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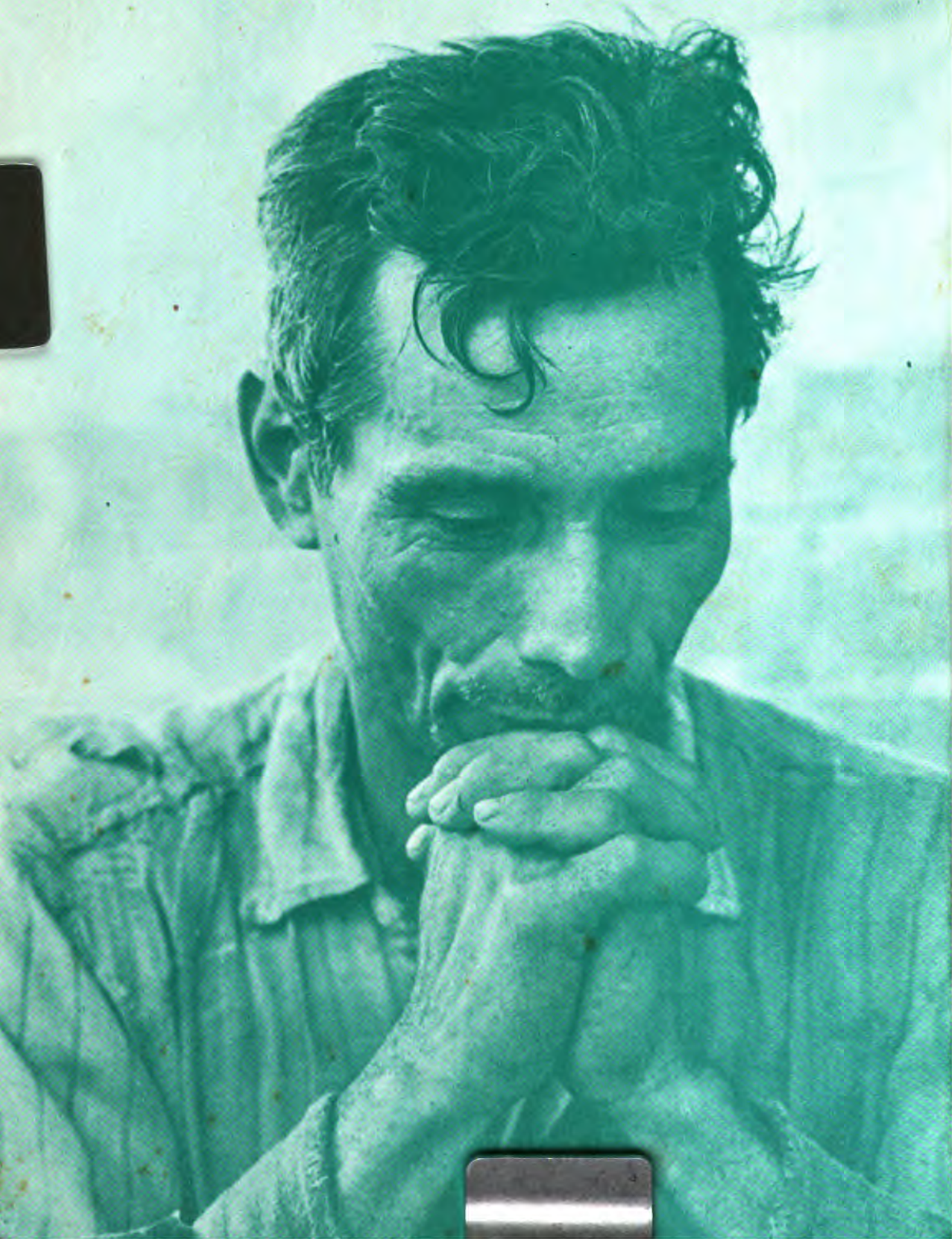
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THE RURAL MAN OF AMERICA AWAITS WITH FAITH . . .



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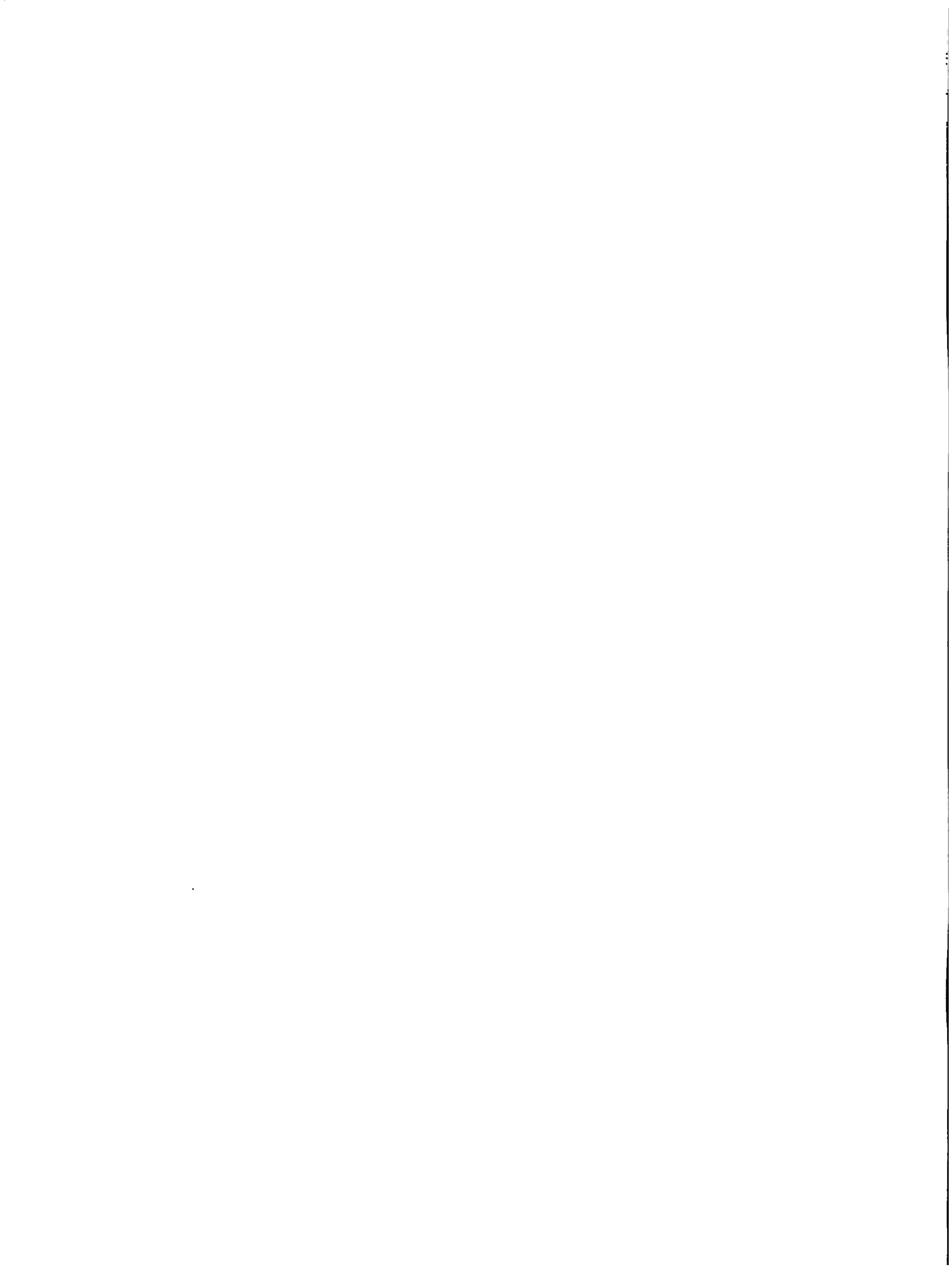
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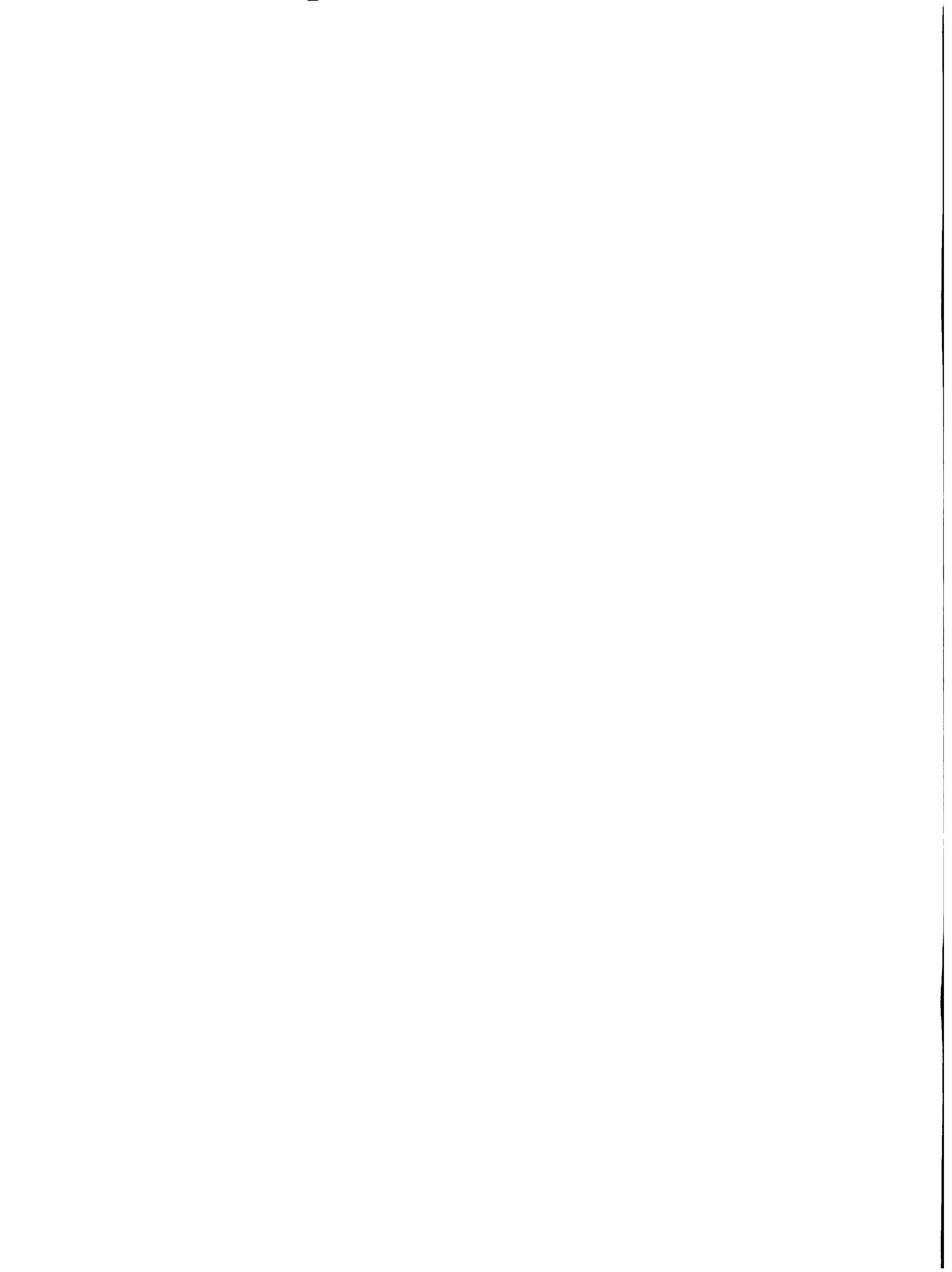
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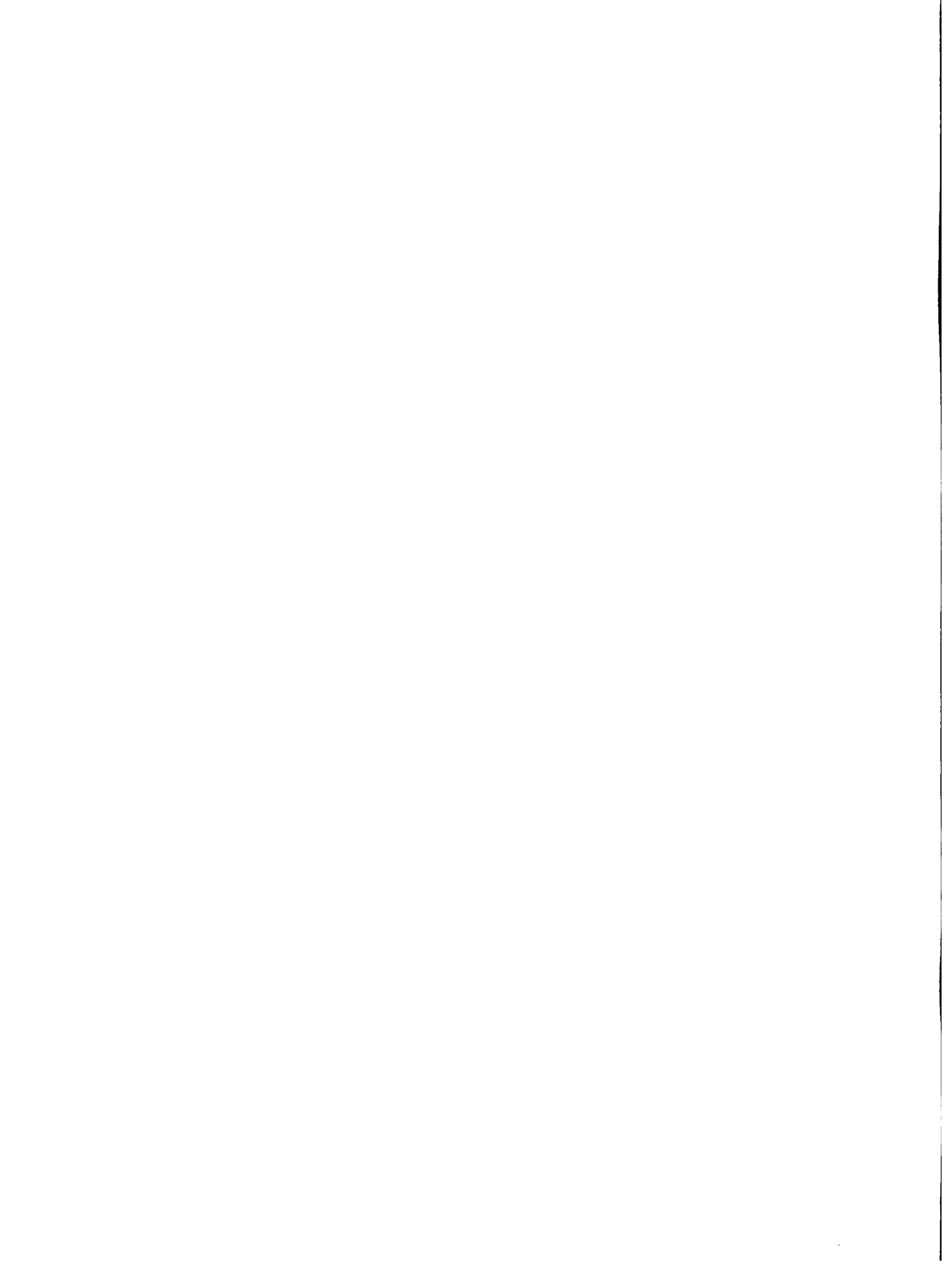
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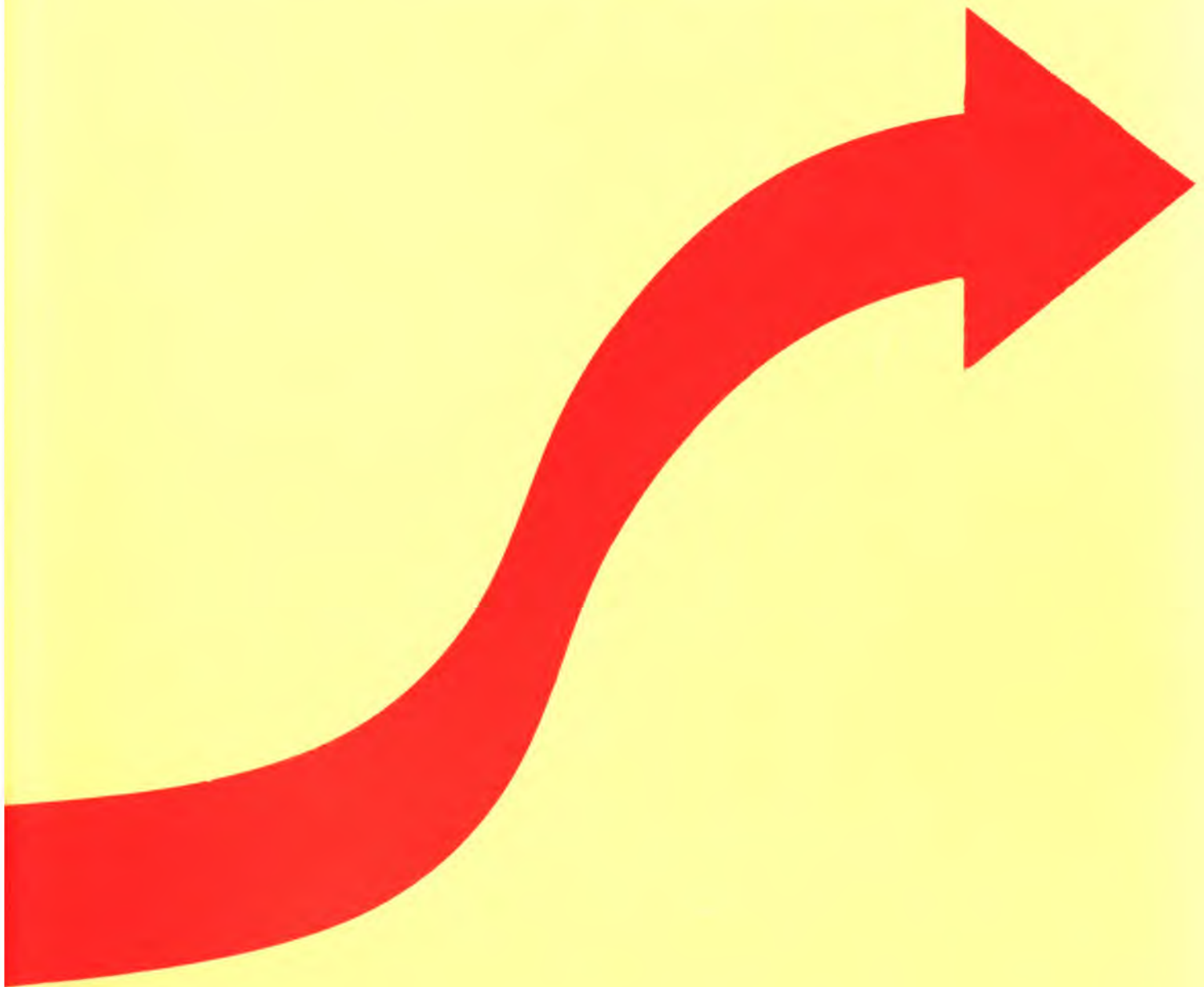


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INTRODUCTION





INTRODUCTION

As one of the responsibilities as Director General of the Inter-American Institute of Agricultural Sciences, I hereby submit the Annual Report on activities covering the period 1 July 1973 through 30 June 1974 to the consideration of the honorable members of the OAS General Assembly, the Board of Directors and of the Governments of the Member States of this Institute.

Description

The Inter-American Institute of Agricultural Sciences (IICA), is the specialized organism of the Organization of American States for the agricultural sector. It was founded in 1942 by the American governments to promote the economic and social development of their respective countries, through education, personnel training, research, consultation and communications services, as pertaining to agriculture. The Institute complies with these objectives, by helping the American States to stimulate and promote rural development as a means to attain the general development and common wellbeing of their people. The Institute has its Executive Offices in San José, Costa Rica, three Regional Offices, one Support Center and Official Representation in all the Member States of the American Continent.

Third Annual Report by Lines of Action

This is the third Annual Report to be elaborated in accordance with the General Plan, which established seven Lines of Action with the following objectives and goals, presented with the purpose of providing more objective information in the different chapters, and as a ready reference to the nature of the progress achieved in the IICA programs for the period indicated above:

1. Analysis of rural development, and the related information.

2. Strengthening of agricultural education institutions, essential for the dissemination of existing knowledge in the agricultural, and forest sciences, and in socio- and home economics.
3. Strengthening the research institutions responsible for augmenting knowledge in the physical, biological and socio-economic fields.
4. Strengthening the agricultural promotion institutions.
5. Support to the regional integration organisms.
6. Strengthening the institutions in charge of structural changes, and which promote and carry out policies on the distribution of productive resources, the political, social and economic powers, and the elimination of rural marginality.
7. Strengthening the institutions of administration and formulation of agricultural policies, responsible for the planning, organizing and coordination of government and efforts needed to achieve satisfactory rural development.

In a general interpretation of the functions carried out within the Lines of Action, it should be emphasized that the operational structure of IICA in compliance with an hemispheric projection and within an humanistic philosophy, is based on these seven Lines as a means to institutional building within the rural sector of the Member States, which is of fundamental importance.

I am pleased to be able to confirm progress achieved in the elaboration of the operative structure of IICA, permitting an improved perspective on the '*sui generis*' nature of the institution which provides greater flexibility in the services offered the countries.

The flexible nature of IICA action in the field has been acquired over the 30 years of uninterrupted labor

of the Institution, now in a favorable position to adapt and change its approach in as adequate a manner as possible, to the ever-changing realities in development processes of the agricultural sector of the majority of the countries in which the Institute is working.

The purpose of mentioning these favorable characteristics of IICA's structure is not one of ostentation or a wish to air certain functional peculiarities of our organization before the American public but rather an attempt to express some of the positive aspects, the bench marks of distinction, of the Institute's functional identity as a service institution. How does the Institute perceive its obligations and its capacity to serve; what are the means utilized to ensure the efficacy of our action strategies; and how should they be applied by an institution such as IICA, with a definitive commitment to play an influential and helpful role in the field of technical cooperation, so as to make progress in rural development. This is accomplished through the utilization of the proper instruments and the direct actions necessary to contribute to the modification, transformation or change of the agrarian structures which are hindering the needed development of the rural sector and negate, to some extent, the efforts being made by the countries to overcome the rather precarious living conditions of large sectors of the populations in the countries of Latin America and the Caribbean.

However, it should also be clearly established that although considerable progress has been achieved in the development of the rural sector of Latin America, there is much yet to be done. IICA has recently been most outspoken, without circumlocution, about the critical situation of agriculture in Latin America, and in the so-called Third World in general; the complex problems involved, and the multiple causes for lack of progress.

Thanks to the accumulated experience of IICA, and its highly qualified team of technicians working persistently in a dynamic, efficacious and enthusiastic manner on complying with the Institute's mission of public service, the institution is well situated to 'help' in the search for solutions to the serious agricultural problems being faced in the countries of Latin America and the Caribbean.

It is in this institutional aptitude to contribute to the development of the rural sector as an integral component of the general development process of the countries, that the characteristic of flexibility referred to previously is most perceptible. IICA has acquired the necessary experience and therefore has the capacity to adjust its programs, working methods, instruments of action, strategies and its whole operational structure, to adequately meet the changing realities in the Member States of the institution. This flexibility,

which characterizes our programs, is applied at national as well as regional and hemispheric levels.

Reciprocal technical cooperation among the American States

As an international institution of technical cooperation in rural development, IICA maintains that the development of the countries of our continent cannot be viewed as isolated problems on an individual country basis, but should rather be considered within a concept of inter-American relationship, with a view to a joint approach whereby countries with more ample resources help those without them.

In this respect, I am greatly satisfied by the avenue for cooperation opened up at the Thirteenth Annual Meeting of the Board of Directors held in Caracas in May 1974, when resolution ten, on the establishment of what will hereinafter be called Reciprocal Technical Cooperation was approved. As more detailed information on these activities appears in the chapter IICA in the Americas, I will limit myself to a few brief comments.

Creation of the Simon Bolivar Fund

Special mention should be made, with respect to the above, to the establishment of the Simon Bolivar Fund, an outstanding example of inter-American cooperation between countries, for their joint rural development, on both a short and long term basis. Concerning this matter, I should also like to acknowledge the brilliance of the speech given by His Excellency the President of Venezuela, Mr. Carlos Andrés Pérez. I should like to make public recognition of the support his government is providing IICA action, through the proposal to the other American States for the creation of this Extraordinary Fund, an outstanding concept at this critical stage being experienced throughout the continent. I should like to transcribe some of the more significant passages of his speech, a true expression of Latin American solidarity, concern over the non-conformity of large sectors of the population, the urgent need for change in all levels of society, particularly the rural sectors, the growing anxiety over our present and our future, but presenting a breath of hope whereby generations are learning, from experience, to look ahead.

"We could assert, to be sincere, that the life and vicissitudes of this Inter-American Institute are somewhat similar to the rather unfortunate history of the economic development of Latin America, which should have been and will have to be based on the



His Excellency the President of Venezuela, Mr. Carlos Andrés Pérez, speaking at the inaugural session of the XIII Annual Meeting of the Board of Directors of IICA, when he proposed the creation of a Fund for the Rural Development of Latin America and the Caribbean.

expansion of agriculture, as well as the development of renewable natural resources."

"Our countries have not stressed agricultural expansion; we have made tremendous efforts to attain industrial development but seem to have forgotten the fact that this very activity relies on a firm and solid base from which to draw its strength. It is precisely the development of the renewable natural resources that not only provides for the production of foodstuff for the population, but also the raw materials that are necessary for industrial development, which should essentially be of a national and Latin American character."

"We have not been able to carry through with this process, and I daresay that all the nations of this hemisphere as well as the other countries of the so-called Third World, must bitterly admit that the depression in the agricultural sector has been the real cause for the frustration of all the development plans we have undertaken."

"In Venezuela we adhere strictly to the doctrine of representative democracy, respecting all political tendencies and the sectors of private enterprise; we maintain a constant dialogue with the whole country, without any discrimination whatsoever. Without pretending to oppose any particular sector of the Venezuelan economy, we are trying, truly and sincerely, to implant democratic ideas within the economy, and to convert agriculture into a stepping stone, a tool for the development of our national economy."

