided on the formulation and implementation of an integrated food marketing system (July 1, 1977 through June 30, 1978, Lima). Activity IV.AP.211
6. Research in marketing in Peru, to identify limiting factors in food sector policies (July 1977 through April 1978, Lima). Activity IV.AP.212
7. Collaboration provided on training in marketing; on the implementation of an integrated food marketing system (July 1977 through May 1978). Activity IV.AP.213
8. Preparation of a feasibility project for quinoa production in the Department of Puno (July 1, 1977 through June 30, 1978, Lima and Puno). Activity IV.XAP.111
9. Organization and development of a program for technology transfer on quinoa (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.112
10. Preparation, publication and dissemination of informative material on quinoa production (July 1, 1977 through June 30, 1978, Lima and Puno) Activity IV.XAP.113
11. Economic return study of quinoa (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.114
12. Organization and getting underway of a quinoa seed nursery program (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.115
13. Collection, maintenance and evaluation of quinoa germplasm (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.116
14. Inter-varietal hybrids to obtain a new variety of quinoa (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.117
15. Establishing quinoa varietal characteristics (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.118



16. Preliminary study of two native quinoa cultivars (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.1119
17. Regional testing of quinoa production systems (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.1110
18. Production of basic quinoa seed nurseries (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.1111
19. Plant protection for the control of pests and diseases in quinoa (August 1977 through May 1978, Puno). Activity IV.XAP.1112
20. Localization of the best zones for quinoa production (July 1, 1977 through June 30, 1978, Puno). Activity IV.XAP.1113
21. Analysis of current technology and experience in the use of new technologies in marketing quinoa (July 1, 1977 through June 30, 1978). Activity IV.XAP.1114
22. Study of the supply and demand of quinoa (July 1, 1977 through June 30, 1978). Activity IV.XAP.1115
23. Analysis of the quinoa industrial consumption characteristics and future trends (July 1, 1977 through June 30, 1978). Activity IV.XAP.1116
24. Elaboration of a quinoa marketing program (July 1, 1977 through June 30, 1978, Lima and Puno). Activity IV.XAP.1117
25. Campaign to foster quinoa consumption (July 1, 1977 through June 30, 1978, Lima). Activity IV.XAP.1118
26. Study of quinoa marketing costs and channels (November 1977 through May 1978, Puno and Lima). Activity IV.XAP.1119

#### **Line V: Regional Rural Development**

1. Seminar on integrated rural settlements (November 1977 through April 1978, Lima). Activity V.AP.311
2. Formulation of an agricultural and forestry research inventory in the Peruvian tropics (December 1977 through June 1978). Activity V.AP.312
3. Support provided on the establishment of an Amazon fruits crops production system (September 1, 1977 through March 4, 1978, Iquitos). Activity V.AP.313
4. Course on extension and communication techniques for the transfer of agricultural technology (September 4-16, 1977, Tingo Maria). Activity V.AP.314
5. Course on extension and communication techniques for the transfer of agricultural technology (March 6-18, Iquitos). Activity V.AP.315

6. Reciprocal training on the conservation and management of land and water (May through June, 1978). Activity V.NCR.212

#### **Line VI: Structural Changes and "Campesino" Organization**

1. Collaboration provided CENCIRA on a study to identify the principal problems of "campesino" participation in the management and administration of their enterprises (September 1977 through April 1978, Lima). Activity VI.AP.211
2. Participation with CENCIRA on the elaboration of research and training methods and techniques (Course-Workshop on planning and rural development) (January through June 1978). Activity VI.AP.213
3. Collaboration provided CENCIRA on training programs for investment projects (January through June 1978, Lima). Activity VI.AP.213

#### **Line VII: Formulation and Administration of Agricultural Policy**

1. Working meeting on organization and management for development, with the directive personnel from the Arequipa, Tacna, Cuzco, Puno and Ayacucho food zones (November 7-12, 1977 Arequipa). Activity VII.AP.211
2. Working meeting on organization and management for development, with the directive personnel from the food zones of Iquitos and Tarapoto (March 27 through April, 1978, Iquitos). Activity VII.AP.212

### **URUGUAY**

#### **Line I: Information and Documentation on Rural Development**

1. Collaboration provided on the elaboration and implementation of basic studies for the SNIAP (July 1, 1977 through June 30, 1978, Montevideo). Activity I.SU.112
2. Compiling national bibliographic material for AGRINTER (July 1, 1977 through June 30, 1978, Montevideo). Activity I.SU.113
3. Support provided the information program of the Ministry of Agriculture and Fisheries (MAP) (July 1, 1977 through June 30, 1978, Montevideo). Activity I.SU.115

#### **Line II: Education for Rural Development**

1. First Course of Applied Statistics to Experimental Design in Agricultural Research (November 7 through December 2, 1977, Montevideo) Activity II.SU.213
2. Up-grading of professors from the Faculties of Agronomy and Veterinary Sciences (August 21-30, 1977, Montevideo). Activity II.SU.213a
3. Seminar on up-grading professors. -Faculty of Agronomy, University of the Republic of Uruguay (July 17-30, 1977, Montevideo). Activity II.SU.214

4. Initial advisory services provided for the establishment of three permanent teaching aid units (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.215
5. Coordination of a Short Course on Toxic Plants, connected with restructuring the Toxicology professorship (May 1, through August 26, 1977, Montevideo). Activity ILSU.216
6. Advisory services provided on the organization of departments or sectors of the Faculties of Agronomy and Veterinary Sciences (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.216a
7. Course on Scientific Communications Faculty of Veterinary Sciences (July 5-15, 1977, Montevideo). Activity ILSU.216b

### Line III: Agricultural Research and the Transfer of Technology

1. Collaboration and technical assistance provided DGIATA on institutional aspects and in programming research (July 1, 1977 through June 30, 1978). Activity ILSU.111
2. Advisory services provided on the organization and development of a Research Methodology Course (July 1, through December 2, 1977, Montevideo). Activity ILSU.112
3. Support provided on giving a Course to prepare Agricultural Assistant Technicians (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.113
4. Advisory Services and training provided on the production and dissemination of agricultural information material (July 1, 1977 through June 30, 1978). Activity ILSU.114
5. Advisory services provided on global studies within the area of influence of the experimental stations (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.121
6. Cooperation provided in studies of the farming situation, emphasizing technology adoption problems (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.121
7. Assistance on programming and analysis of transferable system models (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.123
8. Development of a methodology for the analysis of the statistical establishment of procedures on the typication of agricultural enterprises (July 1, 1977 through February 28, 1978, Montevideo). Activity ILSU.118
9. Seminar on the organization and management of agricultural research (July 1, 1977 through June 30, 1978, Montevideo). Activity ILSU.214

### Line IV: Agricultural Production, Productivity, and Marketing

1. Collaboration provided MAP on studies on global marketing problems (July 1, 1977 through June 30, 1978, Montevideo). Activity IV.SU.211
2. Collaboration provided MAP on up-grading marketing and price information (July 1, 1977 through June 30, 1978, Montevideo). Activity IV.SU.212
3. Collaboration provided MAP on the solution of specific marketing problems concerning perishable products (July 1, 1977 through June 30, 1978, Montevideo). Activity IV.SU.213

### Line V: Regional Rural Development

1. Formulation of agricultural production projects (July 1, 1977 through June 30, 1978). Activity V.XSU.111
2. Formulation of complementary projects (October 1, 1977 through June 30, 1978, Montevideo). Activity V.XSU.112
3. Formulation of a regional agricultural development plan (July 1, 1977 through June 30, 1978). Activity V.XSU.113
4. Formulation of regional planning methodologies adapted to Uruguayan socio-economic priorities (February 1, through June 30, 1978, Montevideo). Activity V.XSU.114
5. Collaboration provided on the regional agricultural development project in Uruguay (July 1, 1977 through June 30, 1978, Montevideo). Activity V.SU.111
6. Support provided on the formulation of a colonization project in the regional agricultural development area in the North-East of Uruguay (July 1, 1977 through June 30, 1978, Montevideo). Activity V.SU.111
7. Round-table on "Practices for the Conservation of Land and Waters along the West Coast." (October 10-15, 1977, Paysandau). Activity V.SU.211
8. Advisory services provided for the operation of demonstration projects for the conservation of land and waters (July 1, 1977 through June 30, 1978, Montevideo). Activity V.SU.212
9. Advisory services provided the watershed management research project (July 1, 1977 through June 30, 1978, Montevideo). Activity V.SU.213
10. III Practical Course on Soil Management and Conservation at the farm level (April 10-26, 1978, Quebracho, Paysandau). Activity V.SU.
11. IV Meeting of the Advisory Committee of the Conservation and Management of Land and Waters Program (April 3-7, 1978, Montevideo). Activity V.SZ.212

**Line VII: Formulation and Administration of Agricultural Policy**

1. Advisory services provided on the development of a system for information and analysis of agricultural enterprises (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.111
2. In-service training on the formulation and operation of analytical techniques and the evaluation of agricultural policy (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.112
3. Analysis of the current situation of the agricultural sector (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.311
4. Analysis of the agricultural agencies system (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.312
5. Technical Meeting on analysis and management of the public agricultural sector agencies (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.313
6. Up-dating IICA's Action Plan for Uruguay (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.314
7. Internal Meeting on programming and coordination (July 1, 1977 through June 30, 1978, Montevideo). Activity VII.SU.315
8. In-service training for professional up-grading of six project designers (July 13, 1977 through June 30, 1978, Montevideo). Activity VII.SZ.111
9. Elaboration of a manual on the preparation of projects (October, 1977 through June, 1978, Montevideo). Activity VII.SZ.116

**VENEZUELA**

**Line I: Information and Documentation on Rural Development**

1. National meeting on the evaluation of SININCA (June 26-30, 1978). Activity I.AV.111
2. Advisory services provided on the organization and planning of SININCA (July through November, 1977). Activity I.AV.112
3. Advisory services provided on the coordination of SININCA on an inventory of information units in the agricultural sector (July 1, 1977 through June 30, 1978). Activity I.AV.114
4. Seminar on SININCA organization and operations (October 24-28, 1977, Maracaibo). Activity I.AV.115

**Line II: Education for Rural Development**

1. Advisory services provided AVIEAS on the establishment of a Planning Unit (October 1977 through May 1978). Activity II.AV.211

2. Advisory services provided UNELLEZ on the establishment of academic integration mechanisms (March 1978, Guanare and Caracas). Activity II.AV.212
3. Training workshop in planning development, the elaboration of objectives, the selection of course content, learning experiences and evaluation of UNELLEZ professional cycle courses (January through June, 1978). Activity II.AV.213
4. Support provided AVIEAS on the organization of teachers' meetings by area of specialization and related disciplines (November 8-12, Maracaibo). Activity II.AV.214
5. Advisory services provided the National Universities Council and CONICIT on the establishment of a planning unit for postgraduate education in agricultural sciences (June 6-29, 1978, Caracas). Activity II.AV.221
6. Support provided on a Seminar of Postgraduate Education and Rural Development Programs in Latin America (July 1 through October 30, 1977, Barinas). Activity II.AV.222
7. Study of the demand for high-level technical personnel. Publication (July 1, 1977 through June 30, 1978). Activity II.AV.223
8. Advisory services provided on the Second Course on Rural Development (February 1-20, 1978, Maracay and Caracas). Activity II.AV.224
9. Technical Meeting on agricultural development program (January 30 through February 3, 1978, Maracaibo). Activity II.AV.231
10. Provision of advisory services for the MAC Agricultural Development Office on rural development policies and strategies (July 1, 1977 through June 30, 1978). Activity II.AV.233
11. Regional Course on the Transfer of Technology and Rural Development (August 29 through September 30, 1977, Maracaibo). Activity II.AV.234
12. First Seminar in Training Methodology (November 14-25, 1977, Caracas). Activity II.AV.235
13. Participation in the VI Latin American Conference on Higher Education (May 22-27, 1978, Maracaibo). Activity II.AV.
14. Participation in the regular meeting of ALEAP (May 24-25, 1978, Maracaibo). Activity II.NM.213

**Line III: Agricultural Research and the Transfer of Technology**

1. Advisory services provided the Technical Management Planning Office of the National Agricultural Research Fund (FONAIAP) on the formulation of a diagnostic mechanism (July through December, 1977 and June 1978). Activity III.AV.111
2. Advisory services provided the Technical Management Planning Office in the design of a methodology to study

agricultural production systems  
(January and February, 1978, Caracas). Activity  
III.AV.112