"Our world is living a phenomenon which helps us to be understood and more widely respected. As the Director General of the Institute has already pointed out, there is a food crisis. The optimistic outlook of a short time ago, presenting a panorama of abundance based on crops of the so-called "Green Revolution" and which crumbled very fast, because neither technique nor science should be divorced from the prime objective to be kept in mind, which is the service to be rendered mankind, for human welfare."

"This 30 year old Inter-American Institute of Agricultural Sciences could receive extraordinary impetus at this crucial moment in international agriculture, if the American nations were to create an extraordinary

fund, with participation of all our nations, to trigger a truly redeeming agricultural process to increase production and productivity."

"On this occasion, I would like to invite you to reflect on these possibilities. Just as we in our country will spend huge resources on agriculture (we are awaiting Congress approval for the establishment of a fund for two billion Bolívares for the country's agricultural development), we could, as an obligation not as a concession, contribute with a substantial share to this fund for the Inter-American Institute of Agricultural Sciences, so as to take advantage of this 30 year experience and submit audacious programs, serious-minded projects for rapid development; for fast development, because we cannot lose any more time in the field of agriculture in all the countries of this region."

These excerpts from the President of Venezuela's speech indicate his great concern, which is shared by us. This is why we have done our utmost to comply with all the necessary dispositions to ensure the successful implementation of the Simon Bolívar Fund (for an estimated amount of 20 million dollars) in accordance with its aims. The government of Venezuela has agreed to contribute 10 million dollars, or 50 percent of the expected amount of the Fund.

It is our intention to administer this Fund as an Extraordinary Project, with enthusiastic dedication, in the conviction of its usefulness, and the benefits to be derived, putting our acquired technical experience in the field of agricultural development and our human resources, at its service.

This report will present information on the steps taken to date to comply with the aims of the Simon Bolívar Fund to continue the task of accelerating the development process in the rural sector of Latin America and the Caribbean with renewed effort.

Food production: a grave concern

In accordance with one of the basic tenets of the General Plan, increased production is one of IICA's permanent preoccupations, and is reflected in all our activities: the efforts underway to have tropical regions utilized for this purpose; the agricultural regionalization and ecological zoning studies; the emphasis on community organizations; the rural youth programs; the commercialization of agricultural products, and many others.

Our concern over this problem has increased in measure with the increasing seriousness of the world food situation. We have felt the urgent need for our expanded and dynamic cooperation in this area; we are aware of our great responsibility, and our need to make even greater efforts in the fields in which we work.

I have personally assumed this concern as one of my responsibilities in the administration of IICA. It was on the subject of food and the need to increase production in Latin America that I spoke, at the meeting of the Fourth Session of the General Assembly of the Organization of American States held in Atlanta, Georgia, USA. I again spoke of this matter at the Seminar on Production Systems in the Tropics, held at CATIE, in Turrialba. I emphasized the disquieting fact that the production of food in the developing countries, increases at a slower rate than the increases in population of the same countries.

With this in mind, we have been holding a series of round-table discussions on topics of immediate concern for the development of the rural sector at our annual meetings of the Board of Directors and the Technical Advisory Council. The topic of the round-table discussion at our last meeting in Caracas, was on the Production of Foodstuffs in Latin America and the Caribbean. We have as a result, some interesting opinions in an analysis of the problem, and a series of recommendations which we will try to take advantage of as soon as possible, in reorienting and strengthening our action in an area of such importance for our programs. We had hoped to contribute with this round-table discussion, even in a limited fashion, to the analysis of the problem which has recently been the subject of considerable attention, due to the increasing seriousness of the situation.

The Food and Agriculture Organization of the United Nations is working intensively on the analysis of this problem, as a basis for the World Food Conference, an international forum of great significance on a topic which will need the concentrated efforts of all the organizations working in development as well as of all the countries.

IICA, as the specialized organism for the rural sector of the inter-American system, is making every effort to cooperate in this international endeavor. The world depends on the success of this meeting to set about applying efficacious solutions, or it will be added as one more component of a crisis with catastrophic repercussions.

Institutional building

I hereby wish to express my acknowledgement and satisfaction at the support received from the Member

States, in our efforts to strengthen and invigorate the institution's action in service to these countries. This support has been evinced in many ways, such as the unqualified support to our Program-Budget, as well as the additional contributions made to specific projects underway. We feel this to be an indication of the confidence the Member States have in the way IICA is conducting its programs in compliance with its development objectives.

At the same time, I should also like to gratefully acknowledge other types of cooperation received, both from international as well as national institutions working in the Latin and Caribbean countries, and the extra-continental countries that have contributed substantially and with good will to our efforts. With



The Minister of Agriculture of Guatemala, Mr. Mario Martínez, presenting the Director General of IICA, Dr. José Emilio G. Araujo, with an award in recognition of his outstanding work in agriculture for the American States.

the technical cooperation of Germany, Spain, Holland, the United Kingdom and Israel, we have several interesting projects underway in research and in the training of technical personnel.

Inter-Institutional Relationships

At this time, I should also like to comment on the satisfactory manner in which IICA has been working in cooperation with the national and international institutions involved in rural development processes:

a. OAS

As per Article 134 of the Charter of the Organization of American States, in compliance with my responsibilities as Director General of IICA, and with due authorization of the Board of Directors, I signed an agreement together with Mr. Galo Plaza, Secretary General of the OAS, in Washington, D.C. which will contribute to the coordination of activities of both organizations in the sphere of technical cooperation.

A Joint Committee of the OAS and IICA worked on establishing the norms for the joint cooperation, coordination and action of both institutions in the agricultural sector. I am pleased to inform that the Joint Committee has made considerable progress, and are about to complete their work to ensure the maximum profit for the Member States of the two organizations.

b. IDB

Our cooperative work with the Inter-American Development Bank has contributed significantly to our experience in the execution of programs and projects of benefit in the development of the rural sector.

In 1969, we signed a first agreement on non-reimbursable technical assistance with IDB, to finance a training program on the preparation and evaluation of agricultural projects. Under this agreement, one course was offered in each of four countries, and a series of teaching guides for the development of future similar activities in other countries was elaborated. Approximately 100 functionaries from national institutions attended these courses, and eleven basic investment or pre-investment projects were prepared.

Under a new agreement still in force, nine training cycles in an equal number of countries, were planned. These training cycles were divided into two phases: in the first, a basic course is offered to provide general training on agricultural projects and how to prepare the basic work on specific topics for agricultural development; the second phase consisted in in-service training of functionaries from national institutions, with the purpose of converting the projects elaborated during the courses, into investment or pre-investment project proposals.

To date, one course has been offered under this new agreement, in each of eight countries, approximately 200 functionaries from national institutions have been trained, and 20 investment and pre-investment projects have been elaborated.

The value of this type of inter-institutional cooperation on the strengthening of rural development and other institutions of the Member States has been considerable.

The establishment of new structures has resulted from several of the projects elaborated during the courses, and have been submitted to IDB and other international financing institutions for due consideration.

c. FAO

Traditionally our relationships with the Food and Agriculture Organization of the United Nations have been good, and through a series of joint activities and effort, are daily more intensive and cordial. The adoption of the Conceptual Frame of Reference for Agrarian Reform in Latin America can be cited as the result of a joint effort by the two institutions, as well as recent close inter-relationships at high-level technical meetings on vital problems concerning rural development, and the coordinated action on agricultural information techniques and documentation.

IICA-FAO relationships have been strengthened recently through the cooperation between functionaries of both institutions. Close ties have been maintained through the opportunities of working together on activities of importance for Latin American agriculture, the visit of the Director General of FAO, Dr. Boerma, whom we were pleased to receive; constant contact with the Deputy Director General and FAO Representative for Latin America, Mr. Armando Samper, former Director General of IICA, and with Dr. Juan Felipe Yriart, formerly in Latin America, and currently in Rome, who has been openly cooperative towards IICA.

It is not overly optimistic to expect increased joint activity on matters of interest to the countries of Latin America and the Caribbean, through the future coordination of operations of both organizations in this area.

d. Kellogg Foundation

This well-known institution of international cooperation is providing valuable assistance to IICA which will greatly profit the development process of the Member States of our organization. We requested from the Foundation and were granted a donation of 200 thousand dollars in annual contributions of 40,000



The Minister of Agriculture for Peru, General Enrique Valdez Angulo, congratulating Dr. José Emilio G. Araujo, Director General of IICA, after awarding him the Agricultural Order of Merit, on behalf of the Government of Peru.

for the publication of teaching material, essential for the progress of agricultural sciences, and for the success of our educational programs. An additional grant of 75 thousand dollars was also provided, for the expansion and improvement of our printing service, and through this expansion, the improvement of our editorial services in agricultural sciences.

In addition to the outstanding cooperation provided in this area, the Kellogg Foundation is also cooperating significantly in the Rural Youth Program administered by IICA.

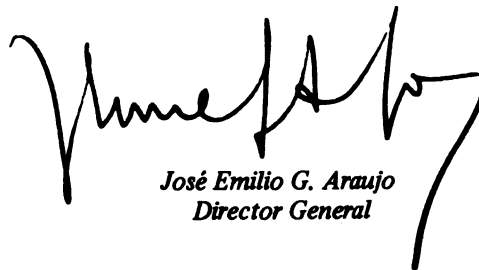
e. AID

The IICA Management Program was initiated as a result of an agreement between IICA and the Agency for International Development (AID) of the United States. Detailed information on this program is provided in the chapter on Special Programs. However, I should like to acknowledge the splendid relationships we have with this important institution.

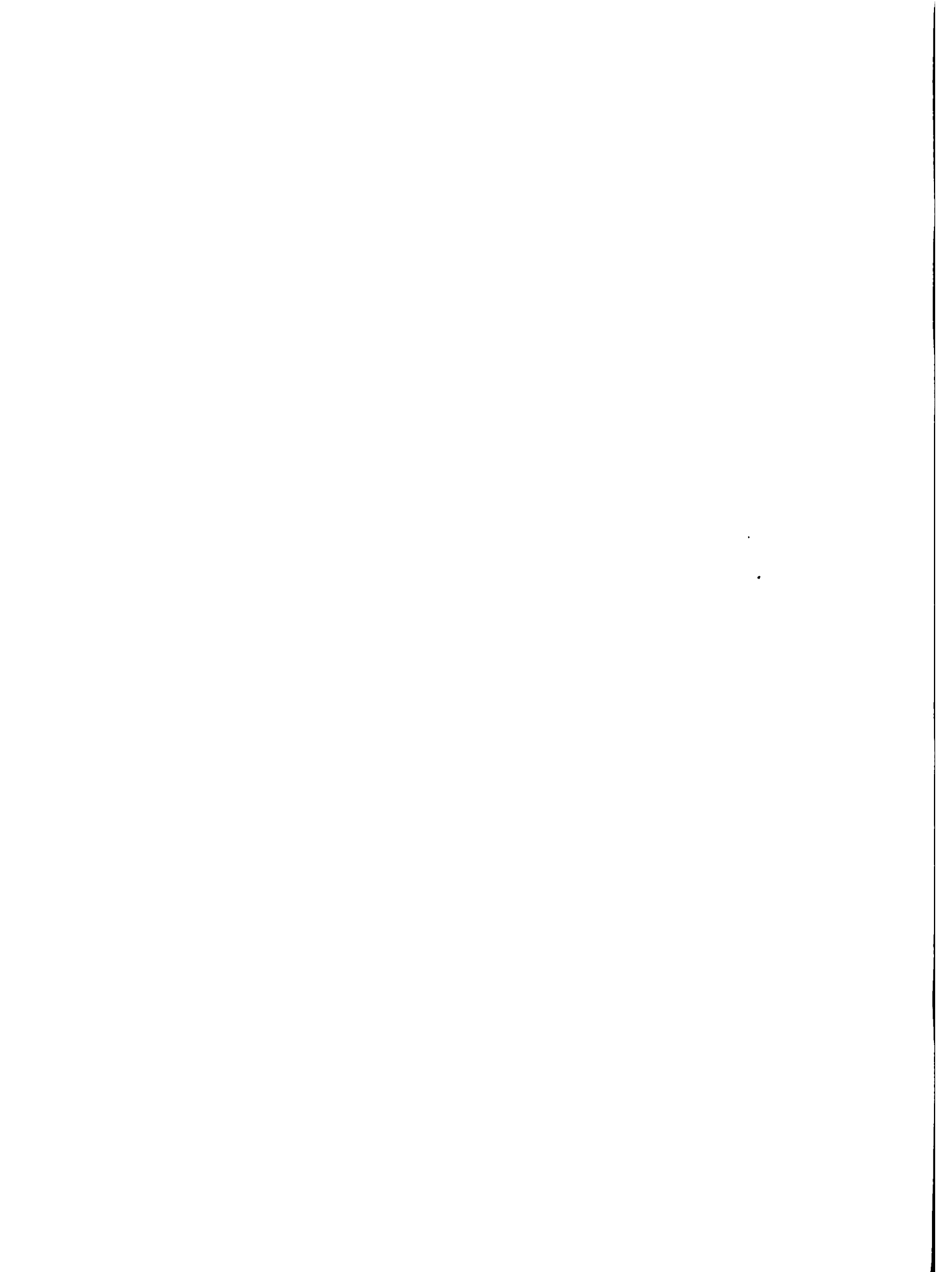
f. Cooperation with other institutions

IICA is also working in cooperation with several other institutions. Worthy of mention, for example, is the basic cooperation established with the University of Costa Rica, within our interest in supporting higher agricultural education programs. The University of Costa Rica has assumed the academic responsibility for the higher degree previously awarded by IICA to graduates in agricultural sciences of the American States. More detailed information on these aspects can also be found in the respective Chapters.

I hereby express my appreciation for your time and attention to this Annual Report.



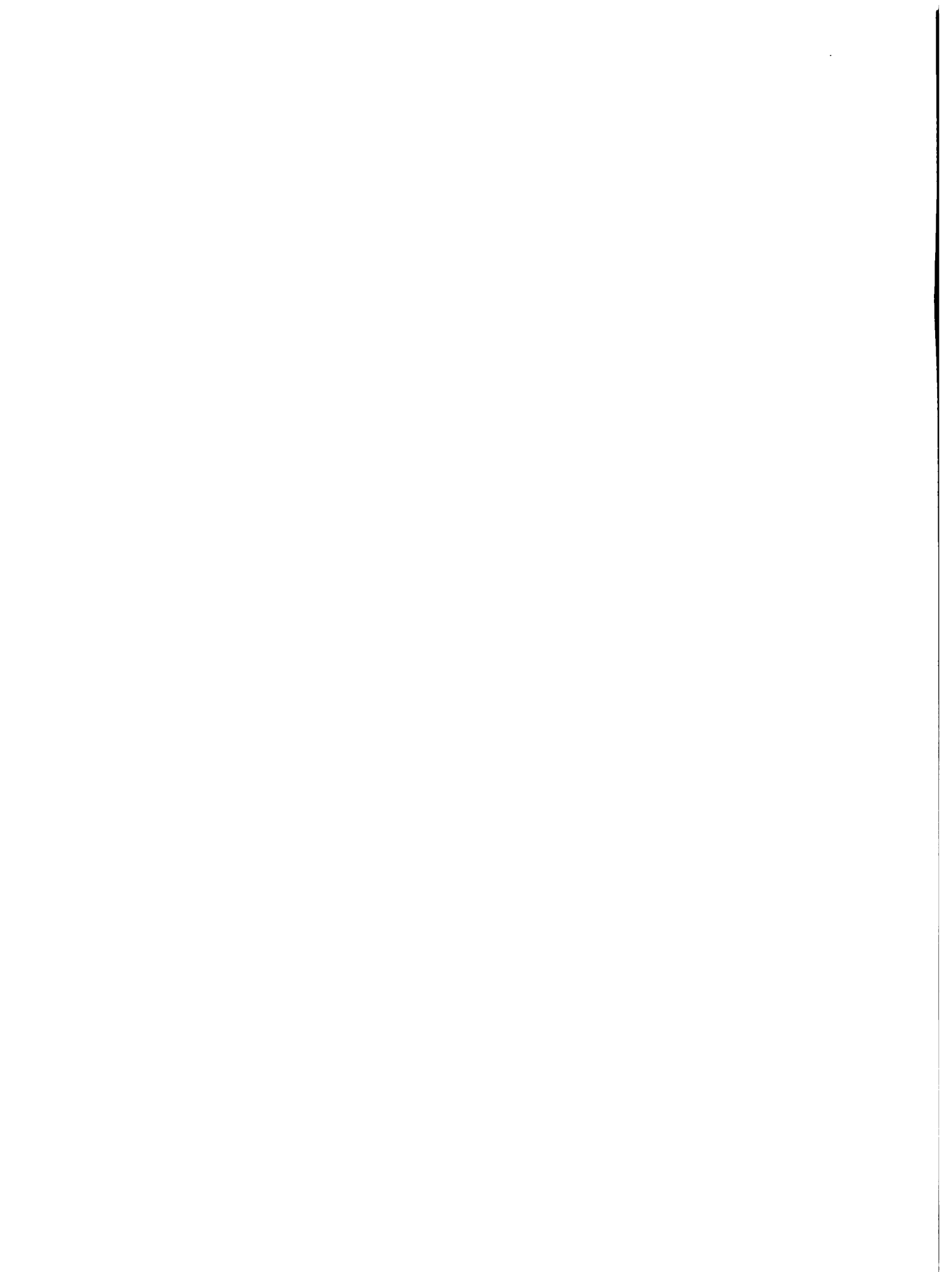
José Emilio G. Araujo
Director General





Chapter I.

CURRENT SITUATION OF AGRICULTURAL RESEARCH IN LATIN AMERICA



Chapter I

CURRENT SITUATION OF AGRICULTURAL RESEARCH IN LATIN AMERICA *

Introduction

It is only since the Second World War, and more specifically since the decade of the sixties that Latin America in particular, and generally speaking throughout the so-called "developing" regions of the world, that there has been an increasing awareness of the marked difference (situational differential) between the circumstances of man living in a "developed" region and man living in undeveloped or developing areas.

A daily avalanche of social and economic indicators emphasize the fact that we live in countries that have been unable to overcome the circumstances which keep the majority of the inhabitants subsisting at levels which barely surpass the 'limits of misery'.

The division into poor and rich societies of the world today shows no sign of disappearing or even of levelling off, but rather shows every indication of widening the gap which separates these societies, with the resulting resentments, incomprehension, egotism, ignorance, sickness, malnutrition, and worst of all, inequality of opportunity, which negate man's true destiny on earth. There are areas today where man is born, knowing that no matter how he struggles or dispairs, he cannot surpass a certain level.

This is not a new problem. The countries of 300 years ago had similar levels of income, although the conditions under which each society evolved served as the bases for the differences encountered today.

The internal struggles of the nineteenth century and the lack of a true national conscience appreciably delayed the development process in Latin America. The modern world expects more than pretty words and inflammatory speeches. The quantitative aspects of the differential therefore, are manifest considering that Latin America has one-third the per capita income of European countries, and one-sixth of the United States, on an average, which produces an economic dependence of the less developed countries on the more developed ones. However, the past decade has shown that the nature of this dependence is changing due to the incontrovertible fact that industry in the

developed nations is less dependent on foreign sources of raw materials with the possible exception, at least at the moment, of certain energy resources.

Scientific superiority is thus converted into a new form of dependence wherein technological progress belongs to those who can achieve it by means of their available human and physical capacity.

The differential between the quantity and the quality of scientific production, *per se*, is not the most important problem. What is important in our countries, is the fact that scientific and technical production frequently bears no relation to the real needs of our countries and the levels of information concerning our own resources is quite limited. To cite an example, CEPAL informs us that only 10 percent of the soils of the region have been surveyed; about five percent of the studies have been conducted in some detail, but comprehensive, detailed studies are available for only one percent of the area.

These circumstances, of grave import from the point of view of planning agricultural development, are repeated in the case of forest resources, subterranean waters, and others.

In 1968, ILPES established that technological advances in agriculture could be estimated by measuring the yield per hectare. Agricultural production in Latin America increased by 3.7 percent a year (0.8 percent on a 'per capita' basis). However, the significant factor of this increased production is that two-thirds of the increase was due to the expansion of the area cultivated, and only one-third was a direct result of increased yield per surface unit.

In Eastern Europe and in the Soviet Union, 80 percent of the increased production was due to the increase in production per hectare, and in the United States 25 percent was due to increased production per area.

Within this general framework, what then is the current situation of agricultural research in Latin America.

* This report presents an analysis of agricultural research in the physical-biological area.

Agricultural Research Problems in Latin America

The national income of the countries of Latin America, taken collectively, depends largely on agriculture. In a similar manner, a high percentage of the exports from these countries (with the exception of Venezuela) are dependent on agricultural products.

To meet the challenge of increased agricultural production in the American nations, the governments have recently – in most cases – established research centers and experiment stations. With a few exceptions in Argentina, Brazil, Colombia, Chile, Mexico and Peru, the countries evinced this interest at the beginning of the forties. Unfortunately, however, the research initiated was almost too academic in nature, and although valuable results were obtained in some places, they were of little practical use. At the same time, these activities were begun with very little economic support, considerable rigidity in administrative norms, and a certain degree of isolation from the rural medium.

Table 1 provides the number of experiment stations in existence in some of the countries of Tropical

America, in accordance with information appearing in recent publications.

Table 1. Number of Experiment Stations in some of the Countries of Tropical America. *

Country	Nº	Country	Nº
Brazil	34	Honduras	11
Bolivia	16	Nicaragua	5
Colombia	21	Panama	15
Costa Rica	5	Paraguay	3
Ecuador	5	Peru	18
El Salvador	5	Venezuela	20
Guatemala	11		

* Sources: Bibliography and Documentation Institute of Brazil; Agricultural Experiment Stations of the Andean Zone, IICA; Catalog of the Experiment Stations in the Central American Isthmus, IICA/ROCAP (1969, 1970, 1971, respectively.)



Professor Allyson Paulinelli, Minister of Agriculture for Brazil, speaking at the inaugural session of the VI Meeting of the Committee for the Regional Cooperative Program for Agricultural Research in the Southern Zone.

It was estimated that in 1971 there was a total of 385 principal agricultural experiment stations in Latin America, of which approximately 80 percent were government or state owned. The remaining 20 percent were in the hands of universities, private organisms or other entities.

Although traditionally, agricultural research has been under the sphere of influence of the respective governments and controlled directly by the Ministries of Agriculture, recently the experiment stations in several countries have joined together into autonomous or semi-autonomous organisms which has greatly contributed towards increasing the stability, organization, administration and development of agricultural research. This is the case in Argentina, Brazil, Colombia, Chile, Ecuador, Venezuela and other countries.

The research centers of Latin America began with the introduction of species and animals, over-estimating to some degree, the genetic value of the introduced material, in relation to its adaptability to ecosystems very different to those from which the material came, and under-estimating the value of native species and the various technological aspects resulting from experience acquired in local ecosystems.



Animal breeding in the Auchenia of the South American Andes is a research problem of priority due to their importance to the "campesino" family economy of the Altiplano.

In the fifties, this lack of adjustment between species and ecosystems having been noted, research initiated another process to explore the best conditions under which material could be introduced, so as to induce its adaptation. Cultivating and management trials proliferated in order to ensure adaptation and production. This

would appear to have been a somewhat one-sided approach. There was considerable imbalance in the search for solutions to very particular problems and for a very reduced area.

Research efforts seemed to lose their over-all perspective, and concentrated on particular problems. Information acquired during this phase of research certainly contributed to increased knowledge, but it was frequently out of tune with actual development needs, with a notable absence of emphasis on the problems being faced by the rural man. This phase could be called the 'technologist' period. The technologist delighted in his knowledge, but tended to ignore the fact that the essential benefits for the existence of man had been forgotten.

The analysis of a specific problem leads to a somewhat disjointed specialization. The agronomist who achieved significant progress in the fifties, usually appeared as a specialist outside the sphere of animal production systems. Forages are his research interest, and he seldom integrates his knowledge into the over-all development of animal production, to the benefit of the animal husbandryman. The veterinary, geneticist, soil scientist, entomologist, phytopathologist and others were in very similar circumstances.

Thus, the sixties presented an over-all picture of isolated research cells, within organisms which were similarly isolated one from another. The governments and researchers themselves, began to inquire how they could overcome this research problem, and decided in favor of an integral process, with the rural man, the farmer, as the beneficiary of the joint efforts.

The question which arises therefore, is whether agricultural research, of a biological nature, has been successful throughout the American continent.

This question cannot be answered without carefully considering a series of factors which cannot be presented, analyzed or discussed in detail in the space available in this report. However, taking into account agricultural production figures and indices, the volume of imports, the levels of rural unemployment and other factors, we can ascertain that although favorable results have been obtained in several areas, agricultural research in Latin America, *per se*, has been largely absent from the development process.

Thus, the classical problems which research faces such as lack of economic resources, adequate facilities, equipment, and highly qualified personnel, and which are traditionally utilized to justify, poor performance, cannot be cited. Although these factors can be accepted as being an inherent part of the problem, the cause is much deeper, and is related to limitations which are linked to the following questions: what is

being researched? for whom or for what purpose is the research being conducted? and how is it being done?

These are important considerations, and should be taken into account when defining the concept of "success". The more or less favorable results obtained in advancing certain constitutive elements of technology should not be the only means of evaluating it. Should a corn researcher consider his work successful if he has obtained a hybrid which surpasses traditional varieties with an increased yield of 40 percent? Should the evaluation of success stop there?

It would appear that agricultural research has lacked an over-all perspective, having limited itself to specific areas of action concerning particular aspects which have been negatively transformed into being considered the totality of scientific knowledge.

Biological agricultural research is intended to provide the information and techniques needed to continually increase agricultural production, through increased productivity, in an attempt to maintain the internal demands adequately supplied, eliminating a dependence on foreign production, increasing exportable surpluses without sacrificing internal consumption, etc.

Nonetheless, it is evident that the real agricultural problem of Latin America is not merely one of insufficient production. The problem can be found instead in the imperfect distribution of income and wealth, in the unequal participation of the different social groups in the distribution of the benefits of labor, in rural unemployment with all this involves, in archaic land tenure patterns with an excessive concentration of land in a few hands, all of which produce an inequitable and weak demand.

On the other hand, the situation described above was not completely understood, and for a long time researchers in the physical-biological area did not perceive that efforts to increase production and productivity in agriculture resulted sterile if not associated with other essential efforts to improve the living and working conditions of the marginal rural masses.