3. Advisory services provided the Technical Management Planning Office on the design of a research evaluation mechanism  
(September through December 1977, Caracas). Activity  
III.AV.113
4. Participation on the formulation of an agricultural research indicative plan for FONAIAP  
(July 1, 1977 through June 30, 1978). Activity  
III.AV.114
5. Meeting on programming and evaluation of the National Agricultural Research Fund Planning Office  
(May, 1978, Caracas). Activity III.AV.115
6. Provision of advisory services to the economic analysis section of the National Agricultural Research Fund  
(July 1, 1977 through June 30, 1978). Activity  
III.AV.117
7. Annual Meeting on programming and evaluation of the economic analysis section of FONAIAP  
(May 1978, Maracay). Activity III.AV.118

#### **Line IV: Agricultural Production, Productivity and Marketing**

1. Data collection on sectorial economic policies and production, marketing and industrialization in Venezuela  
(March 1-31, 1978, Caracas). Activity IV.XAV.111
2. Study of the development of cassava and the agronomy aspects of that crop  
(April 1, through June 15, 1978). Activity IV.XAV.112
3. Analysis of the agro-economic aspects of marketing and the transfer of technology in agricultural production  
(April 1, through June 15, 1978). Activity IV.XAV.113
4. Diagnosis of the cassava industrialization process  
(April 1 through June 30, 1978). Activity IV.XAV.114

#### **Line V: Regional Rural Development**

1. Advisory services provided on the Agrarian Reform cadastral survey  
(July 1, 1977 through June 30, 1978, Caracas). Activity  
V.AV.212

#### **Line VI: Structural Changes and "Campesino" Organization**

1. Provision of advisory services to IAN on the implementation of a Planning System  
(July 1977 through February, 1978, Caracas). Activity  
VI.AV.111
2. Training in the formulation and evaluation of agricultural projects  
(April through May, 1978, Maracay). Activity  
VI.AV.113
3. Advisory services provided on land selection and appraisal  
(July 1, 1977 through June 30, 1978, Caracas). Activity  
VI.AV.114

4. Advisory services in extension provided the "Campesino" Economic Organizations Department of the National Agrarian Institute (IAN)  
(November, 1977, Caracas). Activity VI.AV.211

5. Provision of advisory services to the "Campesino" Organization Division of the Ministry (MAC)  
(July 1, 1977 through June 30, 1978). Activity  
VI.AV.213

#### **Line VII: Formulation and Administration of Agricultural Policy**

1. Advisory services provided the MAC Planning Office on the formulation of the annual operative plans  
(July 1, 1977 through June 30, 1978, Caracas). Activity  
VII.AV.111
2. Advisory services provided the Planning Office and the Agricultural Development Office on program evaluation, monitoring and implementation  
(July 1, 1977 through March 31, 1978). Activity  
VII.AV.112
3. Advisory services provided the MAC Planning Office on the formulation of regional agricultural development plans  
(July 1, 1977 through June 30, 1978). Activity  
VII.AV.113
4. Advisory services provided the MAC Planning Office on the organization of regional units  
(July 1, 1977 through June 30, 1978). Activity  
VII.AV.114
5. Advisory services provided on the formulation of regional production plans and the institutional planning system for the pertinent agencies  
(July 1, 1977 through June 30, 1978). Activity  
VII.AV.115
6. Advisory services provided the MAC Statistics Office on the tabulation of continuous sectoral statistics and the development of efficient information systems  
(July 1, 1977 through June 30, 1978, Caracas and Maracay). Activity VII.AV.116
7. Strengthening the MAC Fisheries Office on the elaboration of its medium and short-term plans  
(July 1, 1977 through June 30, 1978, Caracas). Activity  
VII.AV.117
8. Workshop on Agricultural Planning Methodology  
(November 1-7, 1977, Caracas). Activity VII.AV.118
9. Strengthening regional planning of the Ministry of Agriculture and Livestock (MAC)  
(September 1977 through June 1978, Caracas and Maracay). Activity VI.AV.119
10. Participation on the organization of training, research, technical assistance and production infrastructure activities for the Operative Unit of the Centro Occidental region of the MAC-76-1 Project  
(July through December, 1977 Acarigua). Activity  
VII.AV.211
11. Participation on the supervision and control of training, research, technical assistance and production infrastructure activities of the Operative Unit of the Centro Occidental region  
(October through December, 1977). Activity  
VII.AV.212

12. Participation on the annual evaluation of the MAC-76-1 Project (January through March, 1978). Activity VII.AV.213
13. Participation of the programming, supervision and evaluation of the operative units of Zuliana and North-East region of the MAC-76-1 Project (April through June, 1978). Activity VII.AV.215
14. Support provided in production management aspects at FONAIAP (March through April, 1978, Caracas). Activity VII.AP.215
15. Up-dating information on the evolution of agriculture and the agricultural institutions (January through June, 1978, Caracas). Activity VII.AV.311

### MULTINATIONAL ACTIVITIES

#### Line I: Information and Documentation for Rural Development

1. Reciprocal technical cooperation in agricultural documentation (April, 1978, Costa Rica and Guatemala). Activity I.NG.3111
2. Promotion and coordination of PIADIC (July 1, 1977 through June 30, 1978, Central American Isthmus). Activity I.NZ.311
3. Collaboration provided on the establishment of national agricultural information systems and their integration in to a regional system (July 1, 1977 through June 30, 1978, Central American Isthmus). Activity I.NZ.313
4. Consulting the probable participants in the plan, and on the draft AGRINTER Services Network Agreement to assure acceptance by the authorities (November 30, 1977 through June 30, 1978, Costa Rica and Venezuela). Activity I.D.142

#### Line II: Education for Rural Development

1. Study trip to the University of Heredia and the National Agrarian Institute in Honduras, to gain educational experience in professional and "campesino" training areas, respectively (March 5-9, 1978, Costa Rica and Honduras). Activity II.NM.211a
2. Provision of advisory services to DEAF on the project for expanding the second stage of the agricultural education system (July 1, 1977 through June 30, 1978, Paraguay and United States). Activity II.SP.216
3. Diagnostic study of the educational situation for rural development purposes at regional agencies (July 1, 1977 through June 30, 1978, Argentina, Brazil, Chile, Paraguay, Uruguay). Activity II.SZ.112
4. Teachers and educational authorities visit other institutions in the Southern Zone (August through October, 1977, Argentina, Brazil, Chile, Paraguay and Uruguay). Activity II.SZ.114
5. Collaboration provided national and IICA authorities on Line II programs in the Southern Zone \_

(July 1, 1977 through June 30, 1978, Argentina, Brazil, Chile, Paraguay and Uruguay). Activity II.SZ.115

#### Line III: Agricultural Research and the Transfer of Technology

1. Selection and getting underway of a number of case studies (October 1977 through June, 1978, Argentina, Brazil, Colombia, Ecuador, Peru and Uruguay). Activity III.AC.117
2. Support provided on strengthening coordination linkages between research and the transfer of technology (Bolivia, Colombia, Ecuador, Peru and Venezuela). Activity III.AZ.212
3. Processing and getting the technical assistance agreement IDA-628-HO underway, together with the Natural Resources Secretariat (July through August, 1977, Honduras, Guatemala, and Costa Rica). Activity III.NH.113
4. Reciprocal training in planning the science and technology system (May, 1978, Argentina and Brazil). Activity III.NN.113
5. Advisory services provided the regional agricultural research and extension programs (July 1, 1977 through June 30, 1978, Central American Isthmus). Activity III.NZ.211
6. Collaboration provided at the PCCMCA XXIV Meeting (September, 1977 through June, 1978, Nicaragua and El Salvador). Activity III.NZ.212
7. Support provided on carrying out a diagnostic study and elaboration of each country's report of the agricultural research situation in the Antilles Zone (July 1, through November 25, 1977, Dominican Republic, Barbados, Haiti, Guyana, Jamaica, and Trinidad and Tobago). Activity III.LZ.211
8. Support provided on the exchange of agricultural research and experimental material between the countries of the Southern Zone (July 1, 1977 through June 30, 1978, Argentina, Brazil, Chile, Paraguay and Uruguay). Activity III.SA.212
9. Coordination of research activities in the zone and consolidation of the IICA/AID program. Attendance of agricultural research meetings and conferences, and those with the World Animal Association Secretariat (July 1, 1977 through June 30, 1978, Argentina, Brazil, Chile, Paraguay and Uruguay). Activity III.SZ.213

#### Line IV: Agricultural Production, Productivity and Marketing

1. Technical cooperation provided the "Campesino" Training and Organization Office of MAG in promotional aspects, organization and technical assistance to associative forms of production and marketing (July 1, 1977 through June 30, 1978, Colombia and Ecuador). Activity IV.AE.212
2. Reciprocal technical training in support of basic grain programs (August 4-12, 1977, Honduras and Nicaragua). Activity IV.NES.115

3. Reciprocal training provided cooperatives in marketing, credit and technical assistance (August, 1977, Honduras and Nicaragua). Activity IV.NN.123
4. Seminar on post-harvest losses in Central America and the Caribbean countries (participants) (August, 1977, Dominican Republic, Guatemala, Costa Rica, Panama and El Salvador). Activity IV.NZ.211
5. Diagnostic study of post-harvest problems in Central American Isthmus countries (June, 1977 through March, 1978, Central American Isthmus and Dominican Republic. (Activity IV.NZ.212)
6. Preparing training and investment projects with regional and international agencies (June, 1977 through March, 1978, Colombia, Costa Rica, Guatemala, Mexico and Panama). Activity IV.NZ.213
4. Participation of Costa Rican personnel in agrarian reform and "campesino" organization meetings and seminars (April, 1978, Honduras and Nicaragua). Activity VI.NCR.111
5. Reciprocal technical training in associative forms of production (August 4-12, 1977, Honduras and Nicaragua). Activity VI.NG.115
6. International Seminar on the Inter-relations between Production, Marketing and Financing in "Campesino" Associations (August 4-12, 1977, Honduras and Nicaragua). Activity VI.NH.212
7. Technical working meetings and cooperation with the National Agrarian Training Institute. Participation in the Seminar on Evaluation of the Experimental Laboratory on "Campesino" Organization (October through December, 1977, Costa Rica and Mexico). Activity VI.NM.213

#### Line V: Regional Rural Development

1. Support provided on training functionaries from the agencies working on the development of the tropics (July 1, 1977 through June 30, 1978, Costa Rica and Ecuador). Activity V.AE.313
2. Collaboration provided on training national technicians through trips abroad to observe experiences in regional and area development, "campesino" organization for production purposes and training of technicians and "campesinos". (August, 1977 through June, 1978, Honduras, Nicaragua, and Dominican Republic). Activity V.LH.2112
3. Coordination of the National Committees of the IICA-Tropics Program (July 1, 1977 through June 30, 1978, Bolivia, Brazil, Colombia, Ecuador, Venezuela and Peru). Activity V.SB.321
4. Support provided on the exchange of technicians and reciprocal training actions to take advantage of solutions already found in countries with similar problems in the conservation of land and waters (July 1, 1977 through June 30, 1978, Argentina, and Peru), Activity V.SZ.211
5. Presenting the Advisory Committee with a methodology to optimize the administration of irrigation systems (July 1, 1977 through June 31, 1978, Argentina and Uruguay) Activity V:SZ.213
8. Seminar on Cooperative Models (August 2-20, 1977, Honduras and Nicaragua). Activity VI.NP.215
9. Reciprocal training activities (July through December, 1977, Colombia, Costa Rica, Peru). Activity VI.NZ.111

#### Line VII: Formulation and Administration of Agricultural Policy

#### Line VI: Structural Changes and "Campesino" Organization

1. Analysis, elaboration, publication and dissemination of criteria to establish ways to acquire land for Agrarian Reform purposes (July 1, 1977 through June 30, 1978, Colombia, Bolivia, Ecuador, Guatemala, Honduras, Panama and Peru). Activity VI.AC.111
2. Compiling, analysis, elaboration, publication and dissemination of methodologies for "campesino" training (July 1, 1977 through June 30, 1978, Colombia, El Salvador, Honduras and Panama). Activity VI.AC.112
3. In-Service training on "campesino" enterprises (December, 1977 through archm 1978, Costa Rica, and Venezuela). Activity VI.AV.212
1. Support provided MACAS Sectoral Planning Office (July 1, 1977 through June 30, 1978, Argentina, Bolivia, Colombia and Ecuador). Activity VII.AB.121
2. Support provided MAG on training technicians in the organization, management and administration of development projects (September and October, 1977 and April 1978, Ecuador and Colombia). Activity VII.AE.212
3. Cooperation provided on the elaboration of IICA's Plan in each country and on the respective reprogramming actions (July 1, 1977 through June 30, 1978, Bolivia, Colombia, Ecuador, Peru and Venezuela). Activity VII.AZ.311
4. Collaboration provided on the monitoring and supervision of the operative-program (July 1, 1977 through June 30, 1978, Bolivia, Colombia, Ecuador, Peru and Venezuela). Activity VII.SZ.3k2
5. Collaboration provided on the meetings of the IICA Directors and of the Board of Directors (July 1, 1977 through June 30, 1978, Costa Rica and Paraguay). Activity VII.AZ.314
6. In-service training scholarships supervised by the Regional Office for the Southern Zone (June 1, 1977 through June 30, 1978, Brazil, Costa Rica and Peru). Activity VII.AZ.315
7. Advisory services and training provided UNICOP on the establishment of a control system for agricultural projects (June 1, 1977 through June 30, 1978, Guatemala and Honduras). Activity VII.NG.214

8. Participation in the meetings to program IICA's activities in the countries of the Northern Zone (May through June, 1978, Guatemala and Costa Rica). Activity VII.NCR.212
9. Participation in the meetings to program IICA's activities in the countries of the Northern Zone (January through June, 1978, Guatemala and El Salvador). Activity VII.NES.312
10. Participation in the meetings to program IICA's activities in the countries of the Northern Zone (August and November, 1977; March and June, 1978, Guatemala and Honduras). Activity VII.NH.313
11. Participation in the meetings to program IICA's activities in the countries of the Northern Zone (July 1, 1977 through June 30, 1978, Guatemala and Nicaragua). Activity VII.NN.312
12. Participation in the meetings to program IICA's activities in the countries of the Northern Zone (July 1, 1977 through June 30, 1978, Guatemala and Mexico). Activity VII.NM.312
13. Participation in the meetings to program IICA's activities in the countries of the Northern Zone (June 19-23, 1978, Guatemala and Panama). Activity VII.NP.312
14. Participation in the meetings to program IICA's activities in the countries of the Southern Zone (June, 1978, Uruguay and Argentina). Activity VII.SA.315
15. Participation in the meetings to program IICA's activities in the countries of the Southern Zone (July 1, 1977 through June 30, 1978, Uruguay and Chile). Activity VII.SC.313
16. Participation in the meetings to program IICA's activities in the countries of the Southern Zone (June, 1978, Uruguay and Paraguay). Activity VII.SP.314
17. Participation in the meetings to program IICA's activities in the countries of the Andean Zone (July 1, 1977 through June 30, 1978, Bolivia, Colombia, Ecuador, Peru and Venezuela). Activity VII.AZ.313
6. Negotiations with financing agencies for project identification in the Antilles Zone countries (July 1977 through June 30, 1978, Washington and San Jose). Activity II.U.123
7. Organization of a technical team to carry out studies on the development of appropriate methodology (July 1, 1977 through June 30, 1978, San Jose and Kingston).
8. Advisory services provided at least two countries on the formulation of education projects for the sector (January through June, 1978). Activity II.U.125
9. Advisory services provided the education projects in Haiti and Paraguay (July 1, 1977 through 30, 1978). Activity II.U.126
10. Meeting of agricultural research specialists (Activity III.U.131)
11. Reprogramming research projects (July 1, 1977 through June 30, 1978). Activity III.U.132
12. Basic studies on agricultural research (July 1, 1977 through June 30, 1978, Costa Rica). Activity III.U.133
13. Development of an internal information system for the coordination of Line of Action III (July 1, 1977 through June 30, 1978, Costa Rica). Activity III.U.134
14. Preparing a document on technical cooperation strategy in marketing. (September through October, 1977, Costa Rica). Activity IV.U.141
15. Elaboration of a research program applied to operative areas of the strategy (September through October, 1977, Costa Rica). Activity IV.U.142
16. Preparing a document of IICA's technical cooperation strategy to foster production and productivity (August 1977, Costa Rica). Activity IV.U.143
17. Meeting of professionals selected from within each area identified in the model (Activity IV.U.144)
18. Design of research on stabilization policies (October, 1977, Costa Rica). Activity IV.U.145
19. Revision of the reprogramming of Line of Action I activities (July 1, 1977 through June 1978, Costa Rica). Activity IV.U.146
20. Elaboration of the final draft and getting underway of the agreement between IICA and CIDA for Central America (September through December, 1977, Costa Rica). Activity IV.U.147
21. Collaboration provided on IICA's technical cooperation project in Panama (October, 1977). Activity IV.U.148
22. Collaboration provided Guyana's technical cooperation project (Activity IV.U.149)

**SUPPORT ACTIVITIES  
PLANNING BUREAU**

1. Reprogramming IICA-CIDIA projects in the countries (July 1, 1977 through June 30, 1978). Activity I.U.111
2. Development of an information system for the coordination of Line I (July 1, 1977 through June 30, 1978). Activity I.U.112
3. Advisory services provided information projects in the countries (July 1, 1977 through June 30, 1978). Activity I.U.113
4. Educators' meeting to adjust Line of Action II programs and strategies in the Southern Zone (March through June 1978, Montevideo, Uruguay). Activity II.U.121
5. Educators' meeting to adjust programs and strategies of Line of Action II in the Northern Zone (March through June, 1978, Guatemala). Activity II.U.122

23. Formulation of an inventory of projects for possible external financing in the Southern and Andean Zones, for Line IV (July 1, 1977 through June 30, 1978, Costa Rica). Activity IV.U.1410
24. Seminar to discuss the scope of Line of Action V's programs and their implementation Activity V.U.151
25. Meeting of Northern Zone specialists to adjust the Line of Action VI programs Activity VI.U.161
26. Meeting of the Antilles Zone specialists to analyze Line of Action VI policy Activity VI.U.162
27. Negotiation with financing agencies to carry out a regional study on viable models of social production organization in the Antilles Zone Activity VI.U.163
28. Organization of a technical team to carry out a study and develop the working methodology Activity VI.U.164
29. Meeting of country specialists from the region to analyze the social production organization models developed, and to identify projects Activity VI.U.164
30. Reprogramming Line VII projects in the countries (July 1, 1977 through June, 1978). Activity VII.U.171
31. Formulation of a program for external financing in the agricultural administration policy area (Costa Rica). Activity VII.U.172
32. Basic studies on agricultural planning (July 1, 1977 through June 30, 1978, Costa Rica). Activity VII.U.173
33. Elaboration of expanded theoretical bases for IICA's programs to increase production (July 1, 1977 through June 30, 1978, Costa Rica). Activity U.211
34. Establishing contacts with a view to elaborating agreements to conduct basic studies (July 1, 1977 through June 30, 1978, Costa Rica). Activity U.212
35. Study of agrarian sectoral planning systems in Latin American and Caribbean countries (July 1, 1977 through June 30, 1978). Activity U.213
36. Support provided on the preparation of Trinidad and Tobago and Barbados' Country-level Action Plans Activity U.211
37. Support provided on the preparation of Paraguay and Uruguay's Country-level Action Plans Activity U.222
38. Support provided on the preparation of Venezuela and Peru's Country-level Action Plans Activity U.223
39. Support provided on the preparation of two Northern Zone Countries' Action Plans (Guatemala). Activity U.224
40. Support provided on the preparation of Bolivia's Country-level Action Plan Activity U.225
41. Support provided on reprogramming in Haiti, Dominican Republic, Jamaica and Guyana (Dominican Republic). Activity U.226
42. Support provided the different Headquarters offices on the elaboration or adjustment of operations and external relations, human resources administration, information and publications. (July 12, 1977 through June 30, 1978, Costa Rica). Activity U.227
43. Establishing SDGAP's (Planning Bureau) linkage mechanism with the Northern Zone (Costa Rica). Activity U.228
44. Establishing of SDGAP's linkage mechanism with the Andean Zone (Costa Rica). Activity U.229
45. Establishment of SDGAP's linkage mechanism with the Southern Zone (Costa Rica). Activity U.2210
46. Establishing of SDGAP's linkage mechanism with the Antilles Zone (Costa Rica). Activity U.2211
47. Elaboration of the 1977-1978 Operative Program for Headquarters' Unit Activity U.231
48. Revision and consolidation of the 1977-78 Operative Program of all IICA's Units, as per recommendations made at the programming meetings, for approval by the Director General (Costa Rica). Activity U.232
49. Consolidation and Preparation of a Publication on the 1977-78 Operative Program Synthesis (August 1977, Costa Rica). Activity U.233
50. Advisory services provided Institute Units on the elaboration of their Preliminary Drafts of the 1978-79 Program-Budget, at the Project Level. (August, 1977, Costa Rica). Activity U.234
51. Elaboration of Program-Budget Proposals by Headquarters Units (August and September, 1977, Costa Rica). Activity U.235
52. Elaboration of instructions for the presentation of the 1978-79 Operative Program, at different programming levels, for approval by the Director General (September, 1977, Costa Rica). Activity U.236
53. Elaboration of a Draft Program-Budget for 1978-79 to be presented to the Special Committee of the Board of Directors and to the Council of Directors (September, 1977, Costa Rica). Activity U.237
54. Participation in the analysis of the 1978-79 Draft Program-Budget (October, 1977, Costa Rica). Activity U.238
55. Revision of the 1978-79 Draft Program-Budget in line with recommendations received from the Special Committee of the Board of Directors and the Council of



- Directors, and as per decisions taken by the Director General (November, 1977, Costa Rica). Activity U.239
56. Consolidation of the IICA Unit Proposals concerning Program and budgetary aspects, to be included into the 1978-79 Operative Program (December, 1977 and January, 1978, Costa Rica). Activity U.2310
  57. Design and publication of the Proposed Program-Budget for 1978-79 (December, 1977 and January 1978, Costa Rica). Activity U.2311
  58. Revision of the modifications to the 1977-78 Operative Program, as presented by the Regional Offices as a result of mid-year budget reprogramming (February, 1978). Activity U.2312
  59. Revision of 1978-79 Operative Program at country-level programming meetings (February, 1978). Activity U.213
  60. Collaboration provided the Director General and Regional Directors on the presentations of the 1978-79 Program-Budget (March, 1978). Activity U.2314
  61. Consolidation of recommendations made at the country-level programming meetings (April, 1978, Costa Rica). Activity U.2315
  62. Collaboration provided the Director General on the presentation of the Proposed 1978-79 Program-Budget, to the Special Committee and the Board of Directors (May, 1978, Paraguay). Activity U.2316
  63. Adjustments made as needed to the 1978-79 Program-Budget, as per decisions taken by the Board of Directors and the Director General (May, 1978, Costa Rica). Activity U.2317
  64. Analysis and approval of the 1978-79 Operative-Program for all IICA Units, as per decisions taken by the Board of Directors and recommendations made at programming meetings (June, 1978). Activity U.2318
  65. Provision of advisory services to Institute units on the formulation of preliminary drafts for the 1979-80 Program-Budget, at the project level (June, 1978). Activity U.2319
  66. Analysis of proposals for modification in the 1977-78 Operative-Program, and request for transfers in budgetary accounts by Institute Units, in consultation with the respective Line Coordinators (July 1, 1977 through 30, 1978, Costa Rica). Activity U.2320
  67. Analysis of the allocation of quota and other source budget funding and their structure and balance between objects of expenditure, lines, zones, programs, countries and projects to assure their being in line with IICA policy (July 1, 1977 through June, 1978, Costa Rica). Activity U.2321
  68. Elaboration of criteria for the allocation of budget resources for approval by the Director General (July 1, 1977 through June 30, 1978, Costa Rica). Activity U.2322
  69. Up-dating the registry of current agreements between IICA and National and International agencies (July 1, 1977 through June 30, 1978, Costa Rica). Activity U.2323
  70. Selection of candidates for the evaluation committee (July-August, 1977, Costa Rica). Activity U.241
  71. Programming trip and visiting key sources of information, in selected countries, by the evaluation committee (October, 1977 through February, 1978). Activity U.242
  72. Compiling and analysis of information on Line I and VI programs (July through October, 1977, Costa Rica). Activity U.243
  73. Meeting with specialists of Line of Action I and V programs (Activity U. 243b)
  74. Preparation of documents for the Board of Directors. (January through March, Costa Rica). Activity U.244
  75. Planning activities for the evaluation of Line III and VII programs (January through June, 1978, Costa Rica). Activity U.245

#### **SUPPORT ACTIVITIES PUBLIC INFORMATION OFFICE**

The 40 Support Activities carried out by the Public Information Office take the form of publications, official documents, the publication of books and educational material, journals, newsletters and bulletins, in addition to disseminating information about IICA and its work throughout Latin America and elsewhere.