In addition, it is generally recognized that little attention has been paid to the important aspect of establishing priorities, which for a variety of reasons such as individual preference, the academic training received in research, the influence brought to bear by the bureaucratic and social structures, avoid the need for an agricultural research program based on priorities linked to integral development plans of the countries wherein growth is considered to include aspects other than the quantitative increase in production.

Taking the above into consideration, there is more than enough reason to ask whether a fair proportion of the benefits of research have truly reached those that most need it. The query itself identifies one of the main causes whereby physical-biological research has generally speaking not managed to satisfy the sector's requirements. That is, research has been stimulated by and the results dispersed mainly among the farmers with greater economic resources, influencing in this manner limited rural groups, and leaving the great majority of the farmers without any significant participation thereof. The lack of participation of the small farmers in the benefits of research, has resulted in the maintenance of an effectively small market for consumer goods produced by the industrial sector.

Thus, modern technology developed by biological agricultural research, has established a duality in the field of productivity in our countries, since a small group of producers who have 'modernized' their holdings and have significantly increased their productivity, have also increasingly absorbed the market, thereby impoverishing the situation for the other farmers with no access to technological innovations and therefore with limited development possibilities.

It can be argued that research has complied with that aspect which is its main concern, and that it is not responsible if the knowledge produced is not adequately utilized, or has not benefitted the more needy sectors, since the diffusion of information is not the responsibility of the research worker. Even if partially true, the discrepancy consists in whether technical development can really be achieved if the 'men of science' are isolated from the rural masses, and work only on their immediate goals, their 'creation', forgetting or postponing the final objective, which would be the utilization of this 'creation' by the marginated man to increase his possibilities to achieve a dignified way of life.

With the aim of arriving at a conclusion concerning whether or not biological agricultural research has influenced the action in Latin America, the following queries presented by José Emilio G. Araujo, Director General of IICA, at a Round-table discussion held in Venezuela in 1972 on Agriculture and Agricultural Research, should be considered:

Are our research institutions committed to the development of our continent?

Is our research the result of erudite scientists isolated from reality and enclosed in ivory towers?

Are our research programs really connected with reality and therefore contributing to maintaining autochthonous values within our consumption aims, or are they rather contributing to a sophisticated

and aristocratic consumer pattern, wherein modernization is taken as an equivalent for development?

Does our research contribute towards a modification of income distribution, or does it rather increase existing differences, as a result of the application of research results only by large producers already established in so-called commercial agriculture?

To summarize, it seems that Latin American agricultural research, in several countries, has not managed to overcome some of the failures and deficiencies, particularly in such aspects as programming, organization and administration, together with precarious budgets, and the scarcity of well trained personnel. However, perhaps the most significant failure resides in the fact that research has not been able to be adequately and amply diffused or applied, so as to permit a real increase in productivity, since it has usually been oriented towards the accumulation of knowledge only, without very clear or precise objectives.

At the same time, it is worthy of note that agricultural research in general, has achieved some significant progress in so-called 'physical technology' but has made practically no headway in what may be denominated 'social technology'. This is a very important aspect, and the lack of knowledge in this area has frequently been the main cause for the little or no effectiveness of the transmission of modern technology to rural areas.

The agricultural potential in Latin America is enormous, but the current difficulties and problems are of a similar magnitude. Agricultural research as one of the basic elements needed to overcome many of these obstacles, will only receive the needed understanding and support when it can be shown that it is a real service to the community.

Only a dynamic and imaginative technology —physical as well as social— properly organized, oriented and coordinated, will have a significant impact and be of true service on the vaunted agricultural development of our countries. IICA expects to collaborate with the countries and the region in attaining these important objectives, through the implementation of Line of Action III, Agricultural Research.

IICA Action in the Andean Zone

At first, IICA was directly involved in the search for solutions to physical-biological problems of the Zone, primarily through Institute action at the National Agrarian University, La Molina, in Lima. Later, in compliance with the dispositions of the General Plan, IICA phased out of direct action, and progressed to

work on the institutional strengthening of the official research organisms of the five countries of the area, emphasizing such aspects as organization, administration and the integration of the physical-biological with the socio-economic aspects of agricultural research. The changes introduced with the General Plan are having a greater impact on the system, since IICA is directing its efforts towards research policies, and not towards isolated problems inherent in specific physical-biological research projects.



Experimental fields for the evaluation of varieties, of importance for the selection of the best cultivars.

One of the outstanding of IICA's actions is the training of technical personnel at a graduate level, as well as through intensive short courses, covering the various aspects of agricultural research. The principal benefits can be seen in the increase in quality and consistency of research projects, and in the multiplier effect achieved on transferring information acquired in the training programs, to other technicians from experiment stations and universities.

IICA efforts to provide social and economic content to agricultural research is beginning to produce results at the administrative and executive levels. Researchers are increasingly concerned with obtaining results of immediate use in the community, and there is a progressive tendency in agricultural research to consider the social aspects of the small farmers of the Andean Region.

The characteristic independence of the institutions and the research workers, and the tremendous diversity of agricultural research, are undergoing a transition, thanks to IICA action at both national and multinational levels. The creation of ALAF, at a Latin American level, has been a catalytic agent for the countries, inducing them to form national associations, favoring relations with institutions and researchers, stimulating

the interchange of knowledge and information acquired in the different agricultural programs, thereby encouraging the avoidance of duplication of costs and effort in the search for solutions to aspects already resolved through previous experimentation.



The combination of the student, the laboratory and research work produces more and better researchers for Latin America.

The communication of research results is another field in which IICA has made a decisive contribution, and in convincing the researcher that the results obtained through agricultural experimentation can only be useful if published. The agricultural research worker of the Andean Zone has generally been reluctant to publish his results. Two of the possible reasons given are the lack of training in how to adequately communicate, and the lack of highly qualified journals in which to publish. IICA is resolving these problems through the provision of short courses for researchers, and with the publication of the journal 'Turrialba', which has been qualified by UNESCO as being one of

the highest ranking amongst the scientific publications in Latin America.

Currently the Andean Zone, an area of approximately 5 million kilometers square, has approximately 62 million inhabitants, about 60 percent of which are involved in activities within the agricultural sector. Within this same area, there are about 100 experimental stations, centers, etc. dependent on official agricultural research organisms, universities and other institutions, with approximately 1,300 technicians, not counting university professors whose time dedicated to research is variable.

In the organization of research, two well defined tendencies can be noted. One refers to universities which have not yet overcome the idea of research by areas, and the other refers to official research, through government experiment stations and centers, where programming criteria are on a product basis, with a clear tendency towards integral production systems. It can be seen then, that the system utilized by the university is obsolete, but is nonetheless influential on the training of new professionals, who have to adapt themselves to criteria for which they have not been prepared, when they go to work at an experiment station.

In some countries, research administration is centralized, while in others it is conducted on a regional basis, with a headquarters responsible for setting general research policies. The regional system has proved to be more efficient than the centralized one, not only because of greater administrative flexibility, but also because of a more efficient utilization of the different resources assigned to agricultural research, when applied to the solving of specific problems of a given region, with specific cultural and ecological characteristics.

Of the many aspects that could be discussed here, one could be the search for a dimension of autochthonous values. As in other processes, if there is no other valid option than one of committed agricultural research, the research institutions of Latin America should intensify their nationalistic physiognomy. Research policies respond in general to a production system dependent on needs felt by developed countries, and therefore priority is assigned to research concerning export products, which is somewhat distant from the humanistic concept expressed by the Director General of IICA, to produce foods for the people first of all. In other words, research efforts in benefit of the country appear to be somewhat hindered by the relationship of external dependence.

Now that the scarcity of food and energy sources bear an alarming influence on the possibilities of human survival, it would seem to be an opportune

moment to initiate autochthonous agricultural research programs. While industrial raw materials and energy sources were abundant and cheap, research in many cases, followed foreign guidelines which implied a greater productivity based on the sometimes careless utilization of fertilizers, pesticides, machinery, etc. As the problem of scarcity worsens, agricultural research, dependent on industrial production, is increasingly unsustainable. Thus the need to intensify research into native products found in marginal rural areas such as quinoa, ulluco, sweet potatoes, cuy, criollo cattle, etc., which, without totally ignoring a quality relationship with products more adapted to the tastes and needs of more developed countries, require less industrial inputs as a result of their native characteristics and adaptability to Andean habitats. This will necessarily favor a more nationalistic type of research, geared towards the small farmers.

Another aspect to be taken into account in the agricultural research programs of the Andean Zone results from the very slight ecological elasticity of the experiments. As is well known, the Andean countries, have a much more complex ecology than the rest of the American nations, due to their localization on the Equator and to their extremely diverse altitudes. These factors seriously affect the costs of research, as experiments must contemplate the variables dependent on the different altitudinal levels from the tropics to the altiplano, and of the forests which comprise each level. Progress achieved is therefore applicable only to small surface areas.

The advantage of ecological diversity is reflected in the versatility possible in research for product substitution when conditions are adverse, by other similar food or agro-industrial products. This would not be possible in more ecologically uniform areas. The greater availability of germplasm favours continued improvement within the field of plant breeding.

IICA Action in the Northern Zone and the Caribbean

One of the most important functions of the Institute throughout its 32 years of action, has been the training of personnel in agricultural research. The graduates from the Training and Research Center at Turrialba (now the Tropical Agricultural Research and Training Center – CATIE) can be found today throughout the Northern Zone and the Caribbean conducting research in the service of their respective countries.

The research and regionalization studies for Central America have had their positive impact on the countries of the Isthmus, benefitting them in a direct manner to the point of being able to achieve progress on projects related to the programming of research.

The research project in Honduras, the Bean Program of the Northern Zone, and the study concerning production systems being conducted by CATIE, are all examples of collaboration with the countries in specific phases of agricultural research.

At the Center in Turrialba, work was and is conducted on the selection of various lines, particularly in coffee, cacao, legumes and some tropical forest species, which have been adopted by farmers throughout the region. The use of gamma radiation has produced new coffee varieties which are small and compact, but high-yielding. The germplasm collection includes several coffee varieties resistant to the rust diseases.

Numerous high-yielding cacao clones and hybrids have also been produced, and breeding work in resistance to the main diseases of this crop has been carried out. Several countries have received and planted large quantities of seed from the improved varieties obtained by IICA technicians.

Currently, the Tropical Crops and Soils Department of CATIE is working on the development of agricultural production systems which will permit an optimum utilization of the soil so as to improve production



The introduction of new species to Latin America, is necessary for crop diversification.

efficiency. There are 216 production trials being conducted which are part of a progressive series of tests in the optimum utilization of soil and solar energy with the aim of reducing wasted time in the field.

Worthy of note is IICA's outstanding participation in the Cooperative Central American Program for the Improvement of Food Crops (PCCMCA), in coordinating the Pulses Program and in providing the Secretariat of the annual meetings, and publishing the annual proceedings.

Work is currently being done on the common bean, the coastal bean, gandul and soya. A three-level training program to strengthen the national Pulses Projects has been started: a) formal graduate training towards the M. S. degree, at CATIE; b) national and international intensive short courses on diverse topics, with an attendance of over 200 students; c) in-service training for more than 25 technicians of the area for periods of from three to six months, in various fields of interest, at CATIE, in the Faculty of Agronomy at the University of Costa Rica, at CIAT in Colombia, INIA in Mexico, and at the University of Puerto Rico.

IICA's work in coordination activities has permitted the Institution to obtain an over-all view of the current levels of Pulses research and production in Central America. Considerable emphasis has been given to programming research at a country level, and national meetings have been sponsored to this end, in collaboration with the faculties of agronomy of the area, and INCAP. These meetings have provided the opportunity for the coordinator to suggest lines of research to be followed by the researchers, so as to avoid duplication of efforts.

An important factor in the advisory services offered, is that IICA has had the help of personnel from the Universities of Panama, Costa Rica, El Salvador and Puerto Rico, and from research institutions such as CENTA from El Salvador, INCAP from Guatemala, and others as well as IICA personnel.

In the countries in the Caribbean, IICA has been working closely with the research organisms in the Dominican Republic and Haiti, in coffee production and on pulses and cacao projects.

IICA Action in the Southern Zone

Up to the year 1971, and in addition to the Regional Cooperative Program established in 1967, IICA's main contribution towards improving research programs in the Southern Zone was primarily the specialized training of professionals, first through the utilization of intensive short courses and later at a

graduate level at the Research and Training Center for the Temperate Zone which was established in 1962 at the Agricultural Research Center 'Alberto Boerger' in La Estanzuela, Uruguay. Research was carried out on pastures management, forage production, animal nutrition and cattle management and breeding with the aim of perfecting or creating new methods and research approaches in these fields, to be utilized throughout the countries of the temperate zone. Studies were also conducted in agricultural economy, especially in the field of rural administration.

Great efforts have been made over the past few years in Latin America, to improve and develop the institutional system of the sector responsible for agricultural research, once its importance to rural development was recognized. However, the task is a large one, and is subject to continued adjustments to meet the changes being generated by the rural development processes in our countries. This is why the strengthening of agricultural research institutions is one of IICA's priority objectives, particularly at this time when Latin America must meet the challenge of producing foodstuffs which are increasingly in greater demand on our continent and throughout the world at large.

To this end, the General Plan of IICA established – amongst others – Line of Action III, Agricultural Research, with the aim of collaborating with and supporting national and regional efforts contributing towards the orientation of agricultural research as a function of the agricultural development of the countries, and relating biological-physical research so as to improve applied technology and to stimulate economic and social research to facilitate the promotion and application of agricultural research results from experiment centers and stations, into the rural milieu.

IICA's Line of Action III for the Southern Zone, is being implemented with three main programs: 1) Regional Cooperative Program for Agricultural Research; 2) The Organization and Administration of Research; and 3) Socio-economic Research. Although the three programs maintain their individuality, their actions are frequently inter-related and complement one another. The following are examples of biological agricultural research being conducted.

Regional Cooperative Program Activities

This Program has been guided by an Advisory Committee comprised of the Directors and highest level specialists from the national agricultural research organisms of the five countries of the Zone. The Committee was established in 1967, and to date has held six working meetings in the different capitals of the Southern Zone. Through their active interest and

participation, it has been possible to define the following main activities on behalf of IICA:

a. Inventory and Current Status of the Agricultural Research Institutions of the Southern Zone.

There is currently a Directory which contains the pertinent information concerning the research institutions in the Southern Zone. Several studies and research have been conducted so as to attain complete information concerning the current status of agricultural research in the region, which has facilitated the evaluation, programming, coordination and advisory actions conducted within the Research Line of Action in the different countries.

b. Exchange of Technicians

This activity has involved the exchange of 15 specialists over the 1971-1974 period, between the agricultural research institutions in the Southern Zone. This has contributed mainly in providing an in-service

training which favors the joint programming of research tasks oriented towards common objectives.

c. International Seminars

Scientific meetings that have been held have contributed substantially to the analysis of the current status of research in the Zone. Outstanding international specialists have participated in these meetings, and it has been possible to implant new concepts and promote new ideas for achieving a more efficient and integral research program. Amongst the seminars held, the following important ones can be cited: 'Economic Analysis of Animal Husbandry Research Data' held in Mar del Plata, Argentina, June 1971; and 'Animal Husbandry Production Systems' held in Montevideo, Uruguay, in April 1972.

The Organization and Administration of Agricultural Research

As this is an aspect which is fundamental for



Research centers, such as the 'Centro de Pesquisas de Cacau' (Cocoa Research Center), in Itabuna, Brazil, are a permanent source of information.

research to achieve any real impact, IICA has been paying special attention to the promotion of modern concepts concerning institutional development.

In Brazil, IICA's advisory services on the creation of EMBRAPA (Empresa Brasileira de Pesquisas Agropecuarias) are worthy of note and the later successful negotiations to obtain the necessary technical and financial assistance for its functioning and expansion. The constitution and operation of EMBRAPA represents a tremendous effort in institutional development, and has given rise to considerable interest amongst the diverse research organisms in the region. IICA has also developed the following activities in Brazil: 1) the establishment of an integrated agricultural research program in the State of Minas Gerais (PIPAEMG); 2) the drawing up of a plan for the organization and planning of research in the south of Brazil; and 3) has collaborated with CEPLAC/CEPEC (cacao research program) on the development of the research and training program in cacao.

In Chile, IICA action has been concentrated on providing advisory services to INIA (National Agricultural Research Institute) on aspects related to the analysis and organization of agricultural research and in irrigation.

In Paraguay, IICA provided technical assistance on the formulation of a plan for the reorganization of the animal husbandry research and extension system. In addition, advisory services were provided on the research programs in rice, wheat, tobacco and agricultural economy.

Production Systems

This topic, of considerable current interest, has received special attention within the Program, and is a valuable instrument in the orientation of research, while at the same time favoring extension activities.

Action was developed principally through the holding of seminars and special meetings, and through direct advisory services on the installation of production systems. Worthy of note amongst the latter are the animal production systems established and developed in: a) the Cinco Cruces Experiment Station, Bagé Brazil; b) at the Young and Tacuarembó stations, of the "Alberto Boerger" Center in Uruguay; and c) on the Oromo farms in the South of Chile, belonging to the University of Chile.

Publications

The Agricultural Research Line of Action has collaborated on the publication of 37 papers on different subjects.



To make full use of research results, they must reach those. . .

Future Action

It is felt that in developing countries, where actual resources are scarce and research is relatively expensive and not always adequately financed or understood, that considerable effort should be made to achieve a greater coordination of the actions conducted within and among the countries, with the aim of obtaining the maximum benefit from the available resources. A properly coordinated joint action of this nature, would be of benefit to all, since the exchange of information and mutual collaboration would create a healthy milieu in which to make the most effective utilization of the existing research capacity in the Zone.



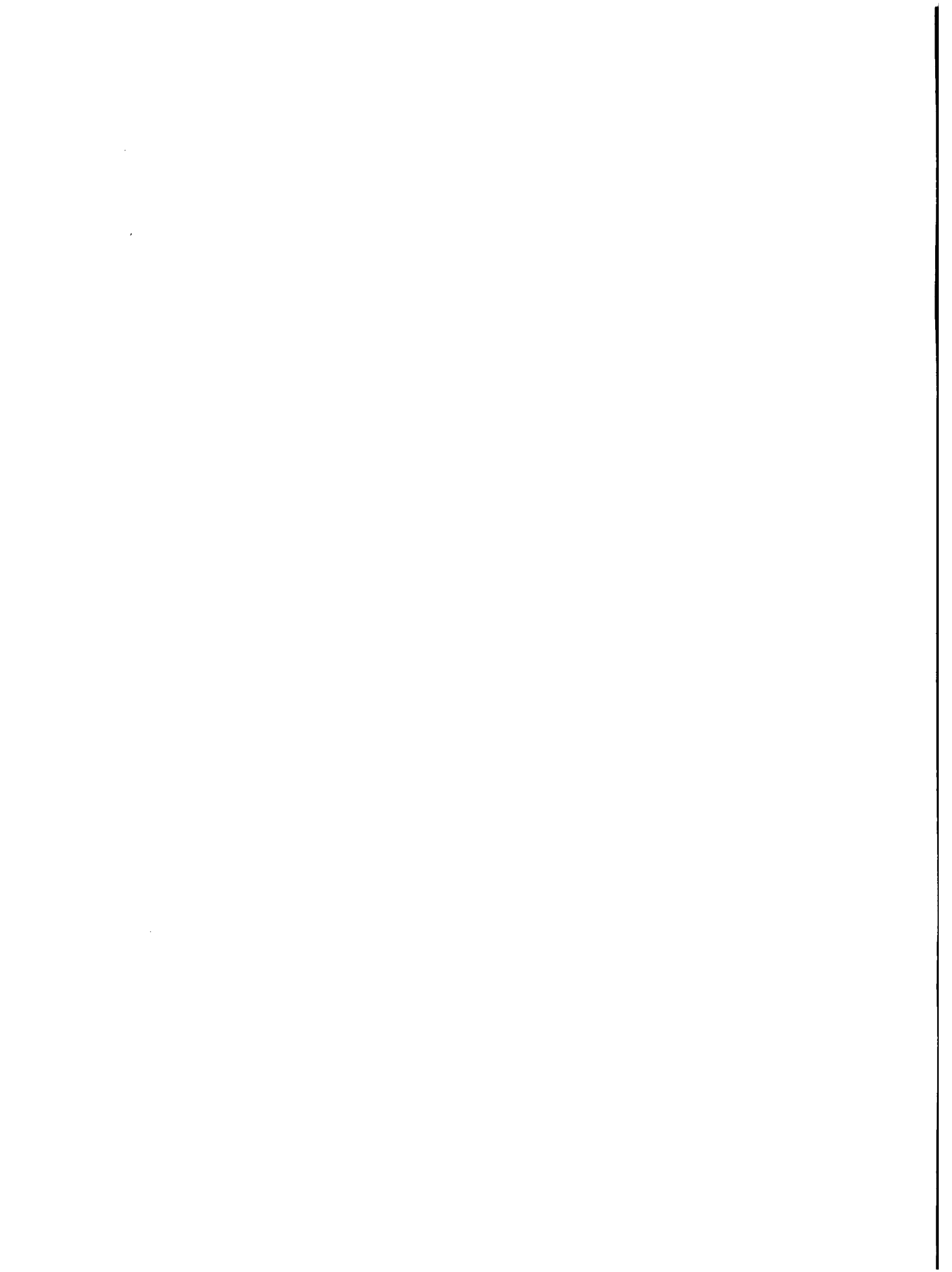
. . . who can put the acquired knowledge into practice, to increase production and improve their standard of living.

The Agricultural Research Program of the Southern Zone, through its cooperative inter-institutional, regional and national action, is a valuable instrument for obtaining the objectives of improved organization, programming and administration of agricultural research, despite limited resources, and for promoting greater contact and interchange between the national institutions of the five countries of the Zone.

The nature of this Program is basically one of promotion and consultation. The aim of the Program, within the possibilities of its resources, is to contribute

towards a stimulatory, catalytic multiplier and innovative action so as to achieve progress and the adequate development of the agricultural research institutions.

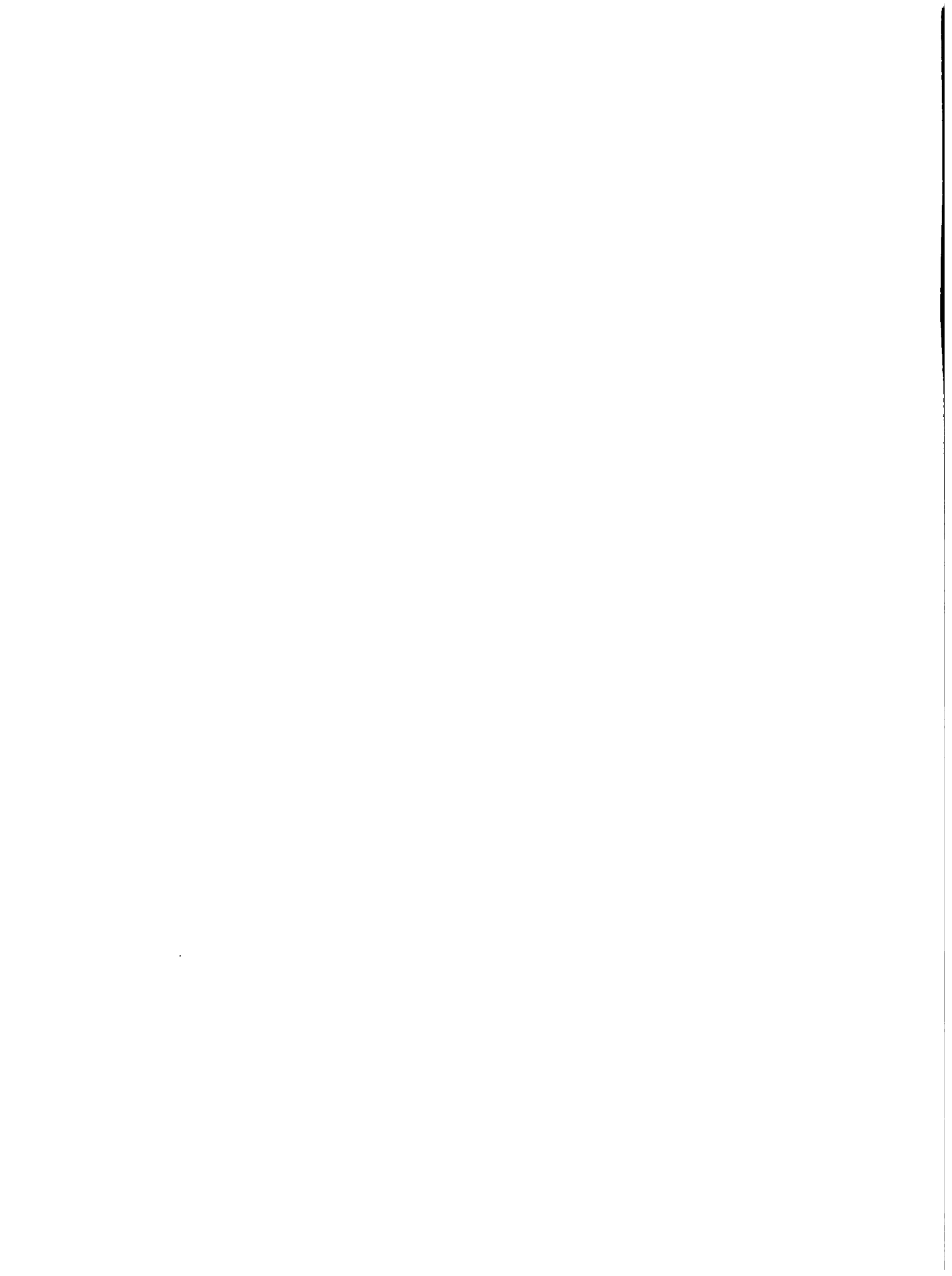
The basic concept of this action is founded on the fact that the strengthening of the agricultural research institutions should be born from within the institutions themselves and the governments of the countries through an evolutionary process which contemplates the progressive elimination of obstacles hindering the development of the research organizations.



argentina bolivia
brazil canada colombia
costa rica chile
dominican republic
ecuador el salvador
guatemala guyana
haiti honduras
jamaica mexico
nicaragua panama
paraguay peru
united states
uruguay venezuela

Chapter II.