Appendix II.  
NUMBER OF INSTITUTIONS  
WITH WHICH IICA COOPERATED  
IN THE 1977–1978 FISCAL PERIOD



## NUMBER OF INSTITUTIONS WITH WHICH IICA COOPERATED IN THE 1977–1978 FISCAL PERIOD

Country	Number of Institutions
Argentina	99
Barbados	17
Bolivia	41
Brazil	95
Colombia	92
Costa Rica	12
Chile	41
Dominican Republic	15
Ecuador	37
El Salvador	12
Guatemala	23
Guyana	2
Haiti	19
Honduras	12
Jamaica	24
Mexico	56
Nicaragua	8
Panama	7
Paraguay	33
Peru	31
Uruguay	8
Venezuela	30
International Agencies	42
National Agencies Abroad	9
	765



Appendix III.  
PARTICIPANTS IN IICA ACTIVITIES



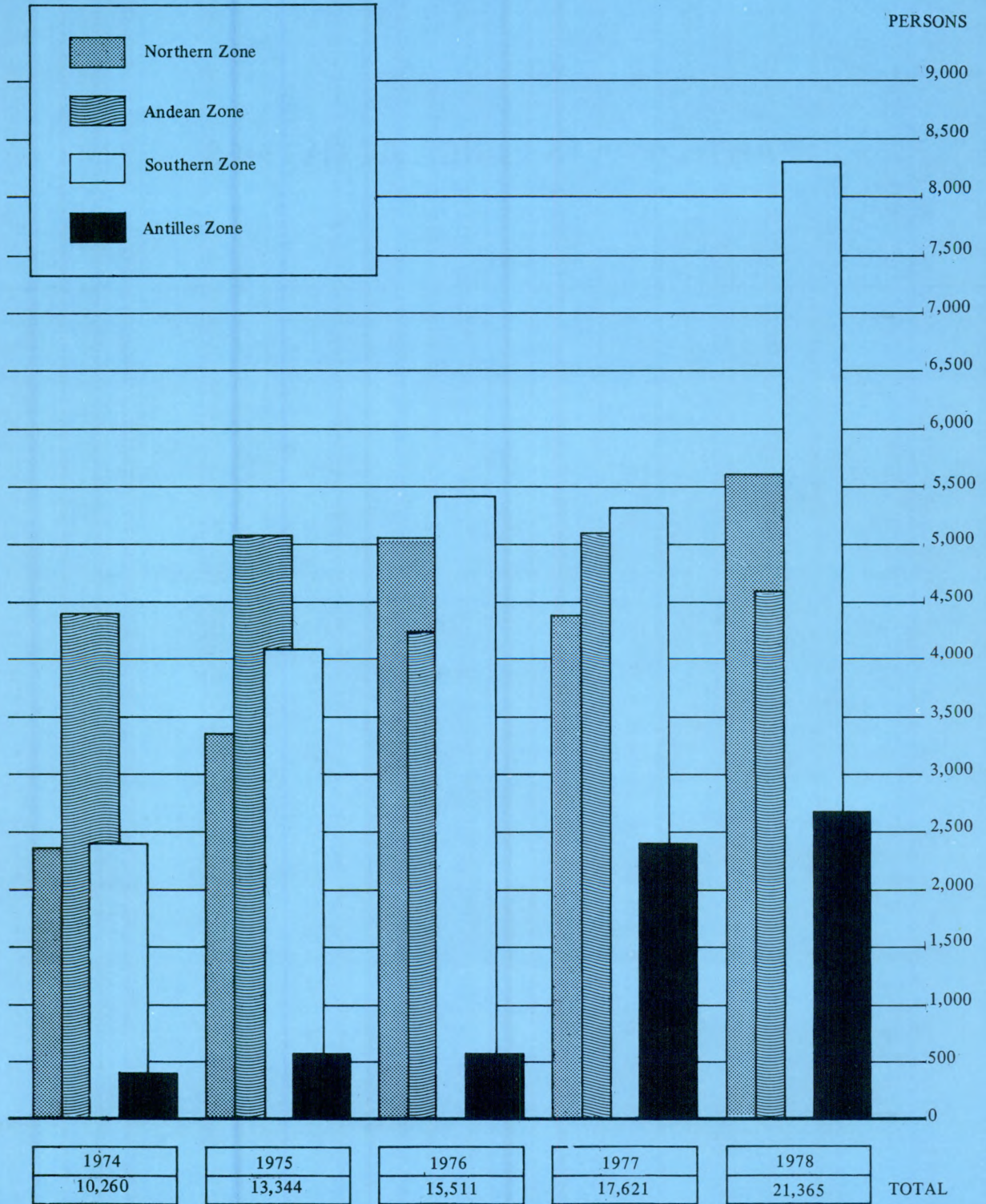


## PARTICIPANTS IN IICA ACTIVITIES

Country	1973	1974	1975	1976	1977	1978
Argentina	20	541	629	792	1,293	3,222
Barbados	—	—	—	—	—	93
Bolivia	74	427	457	787	297	711
Brazil	254	999	1,041	1,797	1,893	2,570
Colombia	482	1,385	1,219	1,160	2,185	1,112
Costa Rica	226	745	972	950	390	446
Chile	68	572	2,289	2,511	1,046	782
Dominican Republic	178	325	347	336	1,496	580
Ecuador	17	610	964	552	390	478
El Salvador	—	351	404	175	537	265
Guatemala	258	236	169	286	157	481
Guyana	—	—	—	—	58	70
Haiti	82	157	184	261	917	483
Honduras	77	268	582	2,327	1,938	3,204
Jamaica	—	—	—	65	69	1,514
Mexico	281	622	809	663	558	427
Nicaragua	70	61	220	320	112	150
Panama	59	50	250	361	784	636
Paraguay	53	238	232	107	671	1,328
Peru	175	1,480	1,570	851	1,360	1,292
Uruguay	56	134	108	198	455	475
Venezuela	221	1,059	898	1,012	1,015	1,046
TOTAL	2,651	10,260	13,344	15,511	17,621	21,365

**FIGURE 5**

**PARTICIPANTS IN IICA ACTIVITIES, BY ZONE**



Appendix IV.  
PUBLICATIONS



## PUBLICATIONS

Following is the list of publications by IICA technicians or the results of the cooperative actions of the Institute with national institutions.

The publications are presented in alphabetical order: publications by IICA staff and offices; papers published in the Series of Reports on Conferences, Courses and Meetings; periodic publications (journals and bulletines which IICA publishes regularly); and books published within the Textbooks and Educational Materials Series.

1. AGUDELO SILVA, F. Determinación de pérdidas post-cosecha de alimentos causados por insectos; algunos comentarios. *In Seminario sobre Reducción de Pérdidas Post-Cosecha de Productos Agrícolas en el Area del Caribe y América Central*, Santo Domingo, Rep. Dominicana, 1977. Estudios de casos en la Rep. Dominicana. Santo Domingo, Rep. Dominicana, SEA/IICA, 1977. v. 3, 8 p.  
Presentado en el Curso de Tecnología Apícola, 1o., Restrepo, Colombia, 1978.
2. ———. Guía para equipamiento preliminar de un insectario. Convenio IICA/SEA/FEDA. Documento de trabajo no. 49. 1978. 19 p.
3. ———. Informe final de la asesoría en entomología (Período 30/7/76 al 30/4/78). San Cristóbal, Rep. Dominicana, IICA/SEA/FEDA, 1978. 15 p.
4. AHLERS, T. H. Haitian rural urban migration: a case study of small towns. Port-au-Prince, Bureau de l'IICA en Haití, 1978. s.p.
5. ALBA, V. Apuntes para cursillos de técnicas de comunicación. Convenio IICA/SEA/FEDA. Material Didáctico no. 39. 1977. 32 p.
6. ———. Informe final de la asesoría en comunicaciones (Período 23/11/76 al 30/10/77). San Cristóbal, Rep. Dominicana, IICA/SEA/FEDA, 1977. 32 p.
7. ———. Normas de estilo para publicaciones de la SEIECA. Convenio IICA/SEA/FEDA. Documento de trabajo no. 44. 1977. 38 p.
8. ———. Notas sobre fotografías para principiantes. Convenio IICA/SEA/FEDA. Material Didáctico no. 40. 1977. 33 p.
9. ———. Pautas para elaborar un compendio. Convenio IICA/SEA/FEDA. Material Diáctico no. 38. 1977. 10 p.
10. ALONSO, A. y COHAN, H. E. Tipificación por conglomerados y su análisis de estabilidad. IICA. Publicación Miscelánea no. 166. 1977. 25 p.
11. ALVAREZ RAMIREZ, A. Aplicaciones de sicología experimental en el aprendizaje de la apicultura. Bogotá, Programa Nacional de Capacitación Agropecuaria, 1978. 11 p.
12. ALVAREZ VALLE, H. Situación de las plantaciones forestales en los países de la Zona Andina. *In Seminario Nacional sobre Plantaciones Forestales*, La Paz, 1977. IICA. Informes de Conferencias, Cursos y Reuniones, no. 141. 1977. pp. 20-30.
13. ALVEAR, A. y ARBOLEDA-SEPULVEDA, O. Capacitación de auxiliares en información agrícola; experiencias y proyecciones. San José, Costa Rica, CIDIA, 1978. 29 p.
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Appendix V.  
AGREEMENTS, AND CONTRACTS SUBSCRIBED  
DURING THE JULY 1, 1977 – JUNE 30, 1978 PERIOD



## AGREEMENTS, AND CONTRACTS SUBSCRIBED DURING THE JULY 1, 1977 – JUNE 30, 1978 PERIOD

No.	TITLE	DATE SIGNED	DURATION	AMOUNT
26/77	Aditivo ao Convênio de Cooperação Técnica celebrado entre o Ministério da Agricultura da República Federativa do Brasil e o Instituto Interamericano de Ciências Agrícolas – IICA da Organização dos Estados Americanos – OEA, firmado em 28 de Maio de 1976	27/7/77	1-1/2 años	US\$ 61.947,00
29/77	Convenio entre la Secretaría de Agricultura y Recursos Hidráulicos, el Instituto Interamericano de Ciencias Agrícolas – OEA y la Productora Nacional de Semillas para la Elaboración de un Estudio de Factibilidad para el Fomento de la Producción, Procesamiento y Distribución de Semillas Mejoradas en Areas Tropicales de México	10/8/77	3 meses	US\$ 60.000,00
31/77	Acuerdo entre el Gobierno de Honduras, la Secretaría General de la Organización de los Estados Americanos y el Instituto Interamericano de Ciencias Agrícolas, para la Celebración de la VII Conferencia Interamericana de Agricultura	10/8/77	–	–
32/77	Segundo Termo Aditivo ao Convênio celebrado em 10 de Setembro de 1976, entre a Companhia de Desenvolvimento do Vale do São Francisco –CODEVASF– e o Instituto Interamericano de Ciências Agrícolas da OEA, estabelecendo Cooperação Técnica para a Execução do Projeto do Fundo Simón Bolívar “Apoio ao Aumento da Produção e da Produtividade no Nordeste do Brasil através da Implantação de Perímetros Irrigados”, para Prorrogação do Prazo de sua Vigência	26/7/77	1 año	US\$ 100.000,00
33/77	Primeiro Termo Aditivo ao Convênio firmado em 10 de Março de 1977, entre a Comissão Executiva do Plano da Lavoura Cacaueira e o Instituto Interamericano de Ciências Agrícolas, da Organização dos Estados Americanos, visando a Execução e Elaboração de um Programa de Desenvolvimento Agrícola da Região Cacaueira da Bahia, Fortalecimento e Adequação dos Mecanismos de Cooperação Interinstitucional e o Desenvolvimento de Atividades Técnico-Científicas	21/9/77	–	Cr\$ 200.000,00
34/77	Amendment 1 – Grant No. AID/ta-G-1316 PIO/T No.: 931-0096-3178502	8/9/77	1 año	US\$ 162.500,00
35/77	Agreement between the Government of Barbados and the Inter-American Institute of Agricultural Sciences on the Privileges and Immunities of the Institute	19/8/77	–	

No.	TITLE	DATE SIGNED	DURATION	AMOUNT
38/77	General Agreement between the Midwest Universities Consortium for International Activities, Inc. and the Inter-American Institute of Agricultural Sciences, concerning Joint Technical Cooperation for the Rural Development of Latin America and the Caribbean	28/7/77	5 años	Acuerdo general
39/77	Contract for Expanded Program of Economic Analysis –Latin American Planning Network (The technical services to be provided by IICA intended to serve as a major input into development of an effective networking mechanisms for providing agricultural policy analysis and planning capabilities to Latin American countries, with the cooperation of Iowa State University and Michigan State Univ.	31/8/77	3 años	US\$ 288.390,00
40/77	Agreement between the Government of Trinidad and Tobago and the Inter-American Institute of Agricultural Sciences on the Privileges and Immunities of the Institute	14/10/77	–	
41/77	Convenio de Operaciones y de Aporte entre la Comisión Nacional de Estadísticas Agrícolas de la República de Guatemala y el Instituto Interamericano de Ciencias Agrícolas – OEA	30/9/77	1 año	US\$ 5.000,00 Q 7.000,00
42/77	Acuerdo General de Cooperación Técnica y Científica entre el Instituto Interamericano de Ciencias Agrícolas de la Organización de Estados Americanos y el Gobierno del Estado de Israel	25/11/77	–	Acuerdo general
43/77	Acuerdo de Cooperación entre el Instituto Interamericano de Ciencias Agrícolas de la Organización de Estados Americanos y el Gobierno del Reino de España	7/12/77	3 años	Acuerdo general
44/77	Acordo que entre si celebram a Associação Brasileira de Educação Agrícola Superior (ABEAS), e o Instituto Interamericano de Ciências Agrícolas (IICA), da Organização dos Estados Americanos (OEA), para prorrogação do Acordo que firmaram em vinte e cinco do mes de Agosto de mil novecentos e setenta e seis, para consolidar a institucionalização da ABEAS como entidade nacional a serviço do ensino agrícola	30/8/77	1 año	A fijar de acuerdo Plan de Actividades
45/77	Convênio de Cooperação Técnica Recíproca entre o IBC–GERCA e o IICA para a Modernização do Cultivo do Café, sua Comercialização e Prevenção e Controle da Ferrugem e outros Problemas Fitossanitarios, na Região Centro-Americana e do Caribe	31/8/77	1 año	Cr\$ 1.500.000,00
46/77	Convenio sobre Servicios Profesionales y Cooperación Técnica en Economía Agropecuaria entre la Secretaría de Estado de Agricultura y el Instituto Interamericano de Ciencias Agrícolas – OEA	16/9/77	2 años	US\$ 380.364,00
47/77	Primeiro Termo Aditivo ao Convênio No. 012 celebrado em 11 de Novembro de 1974 entre o Governo da República Federativa do Brasil e o Instituto Interamericano de Ciências Agrícolas, sobre a Prestação da Assistência Técnica aos Programas de Irrigação para Ampliação da Area Geográfica de Atuação do referido Convênio, bem como Modificação de outras Disposições do mesmo	11/7/77	2 años	US\$ 325.000,00

No.	TITLE	DATE SIGNED	DURATION	AMOUNT
48/77	Ajuste de Cooperação que, entre si, celebram a Empresa Brasileira de Assistência Técnica e Extensão Rural e o Instituto Interamericano de Ciências Agrícolas, da Organização dos Estados Americanos, objetivando a Execução de um Programa de Cooperação Técnica visando ao fortalecimento do Sistema Brasileiro de Assistência Técnica e Extensão Rural SIBRATER	30/8/77	3 años	—
49/77	Carta de Entendimiento entre el Ministerio de Agricultura y Ganadería de Costa Rica y el Instituto Interamericano de Ciencias Agrícolas-OEA para Ampliación de Recursos del Contrato 28/76 del primero de octubre de mil novecientos setenta y seis	7/11/77	2 años	US\$ 178.000,00
50/77	Convenio entre el IICA y el Ministerio de Agricultura y Ganadería del Ecuador para la Ejecución del Proyecto del Fondo Simón Bolívar sobre "Proyecto Integrado de Desarrollo Agropecuario Quimiag-Penipe"	2/12/77	1 año	US\$ 102.000,00
53/77	Segundo Termo Aditivo ao Convênio celebrado em 10 de Setembro de 1976, entre a Companhia de Desenvolvimento do Vale do São Francisco - CODEVASF e o Instituto Interamericano de Ciências Agrícolas da OEA, estabelecendo Cooperação Técnica para a Execução do Projeto do Fundo Simón Bolívar "Apoio ao Aumento da Produção e da Produtividade no Nordeste do Brasil através da Implantação de Perímetros Irrigados", para Prorrogação do Prazo de sua Vigência	26/7/77	1 año	US\$ 100.000,00
54/77	Grant for the Instituto Interamericano de Ciencias Agrícolas (IICA) for a Project: AGRIS Latin America - Phase II Centre File: 3-P-77-0062	24/11/77	3 años	US\$ 1.469.290,00
55/77	Termo Aditivo ao Ajuste celebrado entre o Ministério da Agricultura e o Instituto Interamericano de Ciências Agrícolas da Organização dos Estados Americanos celebrado em 26 de Outubro de 1977, publicado no Diário Oficial da União de 9 de Novembro de 1977, objetivando a Realização de Projetos de Desenvolvimento Agrícola	29/11/77	10 meses	Cr\$ 340.000,00
56/77	Ajuste que entre si, celebram o Ministério da Agricultura e o Instituto Interamericano de Ciências Agrícolas (IICA) da Organização dos Estados Americanos (OEA) objetivando a Execução de dois Cursos de Capacitação em Preparação e Avaliação de Projetos de Desenvolvimento Agrícola	26/10/77	10 meses	Cr\$ 1.866.000,00
57/77	Ajuste que, entre si, celebram o Ministério da Agricultura, através da Subsecretaria de Planejamento e Orçamento (SUPLAN) o Instituto Interamericano de Ciências Agrícolas (IICA) da OEA, e a Fundação Getúlio Vargas (FGV), objetivando a Cooperação Técnica para o Fortalecimento dos Programas Desenvolvidos pela Fundação através da Escola Interamericana de Administração Pública (EIAP/FGV) no Setor Agrícola	30/8/77	3 años	Cr\$ 500.000,00

No.	TITLE	DATE SIGNED	DURATION	AMOUNT
58/77	General Agreement between University of Puerto Rico-Mayaguez Campus and the Inter-American Institute of Agricultural Sciences regarding Joint Technical Cooperation Efforts for Agricultural and Rural Development in Latin America and the Caribbean Area	16/9/77	5 años	Acuerdo general
59/77	Grant to Area for IICA-Rural Youth Documentation Centre File: 3-P-76-0181	16/12/77	18 meses	US\$ 56.914,00
1/78	Convenio entre el Instituto Interamericano de Ciencias Agrícolas-OEA y la Secretaría Técnica del Consejo Superior de Planificación Económica del Gobierno de Honduras para la Cooperación Técnica en el "Proyecto de Fortalecimiento Institucional del Subsistema de Planificación Agrícola"	10/1/78	18 meses	US\$ 118.600,00
2/78	Acuerdo General de Cooperación entre el Instituto Interamericano de Ciencias Agrícolas y el Instituto Internacional de Agricultura Tropical	25/1/78	-	Acuerdo general
3/78	Convenio Específico entre el Instituto Internacional de Agricultura Tropical y el Instituto Interamericano de Ciencias Agrícolas	25/1/78	5 años	-
4/78	Acuerdo General entre el Departamento de Agricultura de los Estados Unidos y el Instituto Interamericano de Ciencias Agrícolas sobre Cooperación Técnica para el Desarrollo de la Producción de Alimentos y la Agricultura en América Latina y el Caribe	15/2/78	5 años	Acuerdo general
7/78	Convenio de Operaciones con el Instituto Agrario Nacional (IAN) y la Fundación para la Capacitación e Investigación Aplicada a la Reforma Agraria (CIARA)	13/3/78	2 años	Bs\$ 300.000,00
8/78	Convenio entre el Ministerio de Asuntos Campesinos y Agropecuarios y el Instituto Interamericano de Ciencias Agrícolas-OEA (Preparación de Proyectos Integrados de Desarrollo Rural)	22/3/78	10 meses	US\$ 266.000,00
8/78a	Convenio entre el Instituto Interamericano de Ciencias Agrícolas y el Ministerio de Educación Pública de Chile para la Ejecución del Proyecto del Fondo Simón Bolívar sobre Apoyo a la Escuela de Nivel Medio Agrícola de San Fernando para constituirse en Centro de Desarrollo Rural en beneficio de Pequeños Agricultores	1/3/78	1 año	US\$ 40.000,00
9/78	Convenio entre el IICA y Corfo-Río Colorado de Argentina para la Ejecución de Proyectos del Fondo Simón Bolívar sobre Desarrollo de la Producción, Comercialización y Agroindustria en Areas de Riego en Argentina - Valle Bonaerense del Río Colorado	7/2/78	1 año	US\$ 223.500,00
10/78	Accord relatif a l'Organisation d'un Programme d'Entrainement dans la Preparation et l'Evaluation des Projets Agricoles (PEPA)	31/10/77	12 semanas	Gourdes 239.000,00 (1a. fase)

No.	TITLE	DATE SIGNED	DURATION	AMOUNT
11/78	Acuerdo General de Cooperación entre el Instituto Interamericano de Ciencias Agrícolas y el Centro Internacional de Mejoramiento de Maíz y Trigo	22/5/78	-	Acuerdo general
12/78	Convênio que entre si celebram a Secretaria de Educação e Cultura do Estado de Pernambuco e o Instituto Interamericano de Ciências Agrícolas	30/5/78	18 meses	Cr\$ 1.185.448,00
13/78	Acuerdo de Cooperación y Coordinación para el Establecimiento de una Red de Servicios del AGRINTER	10/4/78	5 años	Acuerdo general
14/78	Convenio sobre Cooperación Técnica no Reembolsable entre la Nación Argentina, la República de Bolivia, la República Federativa do Brasil, la República de Chile, la República del Paraguay, la República Oriental del Uruguay y el Instituto Interamericano de Ciencias Agrícolas por una parte y por la otra el Banco Interamericano de Desarrollo (Programa Cooperativo de Investigación Agrícola en los Países del Cono Sur)	7/3/78	3 años	US\$ 4.100.000,00
15/78	Convenio de Operaciones entre el Gobierno de Honduras y el Instituto Interamericano de Ciencias Agrícolas - OEA, para la Ejecución del Convenio de Asistencia Técnica del Contrato IDA-628-HO	31/5/78	3 años	US\$ 2.225.901,00
16/78	Accord Administratif Relatif au Projet de Renforcement du Service National de Semences Améliorées (SENASA) au Departement de l'Agriculture, des Ressources Naturelles et du Developpement Rural d'Haiti	19/9/77	1 año	US\$ , 52.000,00
17/78	Memorandum of Agreement between the Inter-American Institute of Agricultural Sciences and the University of Cornell	1/1/78	3 a 5 años	US\$ 50.000,00 por año
18/78	Carta de Entendimiento entre la Secretaría de Recursos Naturales y el Instituto Interamericano de Ciencias Agrícolas de la OEA para la Utilización de Recursos Adicionales	25/1/78	1 año	L. 75.000,00
20/78	Accord entre l'Institut Interamericain des Sciences Agricoles et le Departement de l'Agriculture, des Ressources Naturelles et du Développement Rural pour executer un Programme de Coopération Technique en vue d'aider le Departement de l'Agriculture, des Ressources Naturelles et du Développement Rural dans l'implantation d'un Nouveau Système d'Education intégrée pour le Développement Rural en Haiti	7/3/78	4 años	US\$ 1.000.000,00
21/78	Accord entre l'Institut Interaméricain des Sciences Agricoles, Organisme Spécialise de l'OEA avec siège a San José, Costa Rica et avec personnalité juridique en Haiti selon l'Accord signé le 8 Mars 1972 et l'Organisme de Développement de la Vallée de l'Artibonite, Organisme Public Autonome, crée par la Loi du 2 September 1949 et reorganisé par la Loi du 24 Mai 1971, pour l'Exécution d'un Programme de Coopération Technique en vue du Renforcement des Structures Administratives, Techniques et Financières de l'ODVA et de la Supervision du Prêt (473/SF-HA), octroyé a cet Organisme par la Banque Interaméricaine de Développement	6/12/77	4 años	US\$ 1.036.200,00