IICA IN THE AMERICAS



Chapter II

IICA IN THE AMERICAS

Introduction

This chapter is included into the Annual Report with the aim of presenting the over-all aspect of IICA action within the institution's hemispheric projection. Also included into this chapter are those areas which have been heavily emphasized or wherein new institutional evolution policies have been devised. In past reports, particularly in the last two, information on this type of activity has been mainly concerned with:

—outlining the essential concepts of Institutional Evolution, within the Hemispheric, Humanistic and Rural Development Projection policies as an integral component of development processes.

— concepts of international Technical Assistance, and IICA's conception of Technical Cooperation, comprised of in-depth and expanded inter-institutional and inter-country relationships.

— IICA's emphasis on country-level action, with the aim of orienting the institution's actions towards the changing realities in each country, within its rural sector.

— the action of the National Committees, their participation in the implementation of the work to be carried out by the IICA technicians in each in co-ordination with national organisms and functionaries, with the aim of obtaining more positive results in as short a time as possible.

From its inception, the action of IICA has responded to the inherent principles of an association of countries which have united by multinational agreement, to help one another, utilizing the leadership of the Institute, its programmatic objectives and in general, its technical and administrative organization.

In essence, the aim is to offer a complete over-all view of IICA action in all the Member States.

Reciprocal Technical Cooperation

Following the above guidelines, the present annual report emphasizes mainly the reciprocal technical co-



IICA has worked continuously in the dissemination of its action throughout America.

operation activities. What does this type of cooperation consist in?

The technical work of IICA in compliance with the terms of the Institute's Constitutive Convention and the Resolutions taken by the Board of Directors, and consistently reiterated by the Director General, is not to conduct the work itself, but rather to help the national institutions and organisms to do it. This represents a highly developed concept of advisory service which seeks to strengthen the institutional systems of the Member States.

As per instructions received by the Operative Units from the Executive Offices, IICA action in the future must concentrate on efforts to identify, promote, diffuse and utilize the opportunities made possible through reciprocal technical cooperation, as described below.

In accordance with the doctrine on which this type of cooperation is based, it can be defined as the exchange between countries, of knowledge and experience acquired or being acquired, in the field of rural development.

Effective ways of ensuring this exchange is through adequate scientific information and documentation

(hence IICA's emphasis on this program); through programmed studies; in-service training, the interchange of functionaries, and advisory services; all to be achieved with technicians and professionals working in similar types of organizations in the different countries. The practical aim of this type of action is to take advantage of the accumulated experience in certain disciplines or areas of work for the strengthening of institutions. This permits making the most of the technical experience available in some of the Member States, to the benefit of other countries.

This is evidently a valuable way of putting the experience of each country to the service of the others. At the same time, the system provides for the short-term training of functionaries in certain important aspects directly related to the tasks for which they are or would be responsible.

These training services should be provided in institutions that have already transformed their principles of institutional administration and technological improvements into efficient and operable actions, so that the knowledge acquired may be adaptable to the operation of institutions of similar character. At the same time, this process of acquiring common knowledge forms lasting links in friendship, an important factor, and in the strengthening of cooperation between similar institutions of the different countries.



IICA action can be appreciated in each and everyone of the American States. In this picture, the Director General can be seen talking to Mr. Noel Somarriba, Minister of Agriculture for Nicaragua, during a visit to the National School of Agriculture and Animal Husbandry of that country.

In the methodological orientation of this type of reciprocal cooperation, it is necessary to establish objectives – as in all IICA action – geared towards the strengthening of institutions, with clearly defined goals to be developed on a carefully planned basis, to stimulate the application of acquired knowledge to the

search for solutions to already identified, specific problems, taking into account the prevailing social and economic conditions.

With the aim of facilitating the smooth functioning of the kind of cooperation described above in general terms, the following guidelines have been established:

- To be sure that this is the most efficient manner in handling a training or advisory services problem.
- Have a thorough knowledge of the institutional subsystems and the participating organizations in the countries, as well as their technical personnel.
- To be assured of the good will and support of the administrative levels and the participating technicians.
- To ensure that an institution (in this case IICA) assumes the responsibility for the promotion, organization and development of specific activities, and to ascertain insofar as it is possible, that these activities be carried out by means of direct agreement between the interested institutions.
- To make sure that the necessary resources to cover costs for these actions be available.

In addition, there are other dispositions established to ensure the actual need for the reciprocal technical cooperation, services, their effectiveness and their adequate implementation.

As the search for solutions to national problems has become an international concern, it is evident that IICA has been fundamental in implementing the trend through the more convenient means within the norms of cooperation, as outlined above, as a service to the countries for the development of their rural sectors.

Some statistics are added to illustrate the fact that reciprocal technical cooperation, as an operative instrument, is already bearing fruit.

In the period covered by this annual report, 47 technicians from different countries have cooperated in activities related to other countries of the region, illustrating the evident benefits of reciprocal technical cooperation, as a new development strategy which IICA is fostering.

Creation of the Simon Bolivar Fund

At the Thirteenth Annual Meeting of the Board of Directors, held in Caracas in May 1974, Resolution IICA/RAJD/Res.20(13/74) was adopted, creating the Simon Bolivar Fund for the Rural Development of Latin America and the Caribbean. The importance of



Head table at the inaugural session of the XIII Annual Meeting of the Board of Directors of IICA. From left to right: Dr. Hector Albuquerque, Representative from Uruguay; Mr. Mario Martínez, Minister of Agriculture for Guatemala; Mr. Froilán Álvarez Yépez, Minister of Agriculture for Venezuela; His Excellency, the President of Venezuela, Mr. Carlos Andrés Pérez; Mr. Efraín Schacht, Minister of Foreign Affairs for Venezuela; and Mr. Jorge Ramsay, IICA Representative in Venezuela.

this Resolution merits its being presented herein in its entirety:

The BOARD OF DIRECTORS OF THE INTER-AMERICAN INSTITUTE OF AGRICULTURAL SCIENCES, at the Thirteenth Annual Meeting.

HAVING SEEN:

The initiative taken by His Excellency the President of the Republic of Venezuela, Mr. Carlos Andrés Pérez, in proposing that every effort be made to stimulate agricultural and rural development in the Hemisphere, would be considerably advanced through the creation of an Extraordinary Fund, inviting the participation of all member nations of IICA; and that the Republic of

Venezuela would make a direct substantial contribution to this Fund without imposing any special conditions.

WHEREAS:

The diagnosis of the situation of the rural sector of Latin America and the Caribbean area reveals an as yet insufficient agricultural development, in spite of actions carried out by the Governments of the Hemisphere, which would indicate the urgency for an unparalleled effort by them, to overcome production aspects as well as the social and economic conditions of the rural population.

The Government of Venezuela has officially

announced to this Annual Meeting of the Board of Directors that the Venezuelan contribution will be of the order of ten million dollars; and expressed the hope that this contribution will represent 50 percent of the Fund.

RESOLVES:

1. To create a "Simón Bolívar" Fund for the Rural Development of Latin America and the Caribbean area for an initial amount of U.S.\$ 20,000,000, and open to the voluntary, non-binding participation of the Member States of IICA; the fund to be administered by the Inter-American Institute of Agricultural Sciences.
2. To designate a five-member Committee comprised of one representative from each Zone and one representative from the Government of Venezuela, and with the participation of the Executive Offices of IICA, in an advisory capacity, to meet in Caracas to establish policy, objectives and procedural aspects of the Fund. The Committee's report should be presented to the Special Committee of the Board of Directors, to be convened before August 31, 1974,

to set the guidelines, ad referendum to the Fourteenth Annual Meeting of the Board of Directors, on the possible initial operation of the Fund.

3. To authorize the Director General to utilize up to a maximum of U.S.\$ 5,000 from the Working Fund to cover the costs of the Committee designated to study the bases for the "Simón Bolívar" Fund.

Accordingly, the Director General has since complied with the Board of Directors' dispositions. At the Annual Meeting in Caracas, it was established that the Special Committee would meet in the month of August, for an extraordinary session, to propose and approve in principle, the norms and criteria for the functioning of the Simon Bolivar Fund, as well as to analyze future action of the Resolution, with respect to the implementation of the General Plan, another aspect of IICA action in Latin America of considerable interest to the Board.

The Committee of five members was convened to meet in San José, Costa Rica, from August 26, to 29, to deliberate on the proposed policies, objectives and operational structure of the Fund, elaborated at the extraordinary session, and to prepare the basic



The wish for a permanent headquarters for the Executive Offices of IICA, began to take definitive shape in October 1973, when the Minister for Agriculture and Animal Husbandry of Costa Rica, and the Director General of IICA, unveiled the plaque commemorating the land donation for the building.

document to be submitted for consideration at the Fourteenth Annual Meeting of the Board of Directors to meet in May 1975, in Ottawa, Canada.

In the Introduction to this report, the Director General comments on the importance of the Simon Bolivar Fund for the rural development of the countries of Latin America and the Caribbean, and on the Government of Venezuela's spirited gesture of inter-American cooperation.

The Creation of EMBRAPA

The organization of the Brazilian Institute for Agricultural Research (Empresa Brasileira de Pesquisa Agropecuaria - EMBRAPA) is an important IICA contribution to institution building in the countries of Latin America and the Caribbean. In considering the creation of EMBRAPA, it is worthwhile emphasizing once again IICA's philosophy to help countries to help themselves in their development efforts.

On the request of the Minister of Agriculture of Brazil, IICA began in 1972 to collaborate on a study of the then current situation of the research program under the Ministry, having as frame of reference the need to take the federal organization of Brazil into account for the study; that is, the existence of a federal department with sections in each State, working on research.

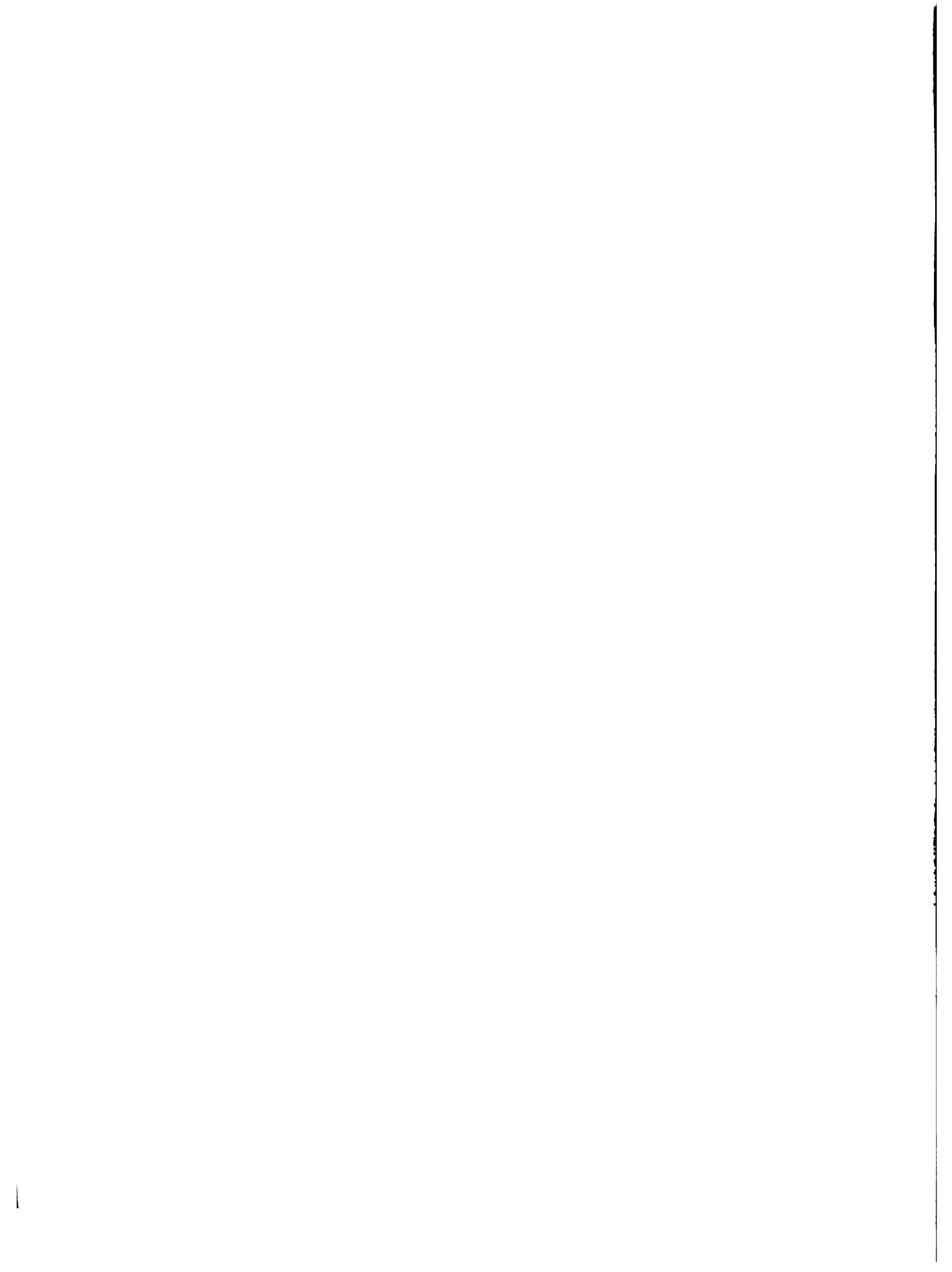
With the participation of personnel from the Executive Offices, IICA has worked intensively on this activity. A proposal for a new organization for the research system resulted from the study, to be based on the creation of a national organism with a new structural orientation for public service.

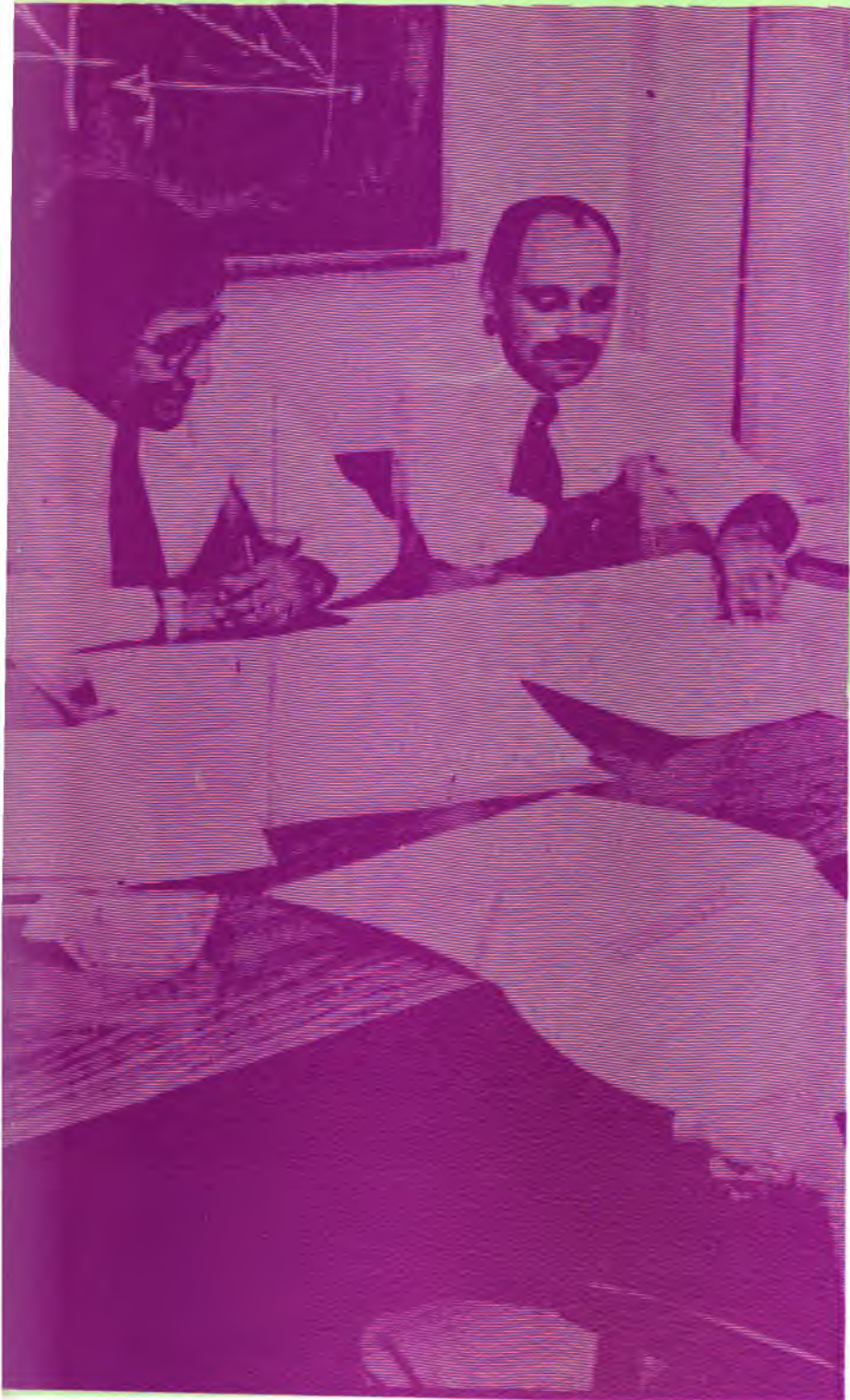
EMBRAPA today is a public institution linked to the Ministry of Agriculture, but with private juridical status and rights, with its own patrimony and with administrative and financial autonomy.

This therefore is an outstanding example of the technical cooperation services which IICA offers its Member States in institution building.

Other Cooperation Activities

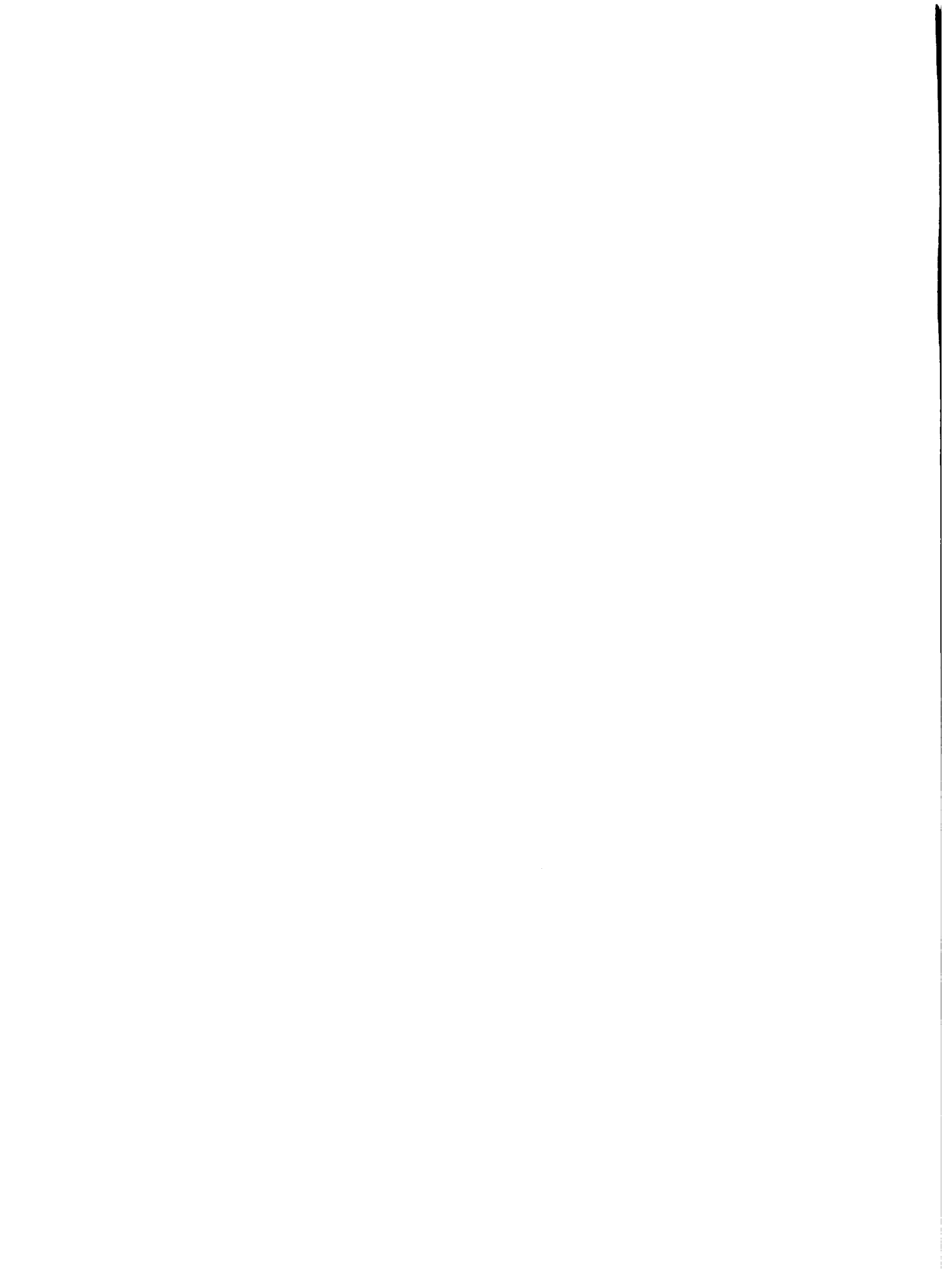
Other aspects of IICA technical cooperation services with similar objectives can be cited, such as the collaboration on the functioning of PRACA (Training and Studies Program on Agrarian Reform and Rural Development for the Central American Isthmus), reported on in another section of this publication; the cooperation provided through the Development Management Program, also reported in a separate section of this document, to UNASEC (National Agricultural Council of Nicaragua), and others, as indicated in the table of IICA activities for the period covered by this Annual Report.





Chapter III.

IICA AND AGRICULTURAL POLICY



Chapter III
IICA AND AGRICULTURAL POLICY



The agricultural policies of the countries should take into account the needs of the rural sector, as expressed by the 'campesino' leaders.

Introduction

This chapter contains information on the work conducted by the Institution during the period covered by this Report, in Line of Action I: Analysis of and Information on Rural Development; Line of Action V: Multinational Integration; and Line of Action VII: Administration of Agricultural Policies.

Line of Action I

With respect to the line of action pertaining to the analysis of and information on agricultural development, details can be found in the chapter on information and documentation, specialized areas of work within the institution, where policy and action guidelines in these areas are presented. However, although

information and documentation are essential components they are not the total sum of the work conducted in this line of action, which has a basic strategy involving the diagnosis of the institutional system of the agricultural sector of the Member States.

Latin American government officials and technicians are well aware of the existing limitations of available sources of systematic and up-to-date information concerning the current situation and tendencies for rural development in our countries and the national institutional systems. This is a serious obstacle to the establishing of national development programs, and considerably limits the efficiency of technical assistance and financial services provided by international organizations.

To fill this need, IICA is developing a series of programs with the aim of systematically collecting and analyzing as much of the available information as possible. To this end, IICA is stimulating national institutions to up-date their information, and is promoting complementary and organized research and analytical studies to be conducted by international technical personnel. Efforts are being made to obtain the necessary information in a uniform manner, so as to facilitate an hemispheric consolidation.

In the Andean Zone of IICA, comprised of Bolivia, Colombia, Ecuador, Peru and Venezuela, work within this Line of Action has been achieved mainly in two programs: the analysis of rural and institutional development, and the strengthening of libraries and agricultural communication services. Satisfactory progress has been achieved in the first program, with individual studies in each country. Not all the information needed for Peru and Bolivia has been collected, but data on Ecuador, Colombia and Venezuela is almost complete.

In Colombia, within the library and information programs, the IICA library continues its basic work of centralizing, systematizing, up-dating and distributing scientific information on rural development and agrarian reform, and has produced a bibliographic catalog which is automatically maintained up-to-date through the utilization of an electronic computer. The catalog lists approximately 25,000 titles.

Concurrently, a bibliographic inventory of all IICA-CIRA publications has been produced for the 1973-74 period, listing 1,089 titles. This inventory will be included into the final report on Project 206 which financed the Inter-American Center for Rural Development and Agrarian Reform through this period. Work was also conducted on improving the Agricultural Library of Colombia, and the getting underway of the National Agricultural Information Service of the same country.

As complementary information to the above, it should be mentioned that the Andean Zone in general, has complied with the objective of systemizing and up-dating information on the institutional system. In aspects concerning agricultural communications, the program objectives were accomplished: in Ecuador follow-up actions were conducted with respect to previous activities; in Peru, work was conducted on the orientation and the analysis of agricultural and social communication policies and activities; in Venezuela, emphasis was placed on the training of communications personnel working in agricultural extension; and in Bolivia work was conducted jointly with agricultural scientists who were interested in developing communications actions.

The study of the institutional system in all the countries of the Northern Zone, comprised of the countries of Central America, Panama and Mexico, has been completed, including all organisms related to the agricultural sector. Based on this study, and as an example of what can be achieved, the Planning Office and the Regional Office for the Northern Zone, in close cooperation with the country representative in El Salvador, elaborated an Action Plan at the Country Level, for El Salvador, which can serve as a pattern for the action plans for the other countries of the area.

Work within this Line of Action for the Southern Zone, comprised of Argentina, Brazil, Chile, Paraguay and Uruguay, was based on five national and one multinational projects.

In compliance with the specific objectives of the above, work was continued on the compiling of information on rural development in the countries of the Zone, and some progress was achieved on the partial analysis of their evolution, their problems and their priority needs. Documentation of this nature was revised and completed for Argentina, Paraguay and Uruguay. Towards the end of the period being reported, a compiling and study of official documents was initiated in Brazil, with the purpose of obtaining information on the organization, objectives and accomplishments of the principal institutions responsible for rural development, and on government strategies, as expressed in plans, programs and projects. A preliminary report was elaborated in Chile, on the new juridical structure of government administration.

The new information available has contributed to a more formal consideration of the Southern Zone programs, with the aim of proposing the introduction of pertinent adjustments. However, these efforts have not as yet been reflected in appreciable changes, since the programs and projects depend more on other factors than on this type of analysis. Timely changes in emphasis in our program, are based on giving greater importance to methodological aspects.

Considerable work was done in both the Northern and Southern Zones in documentation and information aspects. In the Northern Zone, to cite an example, by means of an agreement between the Northern Zone of IICA and ROCAP, considerable effort has gone into sistemizing, compiling and making available existing information on the agricultural sector. Work is being done in the Southern Zone on nine projects within the information, libraries and documentation services program; three are multinational in nature, and six are national.

There is considerable national interest concerning the activities of this program, and the period being reported has been one of the most productive for the Program, with a total of 221 participants in activities conducted in the five countries of the region.

At the same time, the Inter-American Centre for Agricultural Documentation and Information (IICA-CIDIA) has been working intensively on the development of two multinational, hemispheric-level programs comprised of ten projects, on the planning, development and coordination of documentation and agricultural information structures, and the generation, analysis and transmission of information for development purposes.

Further information on CIDIA work may be found in the chapter dealing with documentation and information.

IICA has been developing the following actions in the countries of the Caribbean: Action in Haiti was concentrated mainly on a study of two subsectors, the first being the internal marketing subsector and the second involved the agricultural planning sub-system. An agreement has been signed whereby IICA, administers a donation from the Canadian International Development Agency of US\$280,000 to finance this project over a five year period. Diagnostic actions in the agricultural sector of the Dominican Republic will be started in 1974-75.

Line of Action V

The products from the agricultural sector play an important role in the efforts being conducted by Latin American countries with respect to economic integration. In most cases, the purchase of an industrial product from another countries involves selling raw material or some other agricultural product, either within or outside the area of integration. Thus, the capacity to expand the internal markets of an area in the process of integration, implies a parallel process of increases in available foreign exchange to ensure a healthy balance of payment each year, a condition which is closely linked to agricultural production.

Market perspectives abroad (outside of Latin America), for agricultural products for the 70's decade are such that it is possible to state that an acceleration in the processes for the integration of the area will require an increase in the marketing of agricultural products within the same areas involved in the process of integration.

At the same time, it implies that the development efforts being conducted within the agricultural sector should take into consideration the policies and commitments incurred with the aim of achieving multinational integration. This dependence conditions national policies related to employment in rural areas, price maintenance and other *stimuli* for the producer, the redistribution of income, and others. The economic integration of two countries with different production costs and income levels for field workers, will endanger national and multinational values and objectives; in most cases these differences are practically non-conciliatory.



The meetings of delegations from different countries of the hemisphere, foster the cooperation needed to better determine regional agricultural policies.

IICA, as an international organization at the service of its Member States, cannot be isolated from these processes. The institution's participation is therefore directed towards cooperating with the national integration organism, to help them in an adequate and timely consideration of the problems and other aspects related to the agricultural sector, as much within each country individually as within the region in general.

As an example of the type of action taken by IICA over the period being reported, the Regional Economic Integration Program can be mentioned, concerning joint action on a multinational project denominated Relationships of the Cartagena Agreement with the Agricultural Institutional System, in the Andean Zone area.

This project was carried out in Lima, Peru and to this end, over ten meetings were held with officials from the Cartagena Agreement.

Meetings held and contacts made during the July-December 1973 period were directed towards attaining detailed knowledge of the plans and mechanisms with which the Cartagena Agreement was meeting aspects related to the sub-regional integration of the agricultural sector, so as to determine in what aspects IICA could best help the integration efforts, on the basis of its General Plan programs.

During the month of December 1973, a preliminary meeting to the First Meeting of Ministers of Agriculture of the Andean Group was held in Lima, and was attended by the Regional Director for the Andean Zone of IICA. The Meeting of Ministers of Agriculture for the Sub-region was held in January 1974, having already determined the area in which integration activities could be developed in the agricultural sectors of the zone. After the Ministers' Meeting, and with more detailed information concerning the fields of action, four other meetings were held to analyse joint action projects (two were held in the Cartagena Agreement Offices and two in the IICA Offices).



National agricultural policies should be studied in detail by the technicians responsible for implementing them.

To the above should be added the training of technicians in reciprocal technical cooperation work: a total of 37 technicians in 11 areas, such as colonization, milk production, cadastral surveying, 'campesino' organization, the development of areas, production systems, and others.

Another interesting example of work within Line of Action V can be seen in the work being accomplished

within the Program for regional integration of the agricultural sector, by means of regional agricultural integration projects and comparative studies on regional agricultural production being conducted by the Northern Zone of IICA in the countries of the Central American Isthmus. To date there is information on two important products in the area: corn and beans. During the period being reported, two bean studies were completed in El Salvador and one corn study in Nicaragua.

Relations and contacts have been maintained with the Secretariat for the Economic Integration of Central America (SIECA), with ROCAP and with the Central American Bank for Economic Integration (BCIE) which later turned into specific projects handled outside of the regular IICA budget under the heading of 'Sub-sectorial agricultural studies'.

Line of Action VII

In the past, IICA had concentrated efforts on the strengthening of institutions within the Line of Action of Administration of Agricultural Policies, almost exclusively on improving the technical aspects of the organisms involved. Experience has indicated that these efforts need to be complemented with a parallel improvement effort in the administrative aspects of each organism individually and of the institutional system of which they form part. Thus IICA has increasingly incorporated institutional administration components into its programs during the past few years.

The improvement of the administrative aspects of each organism of the agricultural sector will form an integral part of the corresponding program. It is the analysis and consideration of all the organisms as components of the institutional system of the sector that is subject matter for Line of Action VII. Of particular interest are the stages of the process of elaboration, execution and evaluation of agricultural policies, and their relationship and articulation with all the other sectors of the economy.

One aspect which deserves priority attention within this Line of Action is the functioning and development of adequate agricultural planning systems. Although all the countries have established organisms with responsibilities and obligations in this area, substantial improvements have not been achieved in the processes of formulation, execution and evaluation of agricultural policies at a national level.

In the majority of the countries, an adequate frame of reference is lacking through which the efforts of the different organisms of the sector can be joined as well as to facilitate the articulation of rural development plans being conducted in the other sectors of the

economy. The following should be listed amongst the more important factors to limit these efforts: the lack of planning methods and techniques adequately adapted to Latin American rural conditions; the scarcity of technical personnel; deficiencies related to the internal and external organization of the units responsible for sectorial agricultural planning.

To this end, the Andean Zone, within the Agricultural Planning Program, developed five national projects, one for each of the countries in the area.

As a result of the PEPA (Preparation and Evaluation of Agricultural Projects) Training Cycle Program in Bolivia (IICA IDB Agreement), a project was elaborated on the Promotion of Pig-rearing, which obtained outside financing with IDB. At the same time, personnel from various institutions of the agricultural sector were trained, as in the case of the Development Corporation of Chuquisaca.

In Ecuador, a unit has been formed within the Ministry of Agriculture for the preparation of projects. In Peru a national training program was elaborated on the preparation and evaluation of agricultural projects, in cooperation with key institutions of the country. In Venezuela the work on compiling information on the regional planning organisms of the country was completed.

Under Institutional Administration and Management, five national projects and one multinational project were conducted in the Andean Zone. The projects have been programmed in such a manner so as to permit systematic, complementary and follow-up actions, with the aim of bringing to bear influence as energetically and in as positive a manner as possible on institutional development efforts, so as to ensure that the institutions in the public agricultural sector improve those aspects related to internal structure, administration and management.

It is hoped that through the improvement of the organization, the functioning and the management of service institutions, it will be possible to ensure optimum employment and utilization of the available human, financial and material resources. The projects were comprised of research, consulting and training aspects, with particular attention being paid to applying the acquired knowledge to the improvement of organic, administrative and management aspects.

Projects in Colombia, through the National Agricultural Training Program (PNCA), were conducted in the following fields: education, marketing, credit, administrative improvement, and agricultural research. The PNCA, with help from both national and international personnel, has successfully conducted training services in teaching methodology, in the formation of

teaching support units, in the training of conservation, storage and transportation of foodstuffs, and in the training of personnel in the preparation of agricultural projects. Work in these areas was conducted together with the following institutions: IDEMA, OPSA, INDERENA and the Federation of Coffee Growers of Colombia.

Work in the Northern Zone was based on four national and two multinational projects in accordance with guidelines established in the program on advisory services and studies on agricultural sectorial planning. Special note should be taken of the intensive advisory services provided in Nicaragua, whereby the country representative together with staff members of the management program and other IICA specialists, have dedicated much of their time in helping to process the agricultural plans for the country, in close cooperation with UNASEC. Considerable progress has also been achieved in Honduras, with a similar program.

The strategy utilized to devise specific national projects, avoiding as much as possible the expansion of the subject area, has given excellent results. It is important that in the future, more attention be given to the social aspects of sectorial planning.

With respect to the program concerned with the administration of institutions from the agricultural sector, work in the Northern Zone has centered on seven national projects, one for each country of the area, under the heading 'Management Analysis in the Agricultural Sector'. Considerable progress has been achieved under this program, especially in view of the fact that the program is scarcely a year old. Direct cooperation has been offered the national institutions of Panama, Costa Rica, Nicaragua and Honduras, to help them achieve the necessary administrative reforms.

Detailed studies have been conducted especially in El Salvador, Guatemala, Panama and Nicaragua, to determine the manner in which to achieve improved inter-institutional coordination. In El Salvador, Panama and Costa Rica, training courses were held for some of the key institutions.

The strategy utilized from the beginning has been to help a country to solve a specific problem, to demonstrate that the management program can be useful. After this first experience, the countries have frequently requested a more ample analysis of the agricultural sector. It is hoped that for the future, the program will place more emphasis on in-service training and direct technical assistance, so as to achieve changes in management of the public agricultural sector.

Activities within this sphere of action were initiated in the Caribbean, especially in Haiti whereby the Institute has cooperated with the government on the



Once the national needs and agricultural policies of a country are determined, the rural man should be so informed with the aim of obtaining his support in achieving these goals.

reestablishment of a sectorial planning system. A feasibility project was also elaborated, and the financial resources were obtained for its implementation. This Line of Action will receive priority attention in future annual programs of the Institute.

Within this sphere of action, the following accomplishments in the Southern Zone are worthy of note:

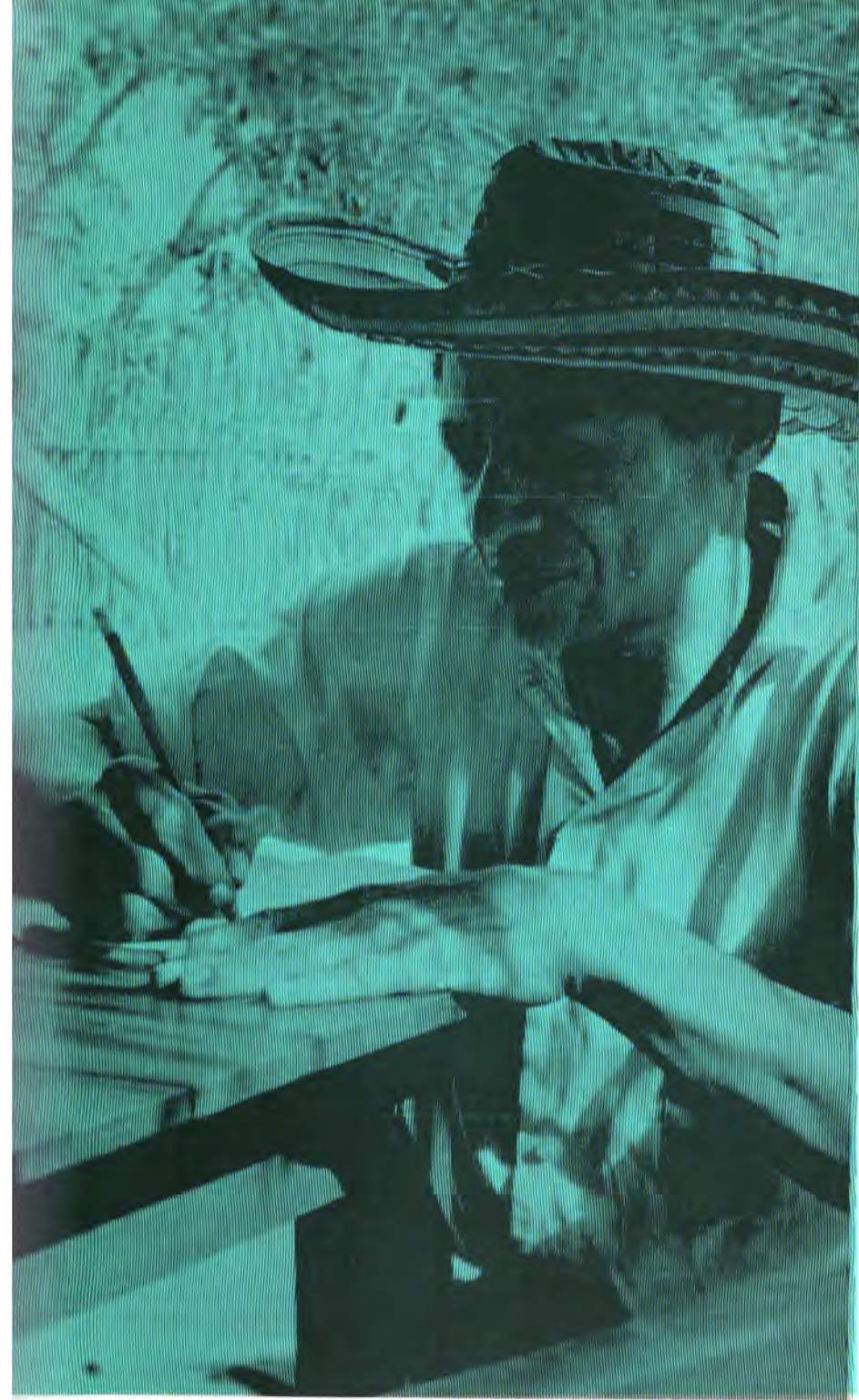
In Brazil, IICA has been cooperating on regional agricultural planning projects, through the development of an integrated investment project for Rio Grande do Sul. IICA's advisory services on this project will terminate in 1974. The Institute is also collaborating on a socio-economic study of the cacao-growing region of Bahia; work in progress is at the data analysis stage.

Work under this Line of Action in Chile was based principally on a PEPA Training Cycle (IICA/BID), an

important step in the training of teams capable of formulating projects and looking for the financing necessary to implement them.

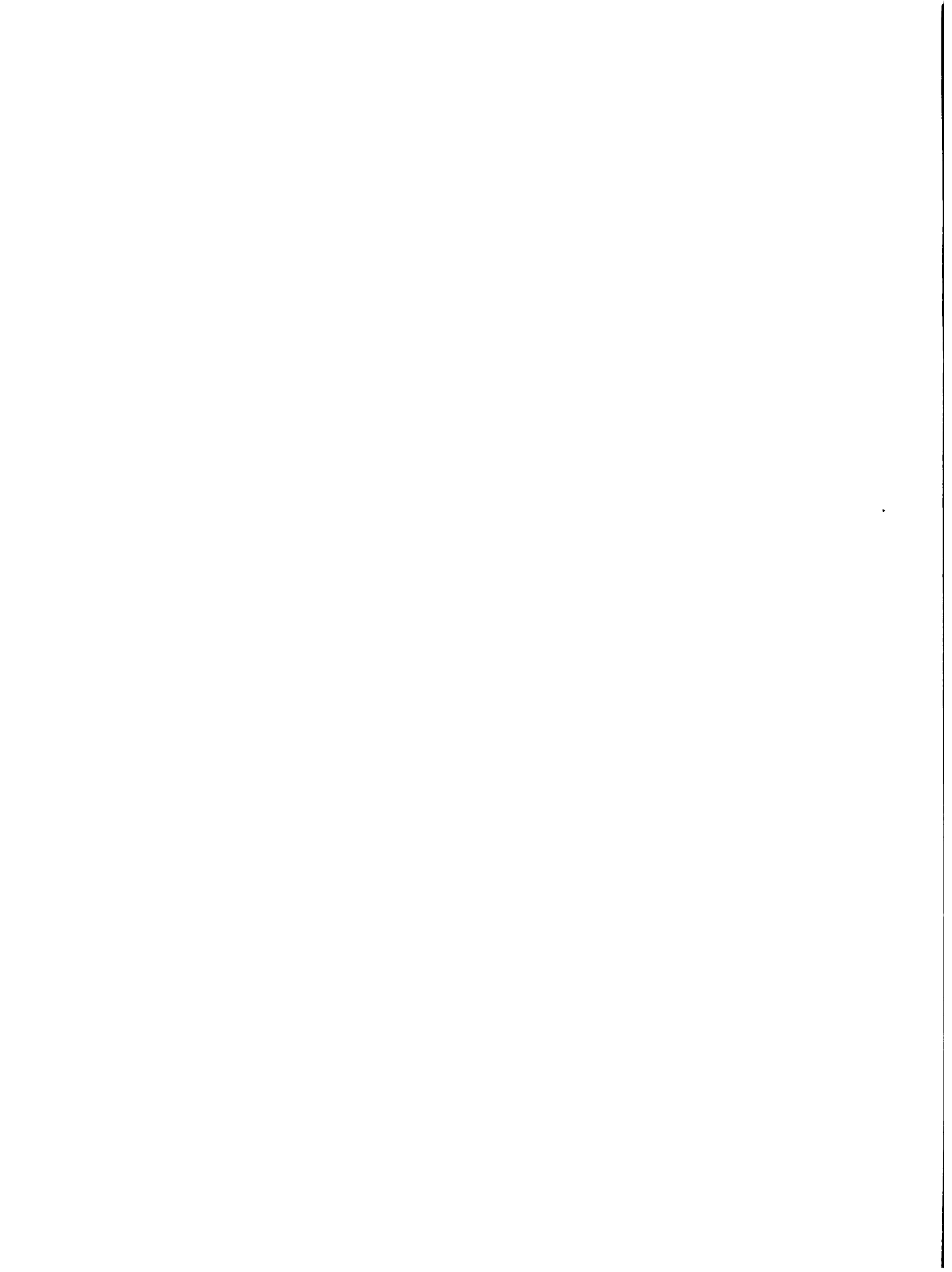
Two projects were conducted in Argentina: advisory services on planning methodology, and on regional development programs. Considerable progress was achieved on the completion of activities in the Chaco region, in the first stage of the Colonization Plan for National Recuperation.

In Paraguay, efforts conducted within Line of Action VII have been concentrated on motivating and proposing a revision of the agricultural sector's institutional system, and the creation of a sectorial programming unit for the Ministry of Agriculture. The importance of these matters has only recently been recognized, and IICA has been asked for help in this sphere of action for the 1974-75 period.



Chapter IV.

IICA AND AGRICULTURAL EDUCATION



Chapter IV

IICA AND AGRICULTURAL EDUCATION



Formal education acquired at the higher agricultural education centers. . .

Introduction

Work in higher agricultural education has always been one of IICA's priorities. Having pioneered in graduate education in Latin America, IICA has reoriented its action as of 1962, with the aim of substituting the strengthening of national institutions working in education, for previous direct action in educational pursuits.

At the same time, concern for university, vocational and special education has been responsible for a notable increase in activities in these fields. The Institute has kept in touch with the institutional development in agricultural education, which facilitates identifying the main problems to be found in these institutions:

- a diversity of study plans and levels of education

between institutions in the different countries, and even within the same country.

– The teaching capacity of the professors and the existence of inadequate teaching methodologies.

– The scarcity of full-time professors due to inadequate resources or lack of personnel.

– An inadequate relationship between the educational centers and the rural milieu, which has a bearing on the little use given to research and extension as teaching tools.

So as to collaborate with the Member States in their efforts towards overcoming these problems, and within the guidelines of the General Plan of IICA, Line of Action II, Agricultural Education is structured as a number of programs carried out through the IICA operative units. The policy to transfer IICA's direct actions in graduate level education to national institutions ready to absorb them has been continued. Support to university level, and in some case, middle level education has been continued, emphasizing areas related to the social sciences.

Agricultural extension activities have also been included, with the aim of strengthening their educational aspects, without ignoring their function to accelerate the transmission and adoption of improved technology, and seeking the models of cooperation most adapted to the specific conditions of the Latin American rural environment.

IICA Action in the Andean Zone

In the Andean Zone, comprised of Bolivia, Colombia, Ecuador, Peru and Venezuela, IICA has been working on two main programs in the field of agricultural education: a) strengthening the graduate education institutions; and b) strengthening college level agricultural education. These two programs are comprised of eight national and two multinational projects. Of the latter, the project related to the aims, perspectives, needs and organization of agricultural graduate programs of the five Andean countries is worthy of note.

Within the program on strengthening graduate education institutions, one of the main objectives is to achieve a consolidation of the graduate academic programs, at a regional level.

A number of interesting initiatives have been taken over the past decade in Latin America, towards the integration and complementation of economic, socio-cultural activities and others, amongst the countries. In the economic sphere of action is the

Cartagena Agreement (or Regional Andean Pact), and the work being conducted by the Andrés Bello Association towards integration and reciprocity in the field of university education. These efforts, and others, reflect the considerable interest on behalf of the countries, to attain an organic integration of their multiple activities so as to achieve a more accelerated rate of development.

Aware of these historic tendencies towards joint effort, the IICA Regional Office for the Andean Zone has been working on several activities with the aim of consolidating some of the graduate education programs, maintaining an eminently regional nature as the central philosophy of the programs. These programs have evolved because of the educational structure of the region which is not sufficiently developed so as to have each country establishing its own graduate program. It is felt that national level activities are not opposed to those of a multinational character; on the contrary, they can just as easily complement one another and therefore should be fostered.

To date, the educational Line of Action of the Regional Office for the Andean Zone has supported graduate programs in the following countries: a) Colombia – Graduate Studies Program in Agricultural Sciences; b) Peru – National Agrarian University; and c) Venezuela – Central University.

IICA cooperation and advisory services have been in the form of financial contributions in some cases, and in others as direct support in academic organization and planning, as well as in the field of administration. In the immediate future it is planned to maximize the essential characteristics of these programs, seeking the most efficient coordination possible so as to intensify the academic services at a regional level. As concerns the program on strengthening university agricultural education, the Andean Zone has contributed to the higher agricultural education institutions in aspects related to academic organization, planning and educational administration, as its main objective. In this manner, and despite certain aspects of these objectives, national higher agricultural education associations have been notably strengthened, particularly at the levels of coordination of national promotion activities.

At the same time, higher agricultural education methodology has achieved considerable progress particularly in those aspects concerning the consolidation of national teams capable of offering much needed courses in teaching methodology.

In addition, serious attempts have been made to foment the expansion and consolidation of education in the social and related sciences, within the agricultural career programs. This initiative responds to the

definitive need to produce professionals trained in the socio-economic transformation processes, occurring in the countries of the Andean Zone to a greater or lesser degree. The objectives and goals are to create inter-disciplinary departments of rural development.

Other areas of importance being worked on in this program in the five countries of the zone are: curricular organization; food technology and agricultural products; animal production and forestry; academic organization and administration; and the continuation of the scholarships program, within the economic possibilities available to IICA. Although costly, it is worthwhile for IICA to maintain this activity, as for many schools in the Zone, it is of the greatest priority to improve the academic capacity of its teaching staff through formal study programs at the more recognized educational centers.

With respect to agricultural extension, the Andean Zone has a program with four projects located in Oruro, Bolivia; in Quito, Ecuador; in Venezuela and in

Peru. The characteristics of the support offered are different in each case, and in accordance with the specific conditions of each country. In the cases of Ecuador and Venezuela, efforts are centered on the respective Ministries of Agriculture and Livestock, while in Bolivia, action has been channeled through one specific project which involves the development of an area (Oruro), in cooperation with the Agricultural Extension Service of the Ministry of 'Campesino' Affairs and Agriculture, and the Oruro Development Corporation. As in Peru there is no extension service as such, activity was directed towards the promotion of rural development departments at the universities, with the objective of providing institutions with personnel better qualified to help in the implementation of structural changes in the agricultural sector.

IICA Action in the Northern Zone

The Northern Zone of IICA, currently comprised of the countries in the Central American Isthmus, Mexico



... and complemented with practical field work. . .

and Panama, has continued working on important higher agricultural education, extension and middle-level agricultural training programs. Work conducted in the countries of the Caribbean will be reported separately.

Extension is one of the areas in which IICA has worked most for the region. The program for strengthening the extension services has made the following progress with the institution's five projects underway: in Costa Rica, IICA is working on training aspects in Extension Planning; in El Salvador, the various stages of the project on the Extension Service and its National Program, supported by IICA, have been a great success, and the objectives of the project have been achieved; in Guatemala, action has been limited to the provision of advisory services; in Mexico, intensive technical cooperation services have been offered the General Directorate of Extra-curricular Education, of the Extension Service under the Secretariat of Agriculture and Livestock, and the Extension Service of the Institute for Improved Sugar Production; in Honduras, IICA conducted two courses for extensionists and three regional workshops have been programmed for training in extension planning and methodology. The decision has also been taken to elaborate a national extension program, and there is interest in receiving technical cooperation assistance from IICA to elaborate the necessary planning instruments; in Nicaragua, the project has not been initiated, as the National Agricultural Development Plan is in the process of elaboration; it was therefore considered opportune to initiate this project during the next fiscal year.

With respect to the Education Program, IICA action in the Northern Zone will be analyzed on an individual country basis:

In Mexico, half the operative funds of the country representation were spent on educational activities, with emphasis on middle-level and extra-curricular education in the rural milieu: the evaluation of the Graduate School of Fruiculture of the National Fruiculture Committee; offering eight basic courses in community development; offering several courses in technical writing and teaching methodology; holding seminars on marketing techniques and rural sociology education; and advisory services to several of the schools and colleges of agriculture throughout the country.

In Costa Rica, work has been carried out mainly in strengthening the College of Agriculture of the University, by means of a signed agreement. Seven specialists were appointed throughout the year, the work plan was adjusted and IICA's actions were oriented towards three main fields of action: didactic, institutional development, and university research and extension. Achievements to be cited are the establishment and

development of the School of Agricultural Economy; the study on the organization of research within the College; and the mechanization of statistical agricultural research information. The programming for the self-evaluation study of the College of Agriculture, and the initiation of the study on the quantitative demand for labor in agricultural sciences, are other important actions being conducted.

In El Salvador, IICA collaborated closely with the College of Agricultural Sciences of the University, and with the National School of Agriculture on strengthening their study plans and offering various training courses for the teaching staff. A total of 107 Salvadoranean professionals and technicians participated in education activities conducted by IICA in that country.