No.	TITLE	DATE SIGNED	DURATION	AMOUNT
24/78	Acuerdo de Operaciones entre el Instituto de Investigación Agropecuaria de Panamá, el Centro Agronómico Tropical de Investigación y Enseñanza y el Instituto Interamericano de Ciencias Agrícolas de la OEA, para brindar Asistencia Técnica a la Investigación y Demostración Pecuarias	22/5/78	2 años	US\$ 183.250,00
25/78	Ajuste que, entre sí, celebran o Ministério da Agricultura da República Federativa do Brasil e o Instituto Interamericano de Ciências Agrícolas, da Organização dos Estados Americanos; objetivando o Estabelecimento de Cooperação Técnica para colaborar no Fortalecimento do Sistema Nacional de Abastecimento Agrícola	1/6/78	3 años	Cr\$ 4.000.000,00
28/78	Segundo Termo Aditivo ao Convênio de Cooperação Técnica firmado em 24 de Maio de 1976, entre o Ministério da Agricultura da República Federativa do Brasil e o Instituto Interamericano de Ciências Agrícolas-IICA, da Organização dos Estados Americanos-OEA	Enero, 1978	2 años	US\$ 200.000,00
29/78	Convênio que entre si celebran a Secretaria da Agricultura do Estado de Parana - SEAG e o Instituto Interamericano de Ciências Agrícolas da Organização dos Estados Americanos-OEA para Assessoria na Implantação do Sistema Integrado de Comunicação Rural	13/3/78	1 año	Cr\$ 155.000,00
32/78	Termo Aditivo ao Convênio celebrado em 17 de Novembro de 1972, entre o Ministério da Agricultura, e o Estado do Rio Grande do Sul, o Instituto Interamericano de Ciências Agrícolas da OEA e o Banco Regional de Desenvolvimento do Extremo Sul, publicado no Diário Oficial da União, de 17 de abril de 1973	27/6/78	3 meses	-



Appendix VI.  
INTERNATIONAL PROFESSIONAL  
PERSONNEL STAFF LIST



## INTERNATIONAL PROFESSIONAL PERSONNEL \*

Name	Nationality	Academic Degree or Profession	Position	Location
Acosta, Jaime <sup>1</sup>	Colombia	Economist	Head, Organization and Internal Auditing Division	San Jose, Costa Rica
Acosta, Ramiro	Bolivia	Editor	Art Editor	San Jose, Costa Rica
Aguirre, Juan A. <sup>2</sup>	Cuba	Ph.D.	Agricultural Planning Specialist	San Jose, Costa Rica
Aitken-Soux, Percy	Bolivia	Ph.D.	Office Director	Kingston, Jamaica
Albuquerque, Héctor	Uruguay	Ph.D.	Director of Administration	San Jose, Costa Rica
Alvarez, Hugo	Bolivia	Mag. Agr.	Forest Development Specialist	Lima, Peru
Alvear, Gualberto	Ecuador	Lic. Bibliot.	Documentalist	San Jose, Costa Rica
Alvim, Paulo de T.	Brazil	Ph.D.	Personnel Emeritus	Rio de Janeiro, Brazil
Amézquita, Rafael <sup>3</sup>	Colombia	Ph.D.	Post-Harvesting Crop Losses Specialist	Mexico, D.F., Mexico
Ansorena, Ignacio	Uruguay	Ph.D.	Office Director, Agricultural Extension Specialist	Quito, Ecuador
Araujo, José Emilio G.	Brazil	Dr. Agr.	Director General	San Jose, Costa Rica
Araujo, Miguel A.	El Salvador	Mag. Sc.	Advisor to the Regional Coordination Director, and Agricultural Project Elaboration Specialist	Guatemala, Guatemala
Arboleda, Orlando	Colombia	M.L.S.	Information and Documentation Specialist	San Jose, Costa Rica
Arias, Carlos Luis	Costa Rica	M.A.	Agricultural Communications Specialist	Guatemala, Guatemala
Bareiro, José Luis <sup>4</sup>	Paraguay	Mag. Sc.	Project Planning and Evaluation Specialist	Caracas, Venezuela
Barrios, José	Chile	M.S.	Specialist, Land and Water Management and Conservation	Rio de Janeiro, Brazil
Barreyro, Héctor	Argentina	Ph.D.	Agricultural Economics Specialist	Georgetown, Guyana
Barros, Mario Paes de <sup>5</sup>	Brazil	M.S.	Office Director, Rural Development Specialist	Trinidad-Tobago
Bazán, Rufo <sup>6</sup>	Bolivia	Ph.D.	Soils Specialist	Turrialba, Costa Rica
Beraja, Isidoro	Honduras	Ing. Agr.	Agricultural Production Planning Specialist	Panama, Panama
Blair, Enrique	Colombia	Ing. Agr.	Deputy Director General for External Coordination	San Jose, Costa Rica
Blasco, Mario	Spain	Ph.D.	Agricultural Research Specialist	Lima, Peru
Bucheli, Renán	Ecuador	M.S.	Agricultural Marketing Specialist	Mexico, D.F., Mexico
Buitrón, Víctor Hugo	Ecuador	Mag. Agr.	Agricultural Extension Specialist	Bogota, Colombia
Caballero, Hernán	Chile	Ph.D.	Agricultural Research Specialist	Montevideo, Uruguay
Cabral, José Irineu	Brazil	Economist	President of EMBRAPA	Brasília, D.F. Brazil
Cáceres, Hugo	Colombia	M.L.S.	Head, Systems Development Division	San Jose, Costa Rica
Cardozo, Armando <sup>7</sup>	Bolivia	Ph.D.	Livestock Development Specialist	Bogota, Colombia
Cásseres, Ernesto H.	Costa Rica	Ph.D.	Agricultural Education Specialist	Santiago, Chile
Castronovo, Alfonso	Argentina	M.S.	Head, Evaluation Division	San Jose, Costa Rica

- 1 Until June 1, 1978, Head, Services Division  
2 In Managua, Nicaragua as Office Director, until March 31, 1978  
3 Until June 1, 1978  
4 In San Jose, Costa Rica, until February 15, 1978  
5 In La Paz, Bolivia, until November 19, 1977  
6 CATIE personnel  
7 Until March 31, 1978  
\* Quotas Funds

Name	Nationality	Academic Degree or Profession	Position	Location
Cetrángolo, Miguel A.	Uruguay	M.Ec.	Agricultural Economics Specialist	Asunción, Paraguay
Clifford, Roy A.	U.S.A.	Ph. D.	Rural Social Development Specialist	Guatemala, Guatemala
Cohan, Hugo	Argentina	Ph.D.	Agricultural Economics Specialist	Montevideo, Uruguay
Coto, Rogelio	Costa Rica	Communications	Head of PIADIC	San Jose, Costa Rica
Cubillos, Gustavo <sup>1</sup>	Chile	Ph.D.	Agrostologist	Turrialba, Costa Rica
Cusicanqui, Jaime	Bolivia	Communications	Executive Secretary of Rural Youth; Coordinator, Scientific and Professional Associations	San Jose, Costa Rica
Chaverra, Hernán	Colombia	Ph.D.	Regional Agricultural Planning Specialist	Caracas, Venezuela
Chávez, Oswaldo	Peru	Ing. Agr.	Specialist, Land and Water Management and Conservation	Tegucigalpa, Honduras
Damtoft, Finn	Canada	M.A.	Information and Documentation Specialist	San Jose, Costa Rica
Deaton, Oliver <sup>1</sup>	U.S.A.	Ph.D.	Zootechician	Turrialba, Costa Rica
De la Cruz, Matilde	Costa Rica	Editor	Editor, Teaching Text and Materials	San Jose, Costa Rica
Díaz Bordenave, Juan	Paraguay	Ph.D.	Agricultural Communications Specialist	Rio de Janeiro, Brazil
Donoso, Augusto	Chile	Ing. Agr.	Agricultural Production Planning Specialist	Bogota, Colombia
Dubois, Jean	Belgium	Ing. Agr.	Tropics Development Specialist	Belém do Para, Brazil
Elgueta, Manuel <sup>1</sup>	Chile	Ing. Agr.	Personnel Emeritus	Turrialba, Costa Rica
Erickson, Ana María de	Guatemala	Librarian	Executive Secretary of AIBDA	Turrialba, Costa Rica
Erickson, Arnold L. <sup>1</sup>	U.S.A.	M.S.	Research Secretariat	Turrialba, Costa Rica
Esparza, Javier <sup>2</sup>	Colombia	Ing. Agr.	Specialist in Agronomy	Port-au-Prince, Haiti
Fargas, José <sup>1</sup>	Ecuador	Ph.D.	Plant Physiologist	Turrialba, Costa Rica
Febres, Abraham	Peru	M.S.	Regional Development Specialist	La Paz, Bolivia
Fernández, Angel	Argentina	Librarian	In Charge, Documentation Center	Buenos Aires, Argentina
Fernández, Hugo	Uruguay	M.S.	Agricultural Education Specialist	San Jose, Costa Rica
Fernández, Carlos E. <sup>3</sup>	Guatemala	Ph.D.	Head of PROMECAFE	San Jose, Costa Rica
Ferreiro, Carlos A.	Uruguay	Accountant	Head, Accounting Division	San Jose, Costa Rica
Fiori, Ernani María	Brazil	Mag. Sc.	Office Director, Agricultural Programming Specialist	Asuncion, Paraguay
Fletschner, Carlos <sup>4</sup>	Paraguay	Ph.D.	Agricultural Marketing Specialist	Asuncion, Paraguay
Flores, Luis	Peru	Bs. Pol. & Soc. Sci.	Social Development Specialist	Mexico, D.F., Mexico
Forsythe, Warren	Jamaica	Ph.D.	Office Director, Specialist in Land and Water Management and Conservation	Bridgetown, Barbados
Franco, Alberto	Colombia	M.S.	Agricultural Planning Specialist	San Jose, Costa Rica
Frigerio, Norberto	Argentina	Ph.D.	Agricultural Marketing Specialist	Rio de Janeiro, Brazil
Galrao, María José	Brazil	Librarian	Information and Documentation Specialist	Turrialba, Costa Rica
Garcés, Carlos	Colombia	Ph.D.	Agricultural Education Specialist	Mexico, D.F., Mexico
García, Ubaldo	Argentina	Ing. Agr.	Associate Deputy Director General for Planning	San Jose, Costa Rica
García, Noel	Nicaragua	M.A.	Office Director, Rural Social Development Specialist	Panama, Panama
Gastal, Edmundo	Brazil	M.S.	Director of EMBRAPA	Brasilia, D.F., Brazil
Genis, Marigold de	United Kingdom	B.A.	English Translator and Editor	San Jose, Costa Rica