In Honduras, IICA worked on the creation of an Agricultural Education Association of Honduras. The discussion and approval of the statutes are the remaining requisites for the Association's legalization. The association provides for the participation of all the agricultural education organisms at different levels, of Honduras.

In addition, IICA held a national technical meeting to promote the consolidation of a basic curriculum for the middle-level educational institutions. IICA has also stimulated the participation of Honduras educators in several multinational projects such as technical seminars and meetings held in other countries of the area.

In Guatemala, work in higher agricultural education continued with little change from previous years. Although the Agricultural Development plan for the country has not quantified the needs for technical resources by specialty or areas of interest, it is evident that the graduates from the three higher agricultural education centers are deficient as compared to the exigencies demanded by the Plan's programs and projects.

IICA action has therefore been oriented towards the strengthening of the higher agricultural education centers of Guatemala, utilizing for this purpose such instruments as courses in educational planning, educational evaluation, graduate scholarships, in-service training, seminars, and others.

Executives and advisors for the Extension Service were trained in Administration techniques and work was conducted in the area of secondary agricultural education; a national seminar on educational evaluation was offered.

In Nicaragua, work was directed towards the strengthening of the teaching capacity of the professors



... as well as a constant concern for up-grading the quality of the professors. . .

of the National School of Agriculture and Animal Husbandry. Five professors were given scholarships through the IICA/ROCAP Agreement, to take graduate studies in Puerto Rico. In addition, two professors from the School at Rivas received training in Guatemala, and a group of professionals from different national organisms received training in teaching techniques. Several courses were also offered to animal husbandmen throughout the year, at Matagalpa, Boaco and Juigalpa.

In Panama, work has been carried out on the strengthening of the College of Agriculture of the University and the National Agricultural Institute at Divisa. In both cases, IICA had the collaboration of technicians from CATIE, in Costa Rica, especially with respect to the animal husbandry programs.

IICA Action in the Southern Zone

The Southern Zone of IICA, comprised of Argentina, Brazil, Chile, Paraguay and Uruguay, has worked intensively in the fields of graduate agricultural education and on the strengthening of higher agricultural education institutions.

In Argentina, IICA efforts were concentrated on keeping the Graduate School in Agricultural Sciences functioning. In January 1974, a new operative agreement was signed between the Universities and INTA (National Agricultural Technology Institute). A Director was appointed about the middle of the year, and the operative functioning of the Higher Council was consolidated. IICA continued to support the School through the continuation of scholarships already assigned, and transferred equipment and other material goods to the control of the new authorities.

In Brazil, IICA action included the continued support to the Brazilian Association of Higher Agricultural Education (ABEAS), the Graduate Education Consortium of Rio Grande do Sul and the University of Brasilia.

Activities were concentrated on the support of the Coordination Council for Agricultural Sciences of ABEAS, which held a meeting at the Rural Federal University of Rio de Janeiro, in which EMBRAPA's action in graduate education was discussed.

At the same time, the protocol governing the graduate program, signed between the Ministry of

Agriculture and the Ministry of Education in October 1973, received advisory services and support from the IICA/ABEAS Agreement technicians. The Graduate Education Consortium of R o Grande do Sul also received the permanent counselling services of an IICA technician, who promoted the first two meetings of the Graduate Council comprised of the Rectors of the Universities in the Consortium. The academic norms were approved and the institutionalization of the Coordination of the Consortium were considered at these two meetings, which were held in December 1973 and June 1974.

Also of interest is the fact that the third and fourth meetings of the Academic Council were held with the support of IICA, and that the publication of one catalog with all the courses offered was approved. This catalog will appear at a later date, in its second edition.

As part of the support to the University of Brasilia, the graduate program in communications was initiated at the beginning of 1974, with the participation of one IICA technician. Support to ABEAS and the Federal University of Pelotas was concentrated in the sponsoring of two seminars in Pelotas and Belo Horizonte, on curriculum improvements. IICA support action to the Federal University of Pelotas on the creation of the Agricultural Engineering career has been very positive. The course is in its second year, and the curriculum used has served as the basis for the minimum curriculum of the new course elaborated by a Special Committee designated by the Department of University Studies, and approved by the Federal Council for Education.

In Chile, IICA's action in this area was concentrated successfully on the Permanent Graduate Program, and on the Permanent Committee for Agricultural and Forest Sciences of the Council of Rectors of the Chilean Universities, whereby significant progress was achieved in their consolidation at a national level.

Graduate courses previously offered only in Santiago, were projected to the provinces in 1973-1974, at the University of Concepci n. These courses comprised studies on animal production, fruit production, animal health agricultural economics, soils and specialized short courses. A total of 86 professionals - 19 from other countries - attended these courses. At the university level, it is worthy of note that in addition to the support to the Colleges and Schools and their teaching staff, an internal Seminar on Agricultural and Forestry Education in Chile was offered.

In Paraguay, IICA collaborated with the Ministry of Agriculture and Livestock on improving the middle-level agricultural education system. This has included changes in the study plans of the agricultural schools

to adapt them to the current exigencies of agricultural development. Within this orientation, a school at San Juan Bautista (Misiones) is already functioning on the new system, and the restructuring of others is foreseen for future years.

The College of Agriculture and Veterinary Sciences has adopted a new studies curriculum in all areas, and a project to separate into two faculties has been approved.

IICA advisory services on the establishment and organization of a Teaching Support Unit, for the strengthening of the Rural Economics Center, and collaboration on the revision of study programs and courses curricula as well as the academic training of professors has been a valuable support for the development of the College.

IICA action with the Agricultural Extension Service has been positive, in making the Service aware of the programming process, and is currently working on the elaboration of a National Extension Program.

In Uruguay, work has been continued on various projects, on the improvement of the teaching capacity of professors and on the consultancy to the Colleges of Agriculture and Veterinary Sciences, as well as on the planning a support for the coordination of university education.

IICA Action in the Caribbean Countries

In Haiti, IICA actions with respect to Line of Action II, Agricultural Education, were concentrated on the promotion of a project for the strengthening of the College of Agriculture and Veterinary Medicine, elaborated by IICA. Negotiations were continued with the Haitian Government and with the Inter-American Development Bank (IDB) on an agreement whereby IICA would conduct several studies which would permit the elaboration of a feasibility project for the financing of the 'National Integrated Plan for Agricultural Education'.

Within the program for the strengthening of higher and middle-level agricultural education institutions for the Dominican Republic, a Seminar on Agricultural Education in Rural Development was successfully held.

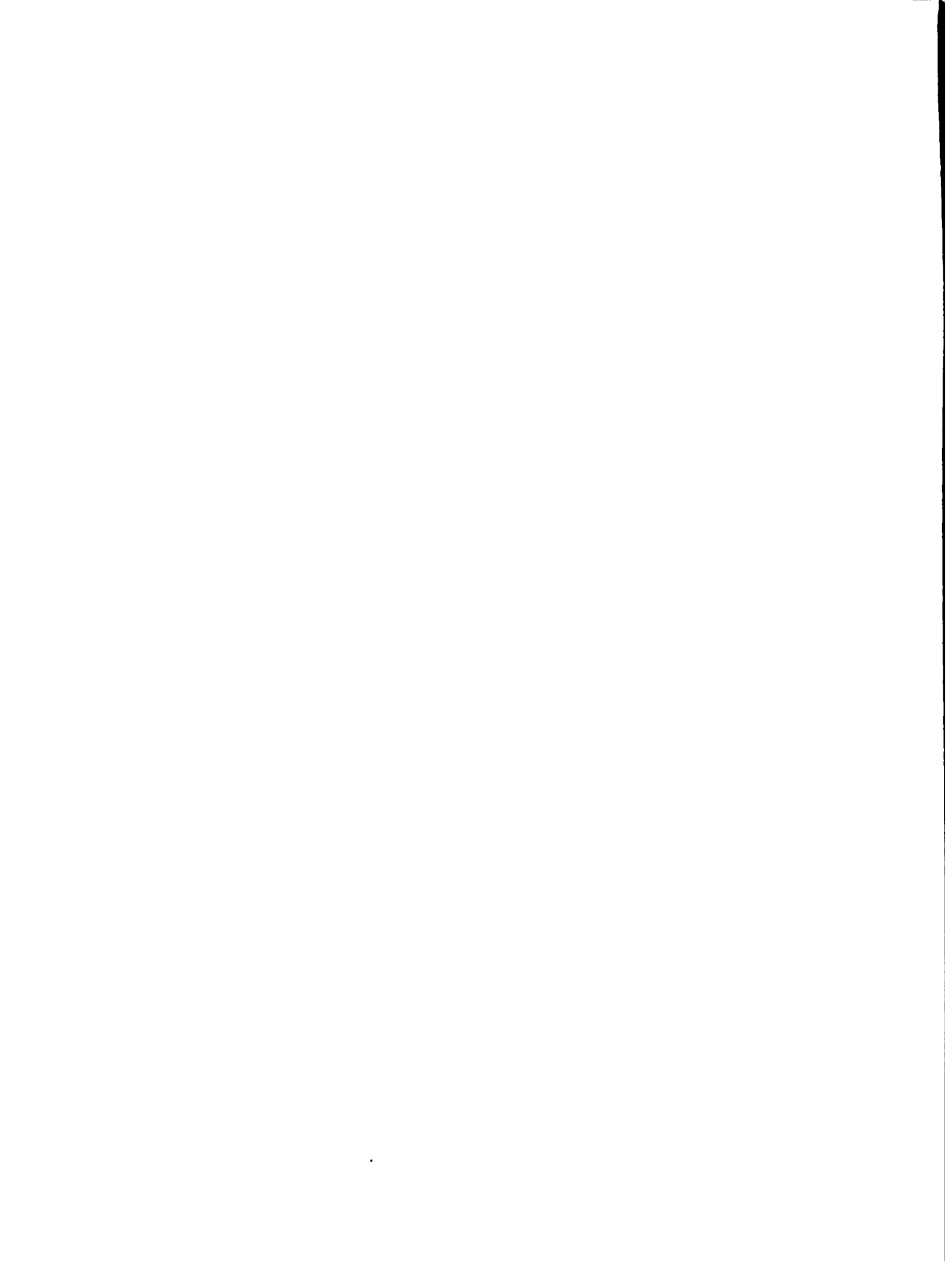
However, IICA's most successful work in this region was in Agricultural Extension, covering many aspects. IICA was largely responsible for the year of 1974 being proclaimed Extension Year, and several socio-economic studies were conducted in five communities as a preliminary step to the establishment of extension agencies. Several courses were given on

different aspects of extension. Advisory services were provided on Rural Youth and on the reorganization of the Information Service of the Secretary of State. The

visit of several Dominican professionals to Venezuela and Puerto Rico was sponsored, for them to observe and learn from the experiences of other countries.



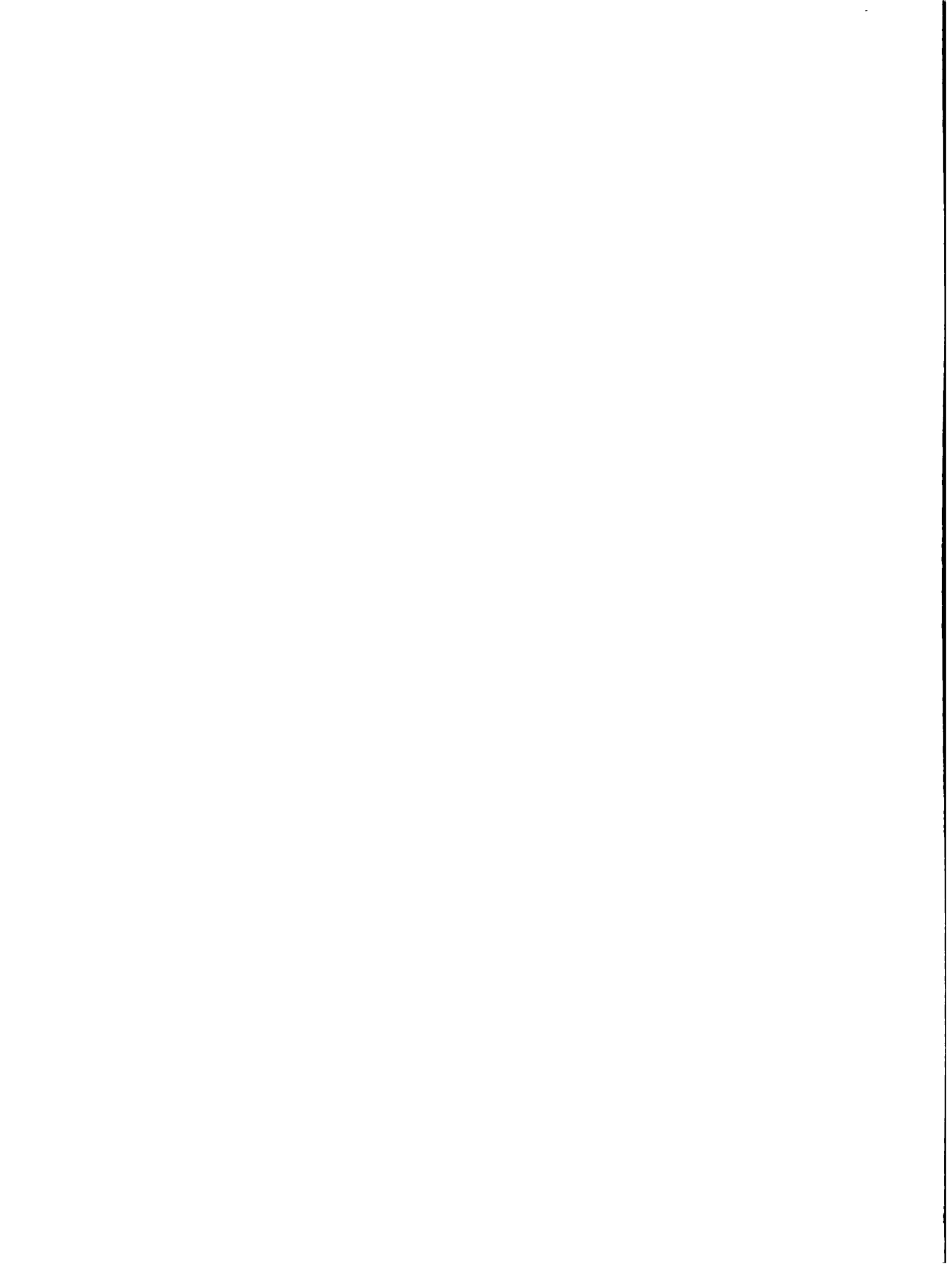
...will in the end be manifest through a multiplier effect of profit to the rural man.





Chapter V.

IICA AND THE PROMOTION OF AGRICULTURAL PRODUCTION



Chapter V

IICA AND THE PROMOTION OF AGRICULTURAL PRODUCTION

Introduction

The Food and Agriculture Organization of the United Nations published a document towards the end of 1972 on the status of agriculture and nutrition which indicates that the agricultural production of Latin America between 1969 and 1971 achieved an annual increment of only 2.6 percent.

Increases in the production of foodstuffs were similarly modest during this period, and short-range expectations do not anticipate any changes for the better, according to provisional information available for the 1972-1973 period. The seriousness of the situation becomes even more evident if one considers the demographic growth for the region, of about 2.9 percent a year.

Food production, on a per capita basis in the developed regions, has increased approximately by 1.5 percent a year throughout the world, since 1954. Although developing areas also attained a similar increase in total production, the higher demographic growth has tended to minimize any per capita increased rate of production.

However, statistical information on changes in the production of foodstuffs only indicate one part of the problem. Poverty, inequitable distribution of the food, feeding habits and many other special circumstances ensure that large groups of people are undernourished, both in the developed and developing worlds, particularly in the latter.

The causes are numerous. From the point of view of demand, the slow rate of increase in incomes and their inequitable distribution, limit the number of people with effective purchasing power. From the point of view of supply, there are structural-type factors and others which greatly reduce the elasticity of production.

As per the General Plan, IICA's purpose is to help the Member States in their efforts to achieve sustained production increases, attempting to link the actions of the national organisms responsible for planning with physical, biological and socio-economic research, the

provision of inputs, and the extension, technical assistance and marketing systems.

IICA is also collaborating with national organisms working on the incorporation of the 'campesino' into a more adequate participation in the profits from increased production, and in a greater utilization of the public services available to help attain these increases. Particular attention is being paid to supporting national institutional programs aimed at increasing employment in rural areas.

During the period covered by this report, IICA has been involved in 17 programs with a total of 63 projects in the different Member States.

IICA Action in the Andean Zone

IICA action in the Andean Zone has included programs in agricultural marketing, strengthening colonization organizations, agricultural credit programming, regional animal husbandry and pastures cooperative efforts, and the development of irrigation, all of which have responded to the Institute's aims to strengthen national institutions.

During the period being reported, two marketing specialists have joined the Andean Zone, one in Ecuador and one in Venezuela. There are therefore three specialists in this area to attend the needs of the five countries in the Zone: the technician in Venezuela works mainly in that country; the one in Ecuador works in Ecuador and Colombia, and finally the one in Peru also works in Bolivia.

The instruments being utilized in the field of agricultural marketing which is presented in greater detail in the corresponding chapter, are the training courses, reciprocal technical cooperation and direct advisory services. Team work has been and will continue to be used to a great degree, in the development of these activities, that is, not only the marketing specialists but also those in agricultural economy, institutional development and agricultural projects located throughout the Andean Zone.

In the area of strengthening the colonization organisms, it has become increasingly evident that it is essential for the countries of the Zone to incorporate and develop new areas of agricultural and forest production. Action in this field is currently being developed in Colombia and Ecuador. A seminar – one of three activities being carried out – was held to closely examine the criteria orienting colonization actions, as comprehended within the characteristics of national development processes.

Worthy of note, within the objectives and strategy of the program, is the concern expressed by the social scientists with respect to a rational and just treatment of the groups living in the colonization zones. It is also important to foster the concept of integral development for these areas, including making the most on a technical and rational basis, of the natural resources, and an agrarian structure consonant with principles of social justice and respect for the populations involved.



Product quality control is still to be established in the majority of our countries.



Marketing of agricultural products begins in the field.

Action with respect to agricultural credit was satisfactorily accomplished with the Study of the Coordination of Agricultural Extension, Research and Agricultural Credit Organizations. The study has served as an example for inter-institutional approach to foment the participation and contribution of the credit institutions in programs of extension, transmission of technology, area development, production promotion, and others.

In the Cooperative Regional Program in Animal Husbandry and Pastures, which has been underway for one year, a meeting was held (II Regional Animal Husbandry Meeting) where the different aspects involved in animal husbandry development were analyzed. These aspects included research, education

extension, marketing, credit and planning. The program has stimulated the coordination of the organisms working in animal production and pastures. As a regional program, it has effectively demonstrated its support to the development of national plans and the coordination of action between countries. The program should therefore reinforce its regional character, to foster the necessary interchange of experience and the concept of multinational integration. Conservation and the rational utilization of genetic resources (plant and animal), animal husbandry policies and promotion actions, seed production and the exchange of information and documentation will require future reinforcement of IICA's multinational action in these fields.

The irrigation program is presented in great detail in the chapter on special programs. However, it is worth noting here that in compliance with Resolution IICA/RAJD/Res.5 (12/73) of the IICA Board of Directors, the irrigation project in Peru was started. Support has been provided on irrigation district operations, in the following areas: diagnostic studies, research, evaluation and the elaboration of norms.

IICA Action in the Northern Zone

In the countries of the Northern Zone, considerable emphasis was placed on the Animal Production and Forages Program, with six national and one regional project. To better serve the program, a consultant was hired to help develop activities oriented mainly towards strengthening and redirecting the national institutions of animal and pastures production.

In the agricultural production promotion program, work was carried out in five national projects: two each in Mexico and El Salvador, and one in Honduras.

The most important aspects of this program was related to the training of personnel from national promotion organisms, and on the advisory services provided on the execution and evaluation of specific agricultural development projects.

IICA action in the agricultural marketing program was achieved through seven national and one multinational projects. The principal activity concerned a diagnostic study of the marketing institutional sub-systems in the countries of the area. In Costa Rica and El Salvador, help was provided on the establishing of agricultural product supply systems. Work was also conducted in these countries on the planning, organization and functioning of the marketing organisms.

It is expected that the Program will have the diagnostic studies available for all the countries, during the 1974-75 fiscal period, which will serve as the basis for future specific action in this area.

IICA Action in the Southern Zone

The Southern Zone of IICA has been working in the Line of Action concerned with Production Promotion, on four main programs: technical and credit assistance; colonization; agricultural marketing; and irrigation in the Temperate Zone of South America. Detailed information on the irrigation program can be found in the chapter on Special Programs.

Five national projects, one for each country of the Zone were contemplated within the program on technical and credit assistance. Four of these projects concentrated on training and advisory services and the fifth one on technological aspects and human resources. The projects are adjusted to the specific conditions of each country in the Zone. In Argentina, the specific objective was to collaborate on the structuring of national planning systems for oriented credit. A seminar was held in which the participants from national entities presented their experience in applying this type of financing in Argentina, and compared them with experience acquired in Brazil, with IICA cooperation.

In Paraguay, work was directed towards promoting organizational and functioning adjustments for a joint approach in technical and credit assistance, as a means to achieving greater impact with both services. The Institute also collaborated on the operative organization at a regional level, of the planning and execution of credit and technical assistance. This inter-institutional coordination also included other national organizations connected with colonization, and higher agricultural education and research.



Cooperative work must be backed up by technical advisory services that increase the productive capacity.

In Chile, work was carried out mainly on technical training, in technical assistance methodologies and on the elaboration and promotion of a new planning methodology, and the execution of technical assistance at different institutional levels, from government decisions to 'campesino' activities. Changes in government policies were responsible for some provisional changes in this program, which will be redefined in view of the recent circumstances.

In Uruguay, the program was conducted somewhat differently, with preference being given to the need to institutionalize the necessary agro-economic studies for the programming and execution of production promotion plans, and on the consolidation of methodology for the elaboration of productivity studies, with the aim of facilitating the elaboration of the promotion plans and projects.

The program in Brazil, made important qualitative and quantitative (more than 500 technicians profited from the program) contributions in aspects concerning human resources and technology in irrigated agriculture in the North East. Technical training was provided professionals with technical assistance responsibilities, strengthening the official action in this manner through the incorporation of new technology and fostering the

creation of research and training organisms in this field.

The Colonization Program in the Southern Zone worked on two projects, in Uruguay and Brazil, and others in Argentina and Paraguay.



Mechanization is an indispensable part of producing certain crops, but should be utilized with caution in those areas where it may bear some influence on rural unemployment.

As specific objectives of this program, efforts have been made to help in the training of inter-disciplinary technical teams, to collaborate on the institutional analysis of colonization, and to provide advisory services on the elaboration of specific projects. In compliance with these objectives, work has been directed mainly towards projects concerning the organization of the agrarian structure with colonization organisms, in Argentina, and towards advisory activities on rural development projects in the colonies areas of Paraguay. Direct action included providing advisory services on agro-economic studies of individual colonies; a possible institutional redefinition was considered, and help was provided on the improvement of irrigation projects being carried out by the colonization organism.

In the field of agricultural marketing, four national projects were carried out in Argentina, Chile, Paraguay and Uruguay, and one multinational project.

Considering that this program is fairly recent in IICA, and that this is the first period in which it has been included into Southern Zone activities, considerable progress has been achieved which will serve as the basis for the future successful development of activities in this area. The following achievements can be mentioned:

- The institutions operating in the sector have been studied, their legal structure, and their operations.
- Contact has been made with different marketing programs operating in the countries, and an institutional linkage has been established with the majority of the institutions.
- A number of training activities have been conducted, considered essential for the development of marketing structures in each country.
- IICA's collaboration has been provided on several national and international courses directly related to the subject matter of this program.
- Several young professionals have received in-service training.
- The exchange of professionals and of technical marketing material has been fostered.
- IICA has collaborated on the planning and execution of several marketing projects being carried out by national institutions.
- The Institute has cooperated on several marketing studies made in the Zone.
- Several marketing institutions have been provided with advisory services.

IICA Action in the Caribbean

In Haiti, the project with priority in Line of Action IV is agricultural marketing. It is expected that by next year the diagnostic study and analysis of the



Agro-industry is currently being heavily emphasized in our countries.

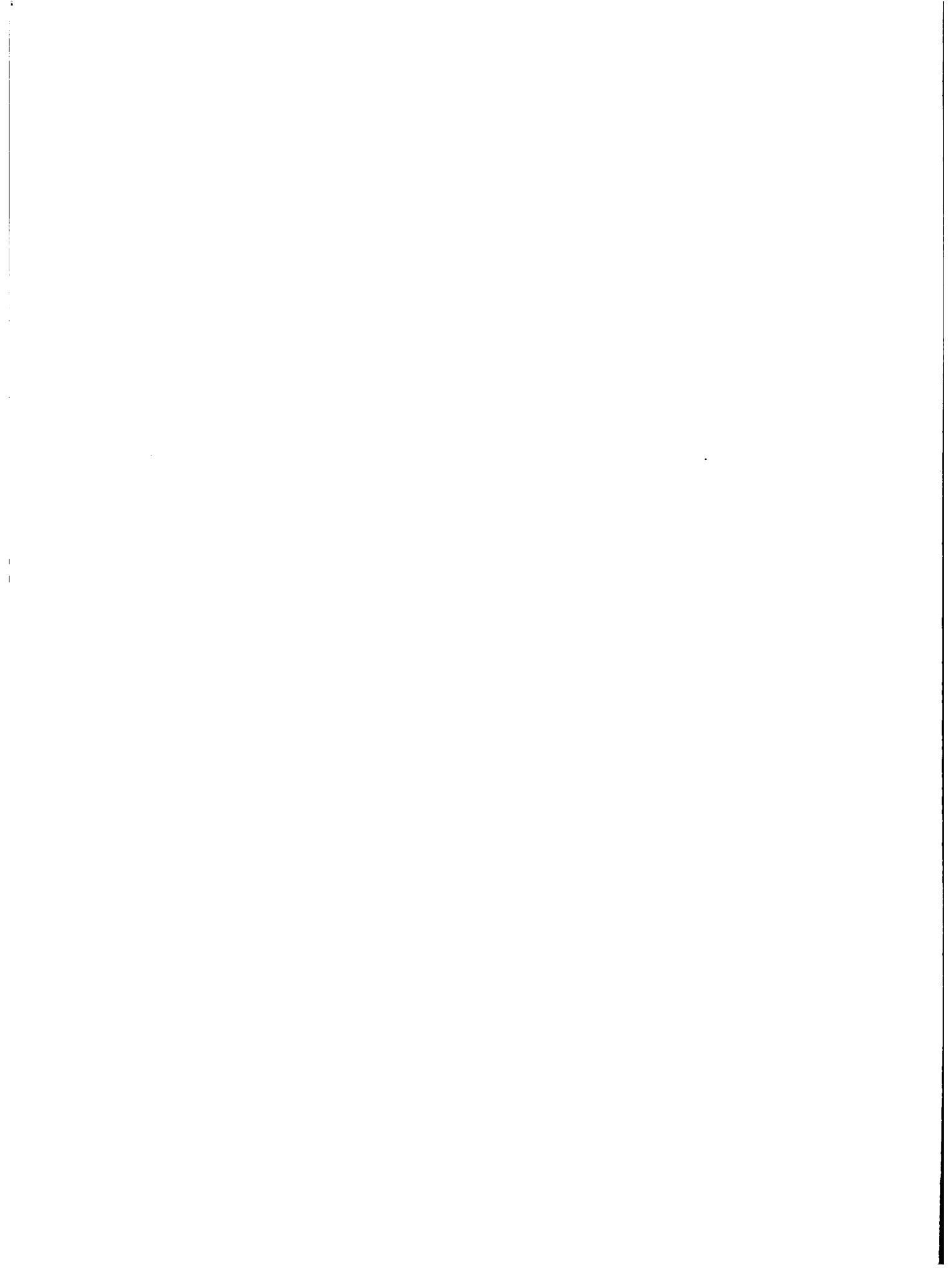
sub-system will be finished, at which time a series of feasibility projects will be prepared, with the aim of resolving the principal problems identified in the study, and of strengthening the institutional sub-system of agricultural marketing.