1 CATIE Personnel

2 Entered on January 15, 1978

3 On leave of absence without pay, until April 30, 1978

4 In Buenos Aires, Argentina, until March 15, 1978

Name	Nationality	Academic Degree or Profession	Position	Location
Gil de Muro, Julio	Argentina	Med. Vet.	Rural Development Specialist	Bogota, Colombia
Gil Turnés, Benjamín	Uruguay	Ph.D.	Agricultural Education Specialist	Asuncion, Paraguay
González, Tomás B.	Bolivia	M.S.	Agricultural Economics Specialist	Rio de Janeiro, Brazil
González, Sergio	Chile	Ing. Agr.	Regional Planning Specialist	Caracas, Venezuela
Gorbitz, Adalberto	Peru	Ing. Agr.	Head, Technical Editing Unit	San Jose, Costa Rica
Grajales, Guillermo <sup>1</sup>	Colombia	Ing. Com.	Office Director, Agricultural Projects Elaboration Specialist	La Paz, Bolivia
Graeff, Allan H.	U.S.A.	M.A.	Community Enterprises Specialist	Port-au-Prince, Haiti
Guerra, Guillermo	Colombia	M.S.	Director, Simon Bolivar Fund	San Jose, Costa Rica
Hepp, Ricardo <sup>2</sup>	Chile	Ing. Agr.	Agricultural Education Fund	Santiago, Chile
Hernández, Aurelio	Cuba	C.P.A.	Head, Recruitment and Personnel Management Division	San Jose, Costa Rica
Holguín, José A. <sup>3</sup>	Domin. Rep.	Lic. Cont.	Head, Services Division	San Jose, Costa Rica
Indarte, Eduardo José <sup>4</sup>	Uruguay	Dr. Geog.	Rural Development Specialist	Buenos Aires, Argentina
Infante, Mario A.	Colombia	Mag. Sc.	Agricultural Economics Specialist	San Salvador, El Salvador
Jacob, Oto <sup>5</sup>	Brazil	Economist	Programming Director and Lines Coordinator	San Jose, Costa Rica
Jara, José O.	Paraguay	Mag. Sc.	Agricultural Economics Specialist	Resistencia, Argentina
Julien, Jean Nicot	Haiti	Mag. Sc.	Agricultural Production Elaboration Specialist	Kingston, Jamaica
La Gra, Jerry	U.S.A.	M.A.	Agricultural Marketing Specialist	Sto. Domingo, Dom. Rep.
Lazos, Flavio	Mexico	M.S.	Office Director, Agricultural Extension Specialist	Guatemala, Guatemala
Liboreiro, Ernesto	Argentina	Ph.D.	Community Enterprises Specialist	Bogota, Colombia
Lombardo, Heraclio A.	Panama	Ph.D.	Director of Human Resources	San Jose, Costa Rica
MacDonald, Malcolm H.	U.S.A.	Ph.D.	Associate Deputy Director General of Operations	San Jose, Costa Rica
MacLean, Alejandro	Peru	Ing. Agr.	Agricultural Communications Specialist	Montevideo, Uruguay
Madrid, Carlos	Colombia	M.S.	Deputy Director General	San Jose, Costa Rica
Maestre, Leonardo <sup>6</sup>	Peru	Ing. Agr.	Regional Development Specialist	Buenos Aires, Argentina
Malugani, María D.	Uruguay	M.L.S.	Director of CIDIA	San Jose, Costa Rica
Marull, José D.	Chile	Ph.D.	Office Director, Rural Development Specialist	Santiago, Chile
Marzocca, Angel	Argentina	Ing. Agr.	Development Management Specialist	Montevideo, Uruguay
Mendoza, Luis A.	Bolivia	Ph.D.	Rural Development Management Specialist	Lima, Peru
Merea, Agustín	Peru	Ing. Civil	Specialist Land and Water Management and Conservation	Buenos Aires, Argentina
Miranda, Heleodoro	Ecuador	Mag. Agr.	Agricultural Research Specialist	San Salvador, El Salvador
Miragem, Samuel	Brazil	Ing. Agr.	Agricultural Project Elaboration Specialist	Montevideo, Uruguay
Mojica, Iván	Colombia	Ph.D.	Specialist, Land and Water Management and Conservation	Panama, Panama
Molestina, Carlos J.	Peru	Mag.Sc.	Director of Public Information	San Jose, Costa Rica
Montenegro, Isberto <sup>7</sup>	Costa Rica	Journalist	Press Officer	San Jose, Costa Rica
Montero, Emilio	Chile	M.S.	Office Director, Agricultural Economics Specialist	Montevideo, Uruguay
Montoya, Jorge M.	Peru	Dr.Sc.B.	Office Director, Agricultural Ecology Specialist	Sto. Domingo, Dom. Rep.
Montoya, Luis A.	Peru	Ph.D.	Office Director, Agricultural Research Specialist	Rio de Janeiro, Brazil
Morales, Héctor	Chile	M.Sc.	Agricultural Planning Specialist	San Jose, Costa Rica

1 In Lima, Peru as a Specialist, until January 28, 1978

2 Until May 1, 1978

3 Entered June 2, 1978

4 Entered December 12, 1977

5 Entered July 7, 1977

6 In Resistencia, Argentina, until December 31, 1977

7 Until March 31, 1978

Name	Nationality	Academic Degree or Profession	Position	Location
Morales, Efraim	Costa Rica	M.R.P.	Director of Regional Coordination Northern Zone	Guatemala, Guatemala
Moran, Michael J.	U.S.A.	M.S.	Special Advisor on External Relations	Washington, D.C.
Muñoz, Víctor M.	U.S.A.	Bus. Adm.	Head, Personnel Rights and Obligations Unit	San Jose, Costa Rica
Muñoz, Héctor <sup>1</sup>	Mexico	Ph.D.	Zootechnician, Head, of Tropical Livestock Department	Turrialba, Costa Rica
Muñoz-Reyes, Jaime	Bolivia	Agr.	Tropics Development Specialist	Quito, Ecuador
Murcia, Héctor	Colombia	M.S.	Agricultural Economics Specialist	San Jose, Costa Rica
Nadal, Francisco	Bolivia	Ph.D.	Rural Development Management Specialist	Buenos Aires, Argentina
Oliart, Francisco	Peru	Dr. of Laws	Head of CIRA, and Agrarian Reform and "Campesino" Organization Specialist	Bogota, Colombia
Ortiz, Egas Jaime	Ecuador	M.S.	Community Enterprises Specialist	Asuncion, Paraguay
Otrera, Wylliam <sup>2</sup>	Argentina	Ph.D.	Agricultural Marketing Specialist	Caracas, Venezuela
Páez, Gilberto	Paraguay	Ph.D.	Evaluation Specialist	San Jose, Costa Rica
Páez, Pascual	Paraguay	B. Ed.	Community Enterprises Specialist	Tegucigalpa, Honduras
Pando, José Luis	Canada	M.Sc.	Agricultural Marketing Specialist	Caracas, Venezuela
Paulet, Manuel <sup>3</sup>	Peru	Ph.D.	Specialist, Land and Water Management and Conservation	Sto. Domingo, Dom. Rep.
Paulette, Miguel	Peru	M.S.	Director, Cooperative Programs	San Jose, Costa Rica
Pérez, Manuel	Chile	Accounting	Head, Organization Division	San Jose, Costa Rica
Pinto, João Bosco G.	Brazil	Ph.D.	Rural Social Development Specialist	Sto. Domingo, Dom. Rep.
Pinchinat, Antonio	Haiti	Ph.D.	Director of Regional Coordination, Antillean Zone	Sto. Domingo, Dom. Rep.
Quiroga, Víctor	Bolivia	Mag. Sc.	Statistics and Information Specialist	San Jose, Costa Rica
Ramsay, Jorge	Chile	Ing. Agr.	Office Director, Agricultural Extension Specialist	Caracas, Venezuela
Rangel, Jefferson F.	Brazil	M.S.	Director and Representative in the United States of America and Canada	Washington, D.C., U.S.A.
Ramos-Chorro, Julio <sup>4</sup>	El Salvador	Ag. Ec.	Agricultural Project Elaboration Specialist	Lima, Peru
Ras, Norberto	Argentina	M.A.	Office Director, Agricultural Economics Specialist	Buenos Aires, Argentina
Reyes, Armando	Honduras	M.S.	Agricultural Economics Specialist	Managua, Nicaragua
Ringuelet, Julio A.	Argentina	Ing. Agr.	Office Director, Agricultural Credit Specialist	San Salvador, El Salvador
Ríos, Pompeyo	Venezuela	Dr. Ing. Agr.	Director of Regional Coordination, Andean Zone	Lima, Peru
Rodríguez, Manuel	Chile	Ing. Agr.	Director of Regional Coordination, Southern Zone	Montevideo, Uruguay
Rosado, Humberto	Mexico	Ph.D.	Office Director, Agricultural Extension Specialist	Mexico, D.F., Mexico
Rosero, Pablo <sup>1</sup>	Ecuador	Mag. Agr.	Forester	Turrialba, Costa Rica
Ruiz, Manuel <sup>1</sup>	Peru	Ph.D.	Nutritionist	Turrialba, Costa Rica
Rulfo, Fernando	Mexico	M. Ed.	Agricultural Communications Specialist	Port-au-Prince, Haiti

1 CATIE Personnel

2 Entered on May 19, 1978

3 Entered on September 17, 1977

4 Entered on February 8, 1978

Name	Nationality	Academic Degree or Profession	Position	Location
Salinas, Luis	Peru	Ing. Agr.	Agricultural Communications Specialist	Lima, Peru
Salvadó, Eduardo	Spain	M.Sc.	Office Director, Rural Social Development Specialist	Port-au-Prince, Haiti
Sandoval, Leopoldo	Guatemala	Ing. Agr.	Agrarian Reform Specialist	Guatemala, Guatemala
Schlottfeldt, Carlos	Brazil	Ph.D.	Advisor to the Regional Coordination Director	
Segura, Mariano	Peru	Ph.D.	Agricultural Education Specialist	Montevideo, Uruguay
Shurtleff, Don L.	U.S.A.	B.A.	Agricultural Research Specialist	Guatemala, Guatemala
Soikes, Raúl	Peru	Ph.D.	Financial Advisor and Treasurer	San Jose, Costa Rica
Soria, Jorge <sup>1</sup>	Ecuador	Ph.D.	Animal Production Techniques and Transfer of Technology Specialist	Tegucigalpa, Honduras
Stagno, Horacio <sup>2</sup>	Argentina	M.S.	General Coordinator IICA/EMBRAPA/World Bank Agreement	Brasilia, D.F., Brazil
Stone, Pablo	U.S.A.	M.A.	Agricultural Economics Specialist	Sto. Domingo, Dom. Rep.
Suárez de Castro, Fernando	Colombia	Mag. Agr.	Social Development Specialist	Managua, Nicaragua
Suárez, Nelson	Colombia	Ing. Agr.	Director, Supervision and Follow-up	San Jose, Costa Rica
Sylvester, Francisco	Peru	M.F.S.	Agricultural Marketing Specialist	Quito, Ecuador
Sylvain, Pierre C. <sup>3</sup>	Haiti	Ph.D.	Agricultural Education Specialist	Caracas, Venezuela
Tapia, Mario	Peru	Ph.D.	Horticulturist Emeritus	Turrialba, Costa Rica
Tonina, Teodoro	Argentina	Dr. Cien. Agr.	High Andes Agricultural Development Specialist	La Paz, Bolivia
Toro, Guillermo	Chile	Ing. Agr.	Agricultural Programming Specialist	Santiago, Chile
Torrealba, Pablo <sup>4</sup>	Chile	Ph.D.	Agricultural Economics Specialist	Caracas, Venezuela
Torres, José A.	Costa Rica	Ing. Agr.	Office Director, Agricultural Marketing Specialist	Bogota, Colombia
Torres, Hugo	Colombia	M.S.	Action Plan Coordinator	San Jose, Costa Rica
Uribe, Germán	Ecuador	Ing. Agr.	Office Director, Agricultural Marketing Specialist	Lima, Peru
Vázquez, Roberto E.	Uruguay	Ph.D.	Office Director, Regional Planning Specialist	Tegucigalpa, Honduras
Vallés, Raúl	Perú	Ing. Agr.	Agricultural Economics Specialist	Buenos Aires, Argentina
Vega Luna, Mayo	Nicaragua	M.Sc.	Specialist, Land and Water Management and Conservation	Santiago, Chile
Veras, Arnaldo	Brazil	B.C.E.	Development Management Specialist	Guatemala, Guatemala
Vergelín, César <sup>5</sup>	Argentina	Ph.D.	Agricultural Planning Specialist	Brasilia, D.F., Brazil
Vieira, Pedro Merçon	Brazil	Ing. Agr.	Special Advisor, IICA/EMBRATER Agreement	Quito, Ecuador
Vigués, Enrique	Spain	Ph.D.	Director General's Dispatch Officer	Brasilia, D.F., Brazil
Villacís, Fabio	Venezuela	Ph.D.	Head, Operations Programming Division	San Jose, Costa Rica
Villegas, Carmen	Uruguay	Librarian	American Tropics Documentalist	Turrialba, Costa Rica
Vohnout, Karel <sup>3</sup>	Ecuador	Ph.D.	Nutritionist	Turrialba, Costa Rica
Wahab, Abdul	U.S.A.	Ph.D.	Agricultural Research Specialist	Kingston, Jamaica
Werthein, Jorge <sup>6</sup>	Argentina	Ph.D.	Agricultural Education Specialist	Rio de Janeiro, Brazil
Yopo, Boris	Chile	M.S.	Agricultural Education Specialist	Lima, Peru