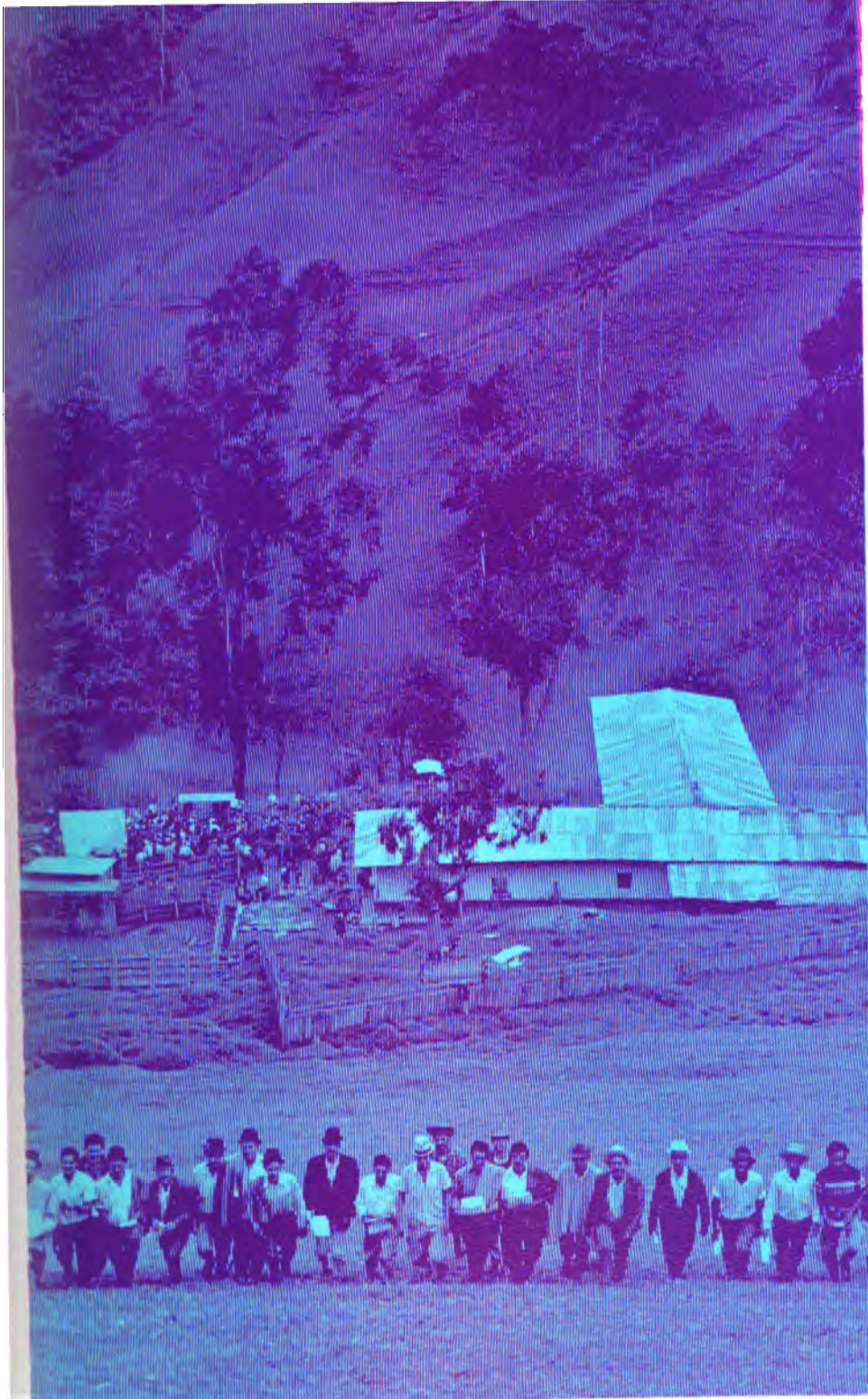
In irrigation and drainage a study of the current irrigation situation in Haiti has been programmed for the next fiscal year in close collaboration with USAID, on the identification and characterization of the work necessary to reestablish more than 10 small existing but abandoned irrigation systems.

In production promotion, IICA action will be somewhat limited. Funds will be budgeted for the organization of two short-term missions in bean and coffee production.

In the Dominican Republic, support to the production promotion program was continued, of the Coffee and Cacao Department of the Secretariat of Agriculture. Plans are made to study the recommendations with care and to get them underway during the next fiscal year. Additional action worthy of mention is the participation of technicians in coffee rust meetings and in the International Meeting on the Utilization of Coffee By-products for Animal Feed.

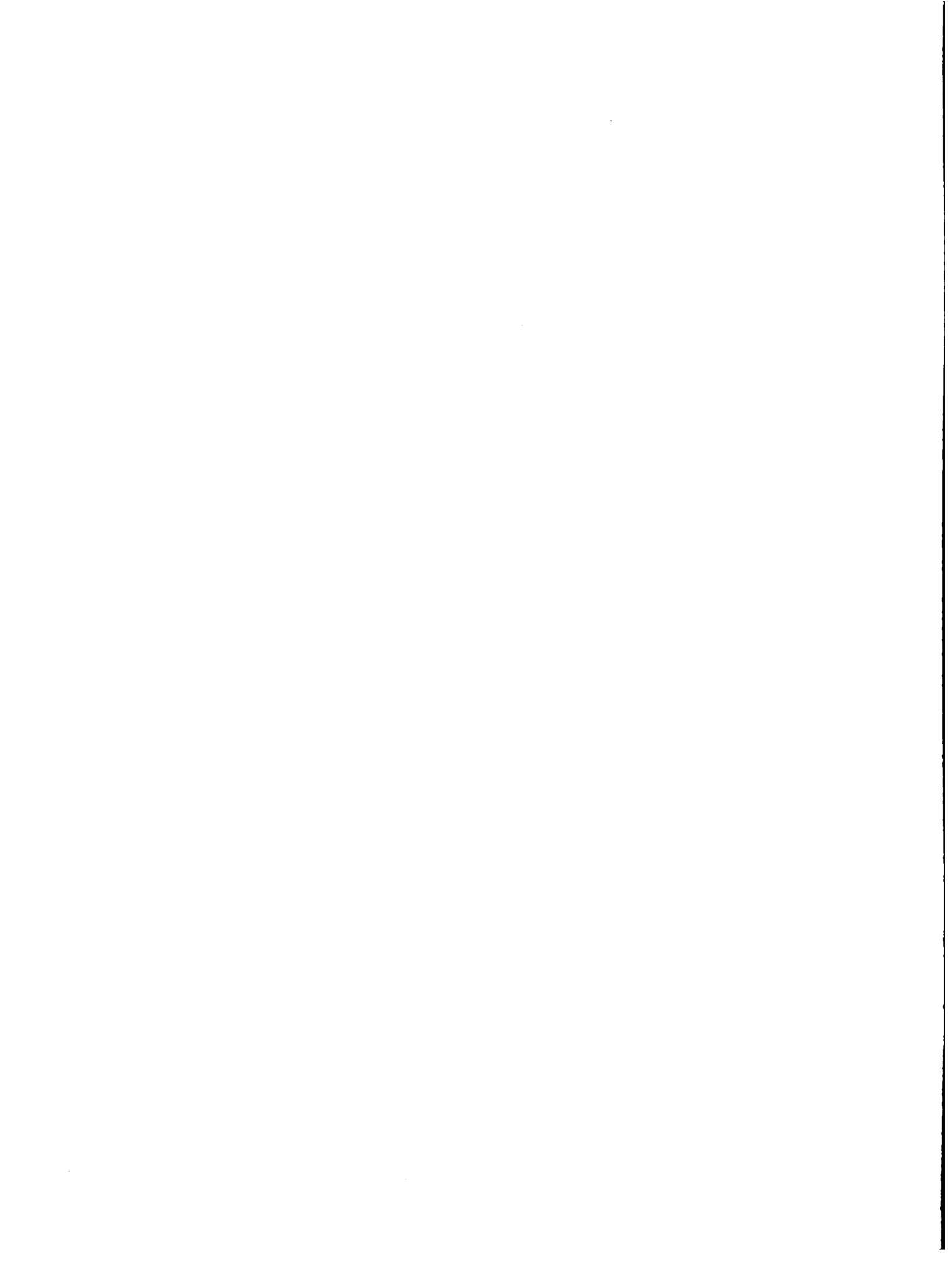
Action contemplated of great impact for the immediate future concerns IICA work in the marketing field. Existing, available documentation on agricultural marketing has been compiled, important contacts have been made with the institutions most directly concerned, and some preliminary studies of the agricultural marketing sub-systems have been made.





Chapter VI.

IICA AND STRUCTURAL CHANGE



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IICA AND STRUCTURAL CHANGE

Introduction

During the decade of the 60's, nearly all the countries of Latin America established programs to do with the promotion and execution of structural changes. Considerable useful experience has therefore been acquired and significant progress has been made. However, it should be mentioned that although the progress achieved has been important, it has not been sufficiently ample or has been modified in such a way so as to diminish the impact needed to properly benefit the marginal rural population. This problem has reached unforeseen proportions and as it is closely related to food production, the majority of the Latin American countries will be obliged, over the next few years, to double their efforts in this area.

With the approval of Resolution IICA/JD/634-7, the Board of Directors reiterated its determination to continue supporting these efforts within the institutional programs, with priority attention. To this end, a plan was approved in 1969 to incorporate the activities of Project 206 of the OAS, Technical Cooperation Administration, into the regular IICA program. This was completed in the present fiscal year.

In accordance with the disposition of the General Plan, the basic strategy for all of IICA's programs is the strengthening of national institutions. It is recognized of course, that it is up to the countries themselves to decide on the content and orientation of their development efforts. With respect to the organizations working in agrarian reform and 'campesino' organization programs, IICA's experience has been to help identify a series of factors which limit their institutional development.

It is on the basis of a recognition of these limitations that IICA is working, within the institutional strengthening strategy, with the purpose of providing basic operative information on training, organization and the functioning of community enterprises derived from the agrarian reform processes. IICA is also active in promoting the critical analysis of problems to facilitate the comparison between conceptual and operative factors, and is fostering the

study of new methodologies to develop the administrative and technical capacity required by these processes.

The programs being developed within this line of action contemplate a series of articulated efforts in research, training and direct advisory services. In addition, activities are underway on reciprocal training, and the offering of seminars and short courses particularly with respect to techniques in the elaboration, execution and evaluation of projects.



Structured changes may be effected in many ways; one of them is through the colonization of new agricultural zones.

An aspect which continues to merit priority attention is the Institute's collaboration with the governments on the finding and applying of new systems for the allocation of lands, 'campesino' organization, and the accelerated consolidation of projects already underway, all within the economic, social, political and cultural conditions of each specific country.

In the period being covered by this report, work within this Line of Action was based on eight action programs and 27 projects.

IICA Action in the Andean Zone

In Agrarian Reform, the Andean Zone has been working on three national (Ecuador, Peru and Venezuela) and two multinational projects.



Progress achieved in the agrarian reform processes is another way of accomplishing structural changes.

Program objectives were concentrated principally on three basic aspects: agrarian reform planning, research in this sphere of action, and technical training. Having accepted, as is logical, that the content of the agrarian reform process being carried out in the countries is largely political, as it has to do with land ownership and productive factors and thus the power relationships between the social groups and classes, one must also accept that the technical component of these programs in many cases, is subordinate to the political component.

Thus in the Andean Zone, where at least three types of agrarian reform have evolved over the years, the strengthening of the agrarian reform organisms, although included within one program and one strategy, must take into account the individual characteristics of the process in each country. The Zone has therefore been working on the strengthening of the organisms and the agrarian reform process *per se*, in each of its component countries, to the degree in which the countries have requested the technical cooperation action the Institute can offer.

The strategy utilized has been the training of functionaries or the provision of direct advisory services to the agrarian reform planning and execution organisms. Research has also been used in some cases, as a means to reveal problems frequently resulting from the very action of agrarian transformation.

The utilization of an increasingly complete diagnosis of the basic problems being faced in these processes, be they at a level of legislation or the execution of the reform process *per se*, will assuredly facilitate the work of national teams in the solving of problems produced by structural reforms in areas not directly related to agrarian reform. Greater emphasis on direct advisory services is suggested, on inter-disciplinary group work and in overcoming agrarian reform strategies which are too concentrated on individual property and the family agricultural unit.

Work in the 'campesino' organization programs is being achieved through three national (Ecuador, Peru and Venezuela) and one multinational projects. Project objectives are oriented towards researching problems, the exchange of experience, training of the 'campesino' and the strengthening of the organisms fostering 'campesino' organization.

Most progress has been achieved in the training aspects, with respect to research techniques in training, as in basic teaching methodologies. In some cases, the training programs have served as a useful model for the strengthening of the institutions themselves, particularly with respect to the self-analysis the organizations are conducting concerning their problematic situation.

Perhaps it may be necessary to give new emphasis on the joint work of 'campesinos' and technicians, seeking the maximum participation of leaders and ground crew, through working sessions, problem analysis, basic planning and joint studies.

Three programs were worked on at the Inter-American Center for Rural Development and Agrarian Reform (IICA-CIRA) now part of the IICA office in Colombia, on agrarian reform, 'campesino' organization and participation, and extra-curricular 'campesino' education, through three multinational and one national projects.

Worthy of mention is the fact that the objectives of the multinational projects have been achieved; agrarian reform concepts have been made known, evaluation studies of the community enterprises of six Latin American countries have been completed, and the study and analysis of specific points of legislation have been concluded, and certain conclusions arrived at, that can be used by the countries in their efforts to modify or generate agrarian legislation to increase the efficiency of the process, to achieve the objectives and goals of each country in this sphere of action.



The organization of 'campesino' into cooperatives. . .

IICA has made considerable progress in the defining of more precise concepts and valid criteria for the analysis and support of 'campesino' organization in Latin America, and its relationship to community enterprises and agrarian reform.

Work on 'campesino' organization has produced important documentation for the orientation of future action, and to help IICA and specialists interested in this field, to define and develop their thinking on the

possible projections of associative 'campesino' forms, as participation instruments.



...and other forms of communal work. . .

In 'extra-curricular' campesino education, an important meeting was held with the participation of the rural education specialists of the Andean countries, Argentina and Paraguay, where the frame of reference for the characterization of the educational programs in 'campesino' association was prepared. This is a considerable accomplishment within the doctrinaire conception of the role of education in the human development within 'campesino' associations and a contribution to a more adequate approach to 'campesino' education within the reformed sector.

In preparation for the above, studies were conducted on the 'campesino' associations in Colombia, Chile, Ecuador and Peru, and in accordance with the program objectives, provided more complete information on existing realities as a first step in defining viable ideas on educational systems for associations and for the reformed sector.

IICA Action in the Northern Zone

The IICA program on agrarian reform and 'campesino' organization has been working in the Northern

Zone mainly on the development of seven national and two multinational projects, with the specific cooperation in many of the activities, of the Training and Studies Program on Agrarian Reform and Rural Development in the Central American Isthmus (PRACA).

Since there were a number of activities conducted in each of the countries within the Northern Zone of IICA, an outline is presented of progress achieved, by specific objectives.

- 1. Foster and provide advisory services on studies to serve as a basis for agrarian reform and 'campesino' organization policies.*

Mexico

The studies on the 'ejidos' and other communities have been postponed in order to work on the effect of the different processes of 'campesino' organization being experimented with, in the country. There is interest in continued work on the methodology developed with the National Agricultural Bank and other entities on studies of this nature, once IICA has the necessary consultants to conduct the studies.

Panama

IICA worked with FAO and local personnel on a study of Community Enterprises. IICA's group of advisors participated in the planning and local arrangements for the study and analysis, while the Panamanian group was responsible for writing up the final report, which has been presented to the Ministry of Agriculture for internal use.

El Salvador

IICA will be working with CONAPLAN and FOCCO on a systematic study of the productive projects being conducted by FOCCO, and the bases were established for an in-depth study of rural settlements and new settlements, once the new agrarian reform program is approved. The results of this work have already been incorporated into the planning of future action of CONAPLAN and FOCCO.

Honduras

An analytical study was made of the 'campesino' organizations of Honduras, that was presented at a seminar for the functionaries of the National Agrarian Institute, Desarrural, the Planning Council and directors of the cooperative federations and



...determine the hope for a better way of life for the man. . .

community enterprises. The study has been very profitable for the planning of the future actions of these organisms.

Nicaragua

As part of the consultancy services being provided the programming and development processes of this country, a study was made of the land tenure system which served as one of the bases for the recommendations made to the President, with respect to rural development methodology.

2. *Contribute to the improvement of the planning, organization and operation of entities working in agrarian reform and 'campesino' organization.*

Mexico

Cooperation on the 'Campesino' Program of the National Productivity Center was continued, through the sponsoring of reciprocal training trips of program functionaries, to familiarize themselves with work being conducted in this field in the countries of South America; through the advisory services provided by IICA specialists on specific matters related to research and the presentation of reports; and through help on the elaboration of plans for the training of professionals, by agreement with the countries of Central America.

A working meeting was held to coordinate the efforts of 'campesino' organization, with the participation of high level functionaries from ten Mexico organisms working in this field. Results have been positive, with the initiation of discussions on policies and working methods in this sphere of action.

Panama

IICA personnel has put considerable effort into helping the Ministry of Agriculture and Development (MIDA), with the programming of 'campesino' settlements. This service includes the formation of accounting instruments, as well as work on the programming for the beginning and continuation of projects in the settlements. Advisory services were also provided the personnel of the General Directorate of Production on the elaboration of production plans for the settlements and agricultural boards. These actions form a good basis for future collaboration of IICA with MIDA in this field.

El Salvador

IICA advisory services have been continued on the elaboration, promotion and implementation of the

agrarian reform program. This year assistance was offered on the legal aspects involved, and on program regulations; was continued on the reorganization of the Rural Colonization Institute as a transitional process. A technical international meeting was held in El Salvador on rural social variables in planning. CONAPLAN, the Ministry of Agriculture and other Salvadorian entities collaborated on this meeting with great enthusiasm. Plans have been established to continue with the incorporation of social variables into future agrarian reform schemes and all other activities to do with 'campesino' organization.

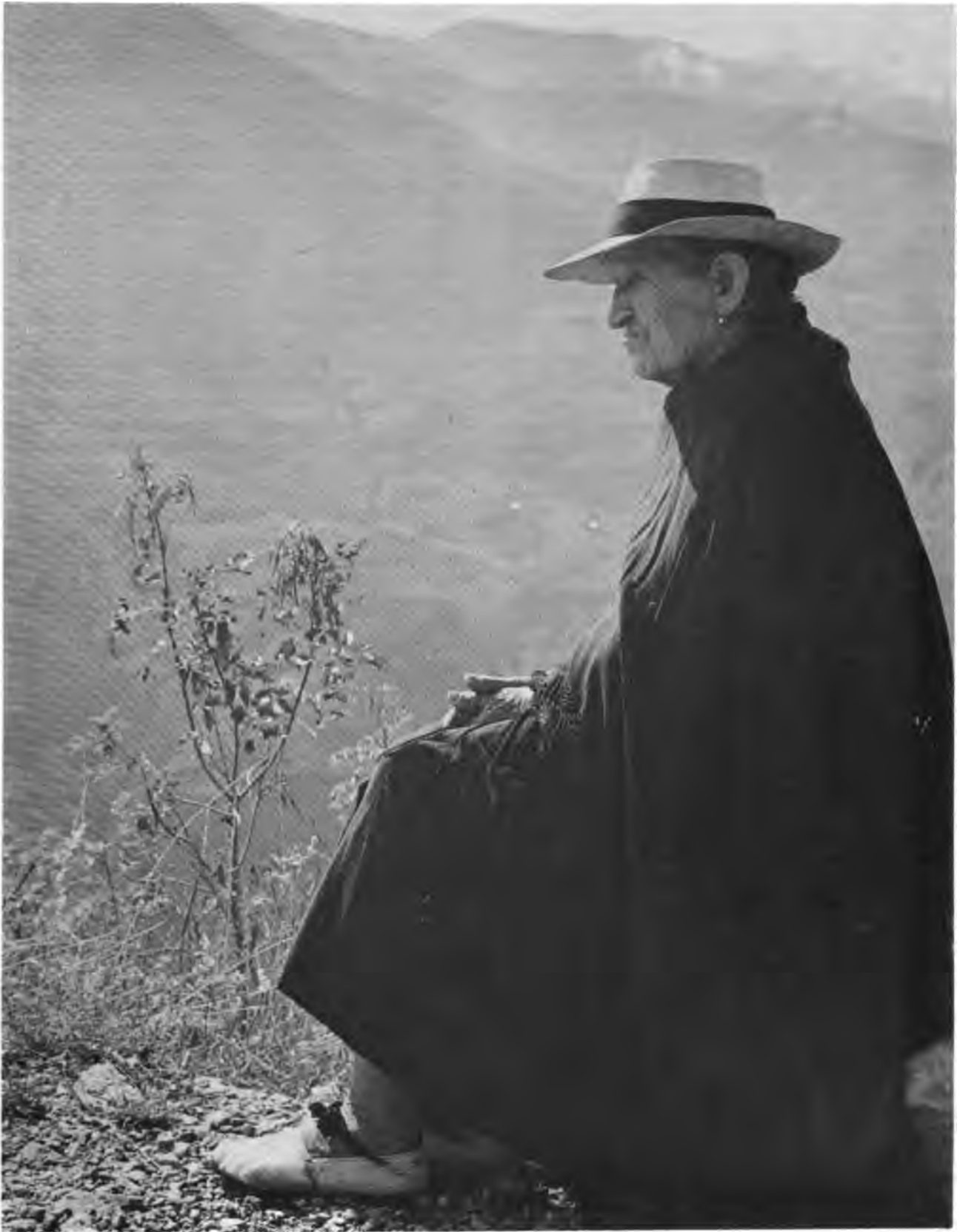
Guatemala

Based on a series of study seminars organized to examine a document on the migration of agrarian reform beneficiaries, the Permanent IICA/INTA (Instituto Nacional de Transformación Agraria) Consulting Committee was formally established in April 1974, and work has continued in an accelerated manner with regular and extraordinary meetings wherein a revision of all IICA programs was completed, and a report and recommendations have been presented, for the future work of the Committee. The Committee is responsible for advising on the formulation of policies as well as for the planning of activities and the study for the reorganization of INTA, in addition to advising on the collaboration that IICA provides in the field of agrarian reform and the organization of community enterprises in this country.

In May, IICA specialists together with the National Economic Planning Council, in a working group which included FAO experts and functionaries from the Guatemalan organisms involved, studied the agrarian laws and the work currently being conducted in this field with the aim of formulating recommendations for the future action of INTA and other entities in the field of agrarian reform and 'campesino' organization. It is hoped that these recommendations will form part of the orientation given to the review of the National Development Plan.

Honduras

A technical meeting was held on the coordination of institutions working with 'campesino' organizations, which resulted in improved work plans in this sphere of action in Honduras. An Agrarian Reform Seminar was also held for military personnel, and an inter-American symposium on agrarian law which have contributed to a better integration and orientation of the agrarian reform and 'campesino' organization plans. Another seminar for military personnel and reporters is being programmed, on request.



... and woman of the fields.

Costa Rica

The advisory services of IICA have increased considerably in the field of agrarian reform and 'campesino' organization by means of a revision of IICA's program on community enterprises. An evaluation of the planning office was conducted with the purpose of improving its working methodology. Assistance was rendered on the elaboration of the rural development plan of ITCO (Instituto de Tierras y Colonización) for 1974-75, approved by the Board of Directors, and will be studied by the Ministry of Planning towards the end of the year.

Nicaragua

IICA action in Nicaragua in this field has been limited to sponsoring the participation of functionaries from the Agrarian Institute of Nicaragua in international seminars on agrarian reform and 'campesino' organization, held in Venezuela, Peru and Costa Rica.

Central America

Through PRACA, several promotional activities for the improvement of planning and organization policies for the agrarian reform programs have been conducted. These include holding the VIII Meeting of Agrarian Reform Executives of the Central American Isthmus, a Seminar on Agrarian Reform for journalists, in Costa Rica, and another Seminar for the Faculty of Agronomy in El Salvador. As per the agreement between IICA and the 'Campesino' Program of Mexico, in-service training was provided seven functionaries from different Central American organizations on new methods for working with organized 'campesino' groups.