1 Plant Geneticist, in CATIE, until February 28, 1978

2 Entered January 1978

3 CATIE personnel

4 As a Specialist in San Jose, Costa Rica, until November 28, 1977

5 Until June 1, 1978

6 Entered on October 16, 1977





**INTERNATIONAL PROFESSIONAL PERSONNEL  
TEMPORARY\***

Name	Nationality	Academic Degree or Profession	Position	Location
Alba, Vicente <sup>1</sup>	Colombia	M.S.	Communications Specialist	Sto. Domingo, Dom. Rep.
Agudelo, Fernando	Colombia	Ph.D.	Entomology Specialist	Sto. Domingo, Dom. Rep.
Alvarez, Aníbal	Colombia	B.Ed.	Ed. Psych. Specialist	Bogota, Colombia
Angilley, Charles S. <sup>2</sup>	South Africa		Systems Programming Specialist	Brasilia, Brazil
Aranda, Germán <sup>3</sup>	Chile	Ing. Agr.	Agricultural Planning Specialist	Tegucigalpa, Honduras
Arriagada, Patricio	Chile	Mag. Sc.	Agricultural Extension Specialist	Sto. Domingo, Dom. Rep.
Arrunátegui, Humberto	Peru	Ing. Agr.	Agricultural Irrigation Specialist	Barreiras, Bahia, Brazil
Bartley, Basil G. D.	United Kingdom	Ph.D.	Geneticist	Itabuna, Bahia, Brazil
Becerra, Julio C. <sup>4</sup>	Peru	Ing. Agr.	Agricultural Production Specialist	Campos, Rio de Janeiro, Brazil
Becker Cabezas, Alfredo	Chile	Ing. Agr.	Agricultural Marketing Specialist	Port-au-Prince, Haiti
Bresciani, Juan Carlos <sup>5</sup>	Chile	M.S.	Seed Production and Classification Specialist	Sto. Domingo, Dom. Rep.
Calvo, Carlos <sup>6</sup>	Costa Rica	Sch. Admin.	Education Planning Specialist	Port-au-Prince, Haiti
Camacho, Angel Fco. <sup>7</sup>	Peru	Ing. Agr.	Agricultural Project Specialist	Guatemala, Guatemala
Campuzano, R. John	Ecuador	Ing. Agr.	Agricultural Project Planning and Evaluation Specialist	Brasilia, D.F., Brazil
Cantrell, Carl W. <sup>8</sup>	U.S.A.	Ag. Eng.	Systems Analysis Specialist	Brasilia, D.F., Brazil
Cassalett, Clímaco <sup>9</sup>	Colombia	Ph.D.	Plant breeder-grains	Sto. Domingo, Dom. Rep.
Castro, Dante	Peru	Lt. Col.	Associated Enterprises Specialist	Colonia Bernardino Caballero, Conondiyu, Paraguay
Cernuda, Juan Carlos <sup>10</sup>	Argentina	B. Ed.	Non-formal Education and Illiteracy Specialist	Port-au-Prince, Haiti
Chang-Navarro, Lorenzo	Peru	M.S.	Soil and Water Conservation and Management Specialist	Recife, PA, Brazil
Dyslá, Raúl <sup>11</sup>	Guatemala	M.S.A.	Livestock Specialist	Catacamas, Honduras
Fiorentino, Raúl	Argentina	Ph.D.	Research on Technology Transfer Specialist	Bogota, Colombia
Fonck, Carlos <sup>12</sup>	Chile	Ph.D.	Agricultural Production Projects Elaboration Specialist	Sto. Domingo, Dom. Rep.
Fuenzalida, Hernán	Chile	LL.M.	Institutional Development Specialist	Managua, Nicaragua

- 1 Until November 1, 1977
  - 2 Began January 1, 1978
  - 3 Began February 16, 1978
  - 4 Began January 30, 1978
  - 5 Until April 30, 1978
  - 6 Began May 4, 1978
  - 7 Until January 5, 1978
  - 8 Began October 13, 1977
  - 9 Until April 30, 1978
  - 10 Began June 15, 1978
  - 11 Until March 24, 1978
  - 12 Began September 5, 1977
- \* Non-Quota Funds

Name	Nationality	Academic Degree or Profession	Position	Location
García Munévar, Mario	Colombia	M.S.	Agricultural Programmer	Port-au-Prince, Haiti
Garra, Fco. Domingo	Argentina	Dr. Geog.	Rural Development Specialist	Itabuna, Bahia, Brazil
Gartner, Alvaro <sup>1</sup>	Colombia	Ph. D.	Coordinator, Agricultural Research Programs	Sto. Domingo, Dom. Rep.
González, Hernán <sup>2</sup>	Colombia	Ing. Agr.	Credit and Agricultural Extension Specialist	Port-au-Prince, Haiti
González, Nelson <sup>3</sup>	Chile	Ing. Agr.	Irrigation Projects Specialist	Port-au-Prince, Haiti
Grondín, Marcelo	Bolivia	Dr. Cien. Sec.	Organization of Agricultural Associations Specialist	Sto. Domingo, Dom. Rep.
Guerrero, Francisco	Chile	Lic. C.E.	Finance Administration Specialist	Managua, Nicaragua
Herrera, J. Eugenio	Chile	M.P.I.A.	Administration Specialist	San Jose, Costa Rica
Ibarra, A. Edgar L.	Guatemala	M.Sc.	Agricultural Education Specialist	Catacamas, Honduras
Iturbide, Angel Ma. <sup>4</sup>	Guatemala	Mag. Sc.	Agricultural Projects Specialist	Sto. Domingo, Dom. Rep.
Jara, Carlos <sup>5</sup>	Chile	Psychiatry	Specialist in Training and up-grading teaching staff	Port-au-Prince, Haiti
Lamprea, Pablo A. <sup>6</sup>	Colombia	Ing. Agr.	Projects Management Specialist	Recife, Pe., Brazil
León Velarde, Carlos Ulises <sup>7</sup>	Peru	Mag. Sc.	Agricultural Extension Specialist	San Fco., Dominican Rep.
Londoño, Diego <sup>8</sup>	Colombia	Ph.D.	Rural Development Specialist	Quito, Ecuador
López, Rubio Armando <sup>9</sup>	Mexico	Agr. Ind. Eng.	Project Planning and Evaluation Specialist	San Jose, Costa Rica
Maezono Y., Luis	Peru	M.S.	Agricultural Engineering Specialist	Catacamas, Honduras
Marambio, Juan L. <sup>10</sup>	Chile	Ing. Agr.	Agricultural Planning Specialist	San Jose, Costa Rica
Matute, Enrique	Peru	Ing. Agr.	Specialist, Land and Water Management and Conservation	Juazeiro, Brazil
Mendoza, Gilberto	Colombia	Economist	Agricultural Marketing Specialist	Sto. Domingo, Dom. Rep.
Morales, Domingo	Chile	B.C.I.	Computer Specialist	San Jose, Costa Rica
Montiel, Raúl	Paraguay	M.C.	Rural Administration Specialist	Santiago, Veraguas, Panama
Morón, Isaac <sup>11</sup>	Uruguay	Ing. Agr.	Specialist in Management and Organization of Training Centers	Sto. Domingo, Dom. Rep.
Nasta, Hugo <sup>12</sup>	Argentina	Ing. Agr.	Agricultural Extension Specialist	Sto. Domingo, Dom. Rep.
Navas, Bolívar Gil	Ecuador	Mag. Agr.	Education and Social Sciences Specialist	Quito, Ecuador
Pasini, Norberto	Argentina	Ing. Agr.	Agricultural Planning Specialist	Brasilia, D.F., Brazil
Paniagua, César <sup>13</sup>	Dominican Rep.	Ph.D.	Agricultural Production Specialist	Cristiana, Jamaica
Paz, Pablo <sup>14</sup>	Honduras	M.Sc.	Plant Breeding Specialist	Sto. Domingo, Dom. Rep.
Pierre, Reginald <sup>15</sup>	Grenada	Ph.D.	Tropical Agronomy Specialist	Georgetown, Guyana

- 1 Until April 29, 1978
- 2 Began May 8, 1978
- 3 Began February 27, 1978
- 4 Until July 31, 1978
- 5 Began May 6, 1978
- 6 Began March 29, 1978
- 7 Until April 30, 1978
- 8 Began March 6, 1978
- 9 Until December 21, 1977
- 10 Began December 13, 1977
- 11 Until April 29, 1978
- 12 Until April 30, 1978
- 13 Until April 11, 1978
- 14 Until April 30, 1978
- 15 Began October 16, 1977

Name	Nationality	Academic Degree or Profession	Position	Location
Pimentel, Mario <sup>1</sup>	Peru	Ing. Agr.	Dairy Cattle Specialist	Tarija, Bolivia
Piñeiro, Martín	Argentina	Ph.D.	Coordinator of the Transfer of Technology Research Project	Bogota, Colombia
Rea, Julio	Bolivia	Ing. Agr.	Andean Crops Specialist	Puno, Peru
Roberts, Pablo	U.S.A.	Ph.D.	Head, Project Management Program	San Jose, Costa Rica
Robinson, Philip	United Kingdom		Agricultural Engineering Specialist	Georgetown, Guyana
Rodríguez, Julia Ines	Uruguay	M.L.S.	Documentalist	San Jose, Costa Rica
Roldán, José Ramón	Argentina	M.S.	Agricultural Marketing Specialist	Salvador, Bahia, Brazil
Romanella, Carlos <sup>2</sup>	Argentina	Ing. Agr.	Specialist, Land and Water Management and Conservation	Santiago, Chile
Sánchez, Alvaro	Uruguay	Ing. Agr.	Experimental Design and Statistical Analysis Specialist	Sto. Domingo, Dom. Rep.
Santiváñez, Hernán <sup>3</sup>	Peru	Ing. Agr.	Agricultural Projects Specialist	Quito, Ecuador
Sepúlveda, Sergio <sup>4</sup>	U.S.A.	Ph.D.	Agricultural Planning Specialist	Brasilia, D.F., Brazil
Scarsi, Juan Carlos	Uruguay	Ph.D.	Technical Advisor to the Coordinator IICA/EMBRAPA/WORLD BANK Agreement	Brasilia, D.F., Brazil
Schaffert, Robert <sup>5</sup>	U.S.A.	Ph.D.	Sorghum Plant Breeding Specialist	Sete Lagoas, Minas Gerais, Brazil
Servy, Elsa C.	Argentina	Ph.D.	Bio-Mathematics Specialist	Brasilia, Brazil
Stagno, Horacio <sup>6</sup>	Argentina	M.S.	Agricultural Economics Specialist	Sto. Domingo, Dom. Rep.
Tejero, Luis	Peru	Ing. Agr.	"Campesino" Organization Specialist	Barreiras, Bahia, Brazil
Trigo, Eduardo	Argentina	M.S.	Transfer of Technology Research Specialist	Bogotá, Colombia
Tunarosa, Víctor Ml.	Colombia	Mag. Sc.	Project Planning and Evaluation Specialist	San Jose, Costa Rica
Vásquez, Arturo	Peru	M.C.	Integral Development Specialist	Marcala, Honduras
Valle, Armando J.	Honduras	M.S.	Agricultural Extension Specialist	Catamacas, Honduras
Vallejo, Carlos	Ecuador	Ing. Agr.	Agricultural Project Administration Specialist	San Jose, Costa Rica
Van Tan, Nguyen <sup>7</sup>	Viet Nam	Ph.D.	Rice Plant breeding Specialist	Goia, Goiana, Brazil
Venezian, Eduardo	Chile	Ph.D.	Rural Development and Agricultural Business Specialist	Santiago, Chile
Vergara, Nízar	Colombia	Economist	Marketing Professor	Bogota, Colombia
Yeganiantz, Levon	U.S.A.	Ph.D.	Economic Analysis Advisor	Brasilia, D.F., Brazil

1 Began December 15, 1977

2 Until December 31, 1977

3 Until December 31, 1977

4 Began April 17, 1978

4 Began January 16, 1978

6 Until December 19, 1977

7 Began January 2, 1978



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**The following were chiefly responsible for preparing the report:**

**Ing. Carlos J. Molestina  
Mr. Victor Ramiro Acosta (artwork)  
Mrs. Marigold Genis (translation)  
Miss. Aiza Vargas  
Miss. Giselle Madrigal  
Miss. Elena Monge  
Miss. Zaida Sequeira  
Miss. Viria Ramírez  
Mr. José Ramón Zúñiga  
Mr. Carlos Alvarado**

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