3. *Participate in the training of technical personnel working in agrarian reform and 'campesino' organization.*

Mexico

IICA collaborated on the elaboration of study plans for the in-service training of seven functionaries from entities of the public agricultural sector of Central America. These plans were carried out at the 'Campesino' Program. IICA helped in the selection of the participants and on the best utilization of the knowledge acquired once they returned to their countries. According to reports received, after their return, it is evident that this intensive, well-planned training program is having excellent results.

Panama

Training activities were organized for personnel from the Ministry of Agricultural Development working on the programming of 'campesino' settlements, on the elaboration of exploitation plans and on accounting and records systems for these groups. A course was given for home economists of the Ministry to train them in control accounting systems in this area, for settlements with agricultural boards.

Central America

PRACA collaborated in a course for directors of cooperatives for the national farms of Guatemala, sponsoring the participation of some of the professors and taking part in the planning of the course with the aim of preparing persons who will be responsible for managing or supervising new cooperatives being established on old national farms, in accordance with the process of handing them over to the workers.

An in-service training course was also offered, for functionaries from 'campesino' organization programs, in collaboration with the 'Campesino' Program of Mexico. Seven professionals from Nicaragua, Honduras, El Salvador and Panama participated for three months of intensive training, including class room and field work. On their return home, they presented reports to their respective institutions, they are obliged to keep IICA/ZN informed on the manner in which they are applying the knowledge acquired, and may request help from IICA at any time, on planning for the best utilization of this knowledge. The scholarships for these technicians were financed by non-reimbursable funds from IDB, and administered by the 'Campesino' Program.

4. *Promote and orient technical assistance as per the needs of the 'campesino' organizations.*

Panama

IICA advisory services to the Ministry of Agricultural Development on 'campesino' organization, includes assistance on the elaboration of production plans for settlements with agricultural production boards, an essential basis for future expanded action.

El Salvador

Additional emphasis has been given the promotional work on an improved orientation of technical assistance to 'campesino' organizations, within the advisory services provided CONAPLAN and FOCCO on

the Program of Productive Projects. These services have included a complete revision of the organizational plans and the model proposals for the productive projects. IICA also sponsored a study trip of an expert in home administration as part of the development process, a functionary of the 'Campesino' Program of Mexico. After his trip, he submitted a report on this aspect of the productive projects. These actions have contributed significantly to the orientation of this work, which should serve as a basis for the incorporation of these same principles and methods into the national planning conducted by CONAPLAN. It is also hoped that this experience will serve as models for the orientation of projects in future agrarian reform programs.

Guatemala

A preliminary study was conducted on the socio-cultural systems of agricultural production, based on a consideration of multiple cropping systems and the multiple agricultural and livestock production of the "altiplano". This study has served as the basis for the formulation of an activity to be initiated in the 1974-75 fiscal period, as part of the regular working program of the Zone. In addition, advisory services have been provided functionaries of DIGESA on the orientation of projects in collaboration with local leaders, and on the orientation of associated groups of farmers and 'campesinos' towards productive projects.

Honduras

As part of the Training Program established by agreement between IICA and DESAGRO, it has been possible to include a series of future courses on associative forms of production and community enterprises. Experience acquired in other countries of the Zone is being taken into account in the formulation of these plans.

IICA Action in the Southern Zone

The action developed in the Agrarian Reform and 'Campesino' Organization Program of the Southern Zone was by means of three national projects: regulation of the agrarian structure of Argentina; advisory services to the agrarian reform institutions of Chile; and agrarian reform and 'campesino' organization projects in Paraguay.

It is felt within the program, that not only have the agrarian reform processes not developed in a uniform manner in the countries of the Zone, but they also differ considerably in agrarian reform concepts and the

relative importance assigned these processes within the respective agricultural policies.

Of the specific objectives being sought, progress was achieved mainly in the training of technical personnel of the agrarian reform organisms, in those fields of specialization which the national institutions considered of greatest importance, and on fostering and helping to create and diffuse advanced methodologies with respect to the elaboration, analysis and execution of projects for structural changes, or for the consolidation of situations which had developed prior to the modifications introduced into the political or institutional systems, at the country level.

In Argentina, advisory services and training were offered on the elaboration of projects, and on the regulation of agrarian structures within the Colonization Plan for National Reconstruction. The time of the IICA personnel located in Argentina during the 1973-74 fiscal period was entirely absorbed on this important work, and strong support, in the form of consultants, was also supplied from the Executive Offices.

In Chile, the production programs in agrarian reform areas were supported, and as requested by the government though not previously programmed, advisory services were provided the national program for the allocation of lands, and a course was offered in rural administration for the agrarian reform institution.

In Paraguay, satisfactory results have been obtained with the national organisms on the preparation and execution of projects in "Colonias," including improvements in institutional coordination at local and national levels, the participation of 'campesinos' through marketing committees, and local progress on the training of technicians responsible for integral rural development projects. The Paraguay Program was strongly supported, through the renewal of the Operating Agreement originally signed in 1970; the renewal implies an amplification of objectives as well as a geographic expansion.

A tendency has been noted in the countries of the Zone, to increase work in colonization. If this is confirmed in the country-level diagnostic studies, it may imply increased requirements from the Line of Action on the Promotion of Agricultural Production.

At the same time, and in accordance with the indications of the IICA Board of Directors, expanded IICA action is expected in 'campesino' organization, which will imply an expansion of the current Program.

In Brazil, the agrarian structure is considered by the government to be a component of the integral development of the country. Thus, agrarian reform matters

have been subject to various government decrees which are closely linked to other measures being taken for national development.

In the decade of the 70's, several development programs considering agricultural structure problems were institutionalized. Of these, the following can be cited:

- National Integration Program which emphasizes colonization (1970).
- Program for Land Redistribution and the Promotion of Agro-industry in the North and North East PROTERNA (1971).
- Mid-west Development Program (PRODOESTE) (1971), which includes consideration of land distribution and colonization problems of that region.
- Development Program of the San Francisco Valley (1971) which emphasized colonization based on irrigation.

The above-cited programs, together with the agricultural enterprises of the North and Mid-west, based on the application of fiscal incentives, have considerably expanded the agricultural frontiers of Brazil. The colonization programs have been developed mainly in the humid valleys of the North East, and in selected areas of the Amazon, as well as in the 'sertaos' zones of the states of Goiás, Matto Grosso, Minas Gerais and South Pará.

INCRA is actively working on the founding of 'agrovillas' along the trans-Amazonic highway currently under construction.

IICA Action in the Caribbean

IICA has consistently maintained the policy of supporting efforts towards structural change in the Dominican Republic. In the 1973/74 fiscal period however, action in this area was limited, and consisted principally in consulting services provided by

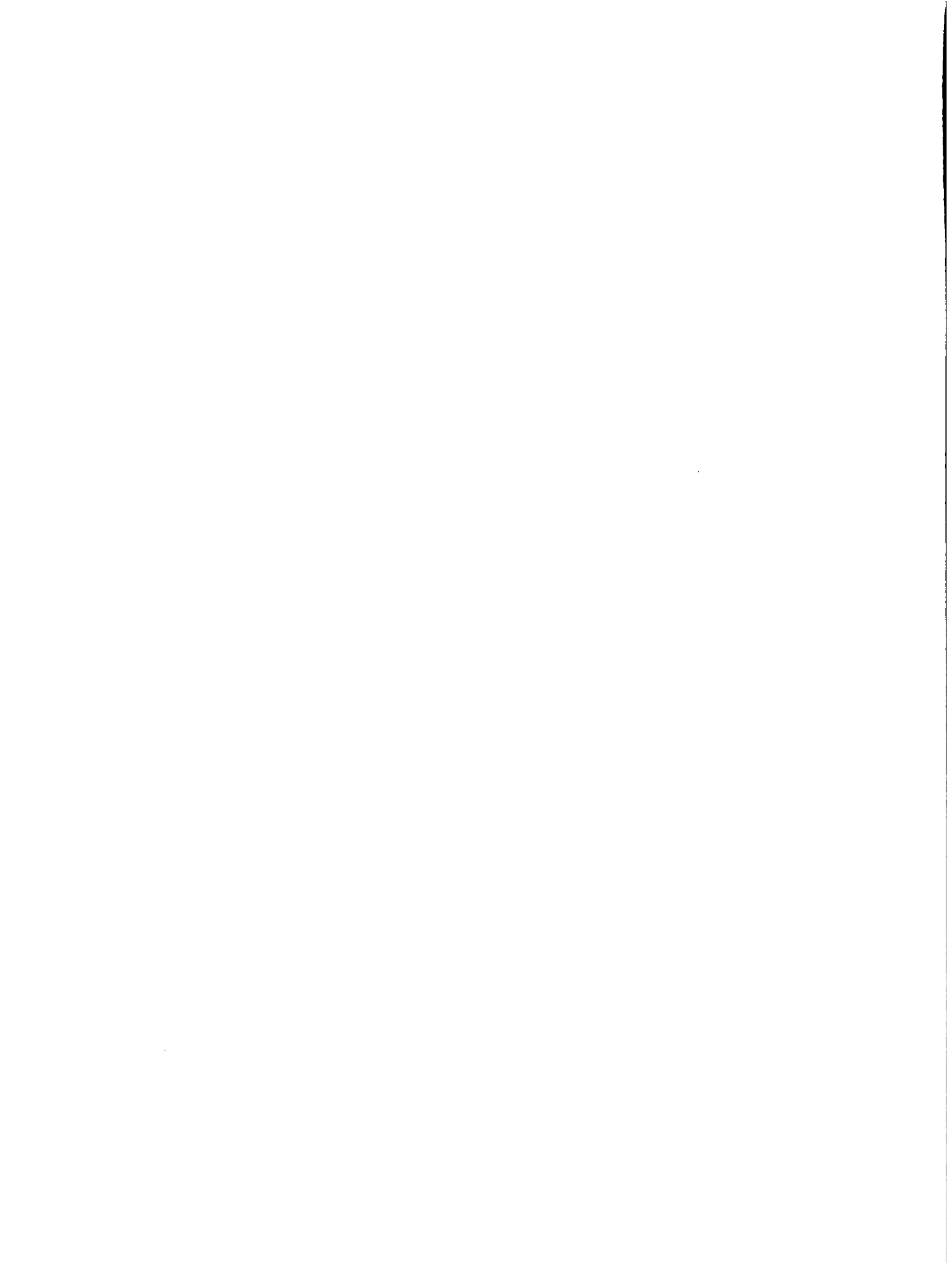


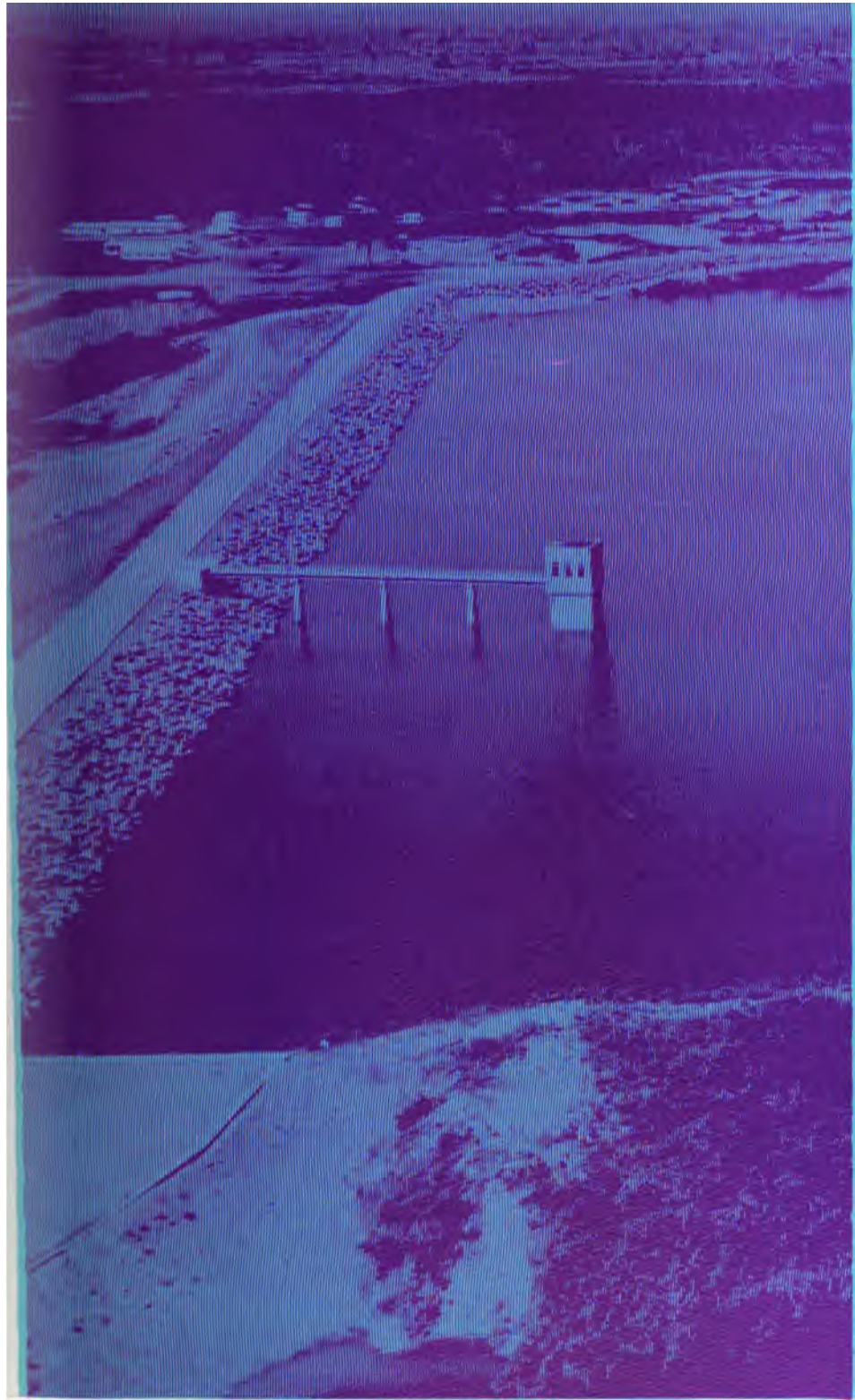
The Director General congratulates a farmer at the "Development Island" of Bonyotte, Leogane, Haiti.

IICA-CIRA on agrarian reform matters, and the sponsoring of the participation of the Programming Department Director of the Dominican Agrarian Institute, to the Technical Meeting on 'Campesino' Participation and Agrarian Reform, held in Costa Rica in June, 1974.

In Haiti, activities within Line of Action VI can be divided into two groups. The first group of activities

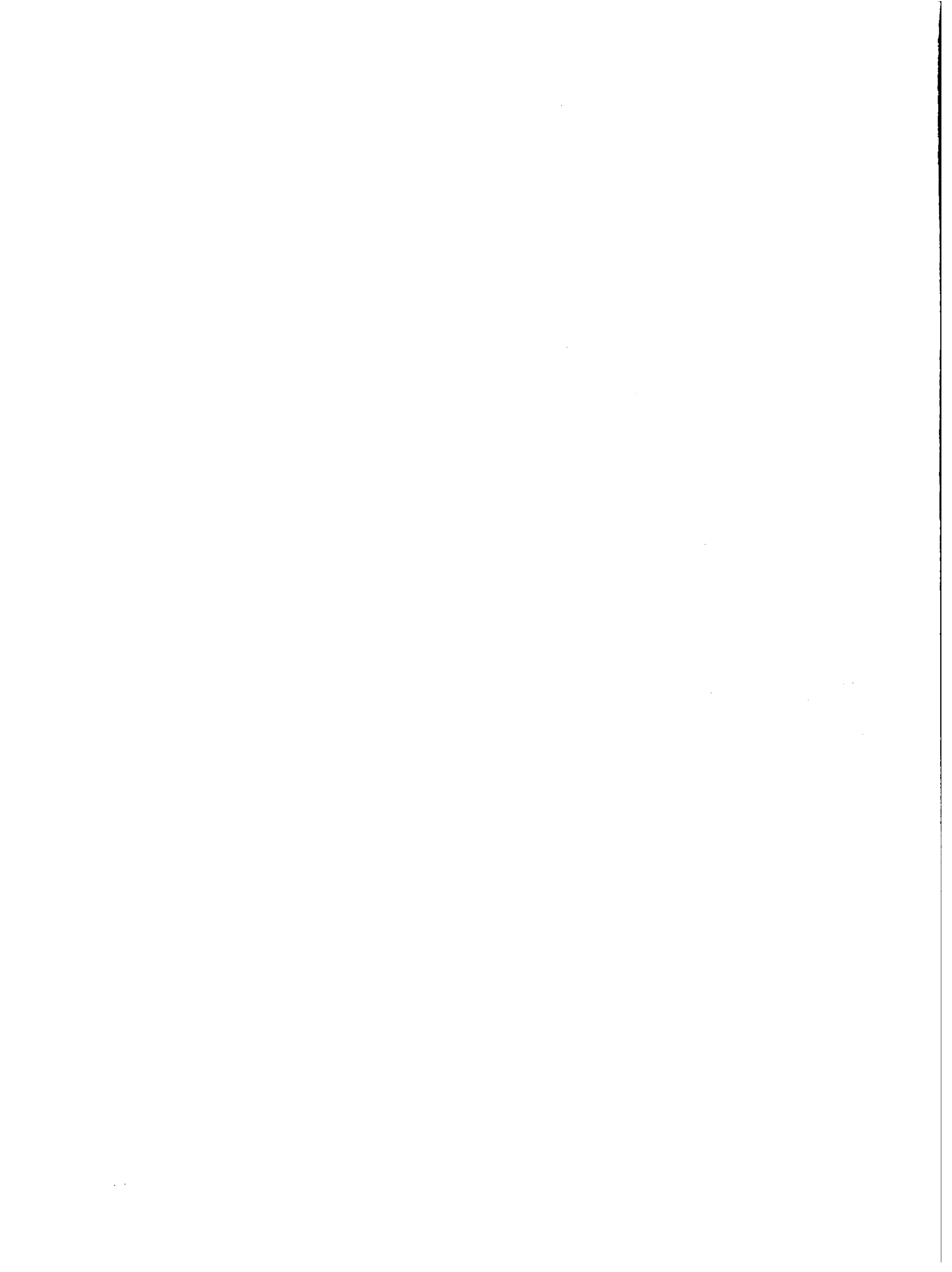
was directed towards obtaining more complete information concerning the 'campesino' organization situation in Haiti, and a definition of future IICA action strategy. The second group of IICA activities were such that IICA acted as executive agent for diverse studies requested by the government in the area of influence embraced by the Development Organism of the Gonaives Plain, on agro-economic, cadastral and 'campesino' organization problems.





Chapter VII.

SPECIAL PROGRAMS



Chapter VII

SPECIAL PROGRAMS

Introduction

In addition to the number of activities which IICA undertakes and which are financed by regular budget funds, there are also several specific activities which fulfill the current needs of the countries and are financed by special budgets in response to specific proposals, and based on studies conducted previously in each case, and approved by the Board of Directors at the annual meetings.

In some cases, these programs and activities have been integrated into the regular institution's activities, within the normal programming process; these can be found in the respective chapters of this report. For those with special financing however, an outline of the principal and most important actions of priority within the Member States is provided in this chapter. These actions may be as a result of agreements with other international organizations or philanthropic foundations; others are self-financed, and on occasion some are financed by the Member States themselves, with the Institute acting on their behalf.

There are many examples of this type of institutional action which enables IICA to develop activities of special interest for the countries, without disregarding the institution's basic lines of action. Perhaps the most important ones are the following:

The Tropical Agricultural Research and Training Center at Turrialba (CATIE)

As is generally known, IICA and the Government of Costa Rica subscribed an Agreement whereby the Center at Turrialba was created into a civil association. The Board of Directors of this new institution is comprised of representatives from IICA and the Government of Costa Rica, plus several other highly-qualified scientists from this hemisphere.

Since 1 July 1973, CATIE has been operating under this new structure, and is orienting its efforts towards research in tropical agriculture and training, for the Central American area and the Caribbean, preserving its status as an international Center, open to participation of all the American nations.

Several extra-continental countries such as Holland and Germany, have indicated interest in increasing their collaboration with CATIE, by means of support to some of the Center's programs.

Of priority amongst the research projects being developed at CATIE, are those related to production systems, animal nutrition and production, and forestry. Graduate education in cooperation with the University of Costa Rica, and short, intensive refresher courses are also offered professors and researchers from the American nations.

IICA and CATIE are about to sign an Agreement of Coordination and Cooperation, whereby CATIE will be accorded recognition as an Associate Program of IICA. This is being done with the aim of better coordinating the actions of both organisms and to facilitate compliance with the objectives they hold in common, particularly in those IICA Lines of Action related to research and education, as well as in other activities, when appropriate.

It is felt that these new efforts in cooperation will be of great advantage to both institutions, and therefore to the Member States.

Agricultural Research in Brazil: IICA and EMBRAPA

As in most of the countries of Latin America, Brazilian agricultural policies up to the middle of the XX century, were ill-defined. This meant therefore, that with few exceptions, there was little or no government interference in agricultural production activities. The main exception was with respect to coffee which constituted the basis of the country's economy.

Eventually, and particularly during crises, the government sought to sustain the price of some of the products (especially coffee), without however, establishing at the same time the necessary conditions to increase productivity.

Brazil is a country of extensive domains and even today there are still unexplored areas. The normal tendency in agricultural activities therefore – although

not precisely a policy of action – was to attend demands for subsistence products and for raw materials needed by incipient industry, through the expansion of agricultural frontiers. The existing urban centers were supplied with relative ease, through the exploitation of neighboring areas, or through the importation from other countries of necessary items. Thus, there was little stimulus for agricultural producers to perfect their production methods, since they had abundant land and labor, and low prices.

Despite this lack of policy definition for the agricultural sector, some not always successful initiatives were taken with the aim of improving the sector.

Thus, in 1812 when Brazil was still linked to Portugal, the then prince Don Juan (later Don Juan VI) established the Botanical Garden in R o de Janeiro, with the principal purpose of studying the adaptability of 'exotic' plants to the country.

At the end of the XIX and at the beginning of the XX centuries, some of the initiatives were put into effect, although in a somewhat isolated manner, and without being integrated into what could be called an 'agricultural policies' context.

It was during this time that the Imperial School of Agriculture in Bahia was established (1875). This

Table 2. Number of Professionals who have received the *Magister Scientiae* Degree Distributed by Country and by Specialization (July 25, 1947 – June 30, 1974)

Country	Extension*	Economics*	Devel. Resources*	Crops & Soils	Forest Sciences	Animal Husbandry	Total
Argentina	11	–	–	2	1	9	23
Bolivia	3	1	1	13	7	7	32
Brazil	8	12	9	19	11	7	66
Colombia	7	6	4	23	15	6	61
Costa Rica	3	1	4	10	6	2	26
Cuba	–	–	–	–	1	–	1
Chile	2	–	1	10	4	7	24
Dominican Republic.	–	3	1	5	2	3	14
Ecuador	10	1	2	35	10	6	64
El Salvador	–	1	–	2	–	3	6
Guatemala	–	2	1	7	1	2	13
Haiti	5	1	–	4	1	8	19
Honduras	–	1	2	1	1	2	7
Mexico	1	–	2	11	6	29	49
Nicaragua	–	2	2	5	1	1	11
Panama	2	1	2	5	1	3	14
Paraguay	1	2	–	2	–	1	6
Peru	2	1	–	35	10	18	66
United States	3	–	–	6	3	1	13
Uruguay	–	–	–	–	–	5	5
Venezuela	6	3	1	10	3	3	26
Other countries	–	–	1	7	–	1	9
TOTALS	64	38**	33	212	84	124***	555

* These three areas of specialization were integrated into Rural Development

** Includes 10 students from IICA-CIRA, Bogota, Colombia

*** Includes 24 students from La Estanzuela, Colonia, Uruguay



The President of EMBRAPA, Economist José Irineu Cabral and the Director General of IICA, Dr. José Emilio G. Araujo, together with Dr. Roberto Meirelles de Miranda and other high functionaries from Brazil, sign the EMBRAPA/IICA Agreement, in August 1973.

agricultural and veterinarian institution was the precursor to the Higher Agricultural School 'Eliseu Maciel' (1883); the creation of the Agronomic Institute of Campinas (1887); the Practical Agricultural School 'Luiz de Queiroz' (1901); the Higher Agricultural School at Lavras (1908); the Head Office for Meteorology and Astronomy (1909); the Higher Agricultural School of Agriculture and Veterinary Medicine (1910); the Technical Cotton Service (1915); the Agricultural Chemical Institute (1918); The Biological Institute of Animal Health (1920); the Forest Service of Brazil (1921); the Higher Agricultural School of Agriculture and Veterinary Sciences of Minas Gerais, at Viçosa (1922); the Technical Coffee Service (1933) and others of no lesser importance.

In 1938, the National Center for Agricultural Training and Research (CNEPA) was created, with headquarters in the State of Rio de Janeiro. This action, in addition to uniting agricultural training and research activities, revealed for the first time, the government's intention to coordinate and carry out agricultural training and research activities at a national level.

From 1938 to 1962, the CNEPA underwent several changes, being divided finally into two large sectors:

a) In the area of education, the Rural University was constituted, with the incorporation of the following:

- The National School of Agronomy;
- The National School of Veterinary Sciences;

- The Training and Specialization courses, precursors to the graduate education courses in the country.

b) In the area of research, the National Agricultural Research Service was created, including:

Central Organisms

- The Ecology and Agricultural Experimentation Institute
- The Oils Institute
- The Agricultural Chemical Institute
- The Fermentation Institute

Regional Organisms

- The Agronomic Institute of the North
- The Agronomic Institute of the North East
- The Agronomic Institute of the East
- The Agronomic Institute of the Mid-west
- The Agronomic Institute of the South

At this time, animal research was not included into the newly created system, remaining under the control of the National Department of Animal Production,

through the Animal Biology Institute and the Animal Husbandry Institute.

In 1962, the Ministry of Agriculture was reorganized, and at this time was made independent of the CNEPA; the Rural University was granted autonomy. That is, education and research were no longer subordinate to a common coordination. The Department of Agricultural Research and Experimentation was then created, which meant the integration into one system of all plant and animal research.

From 1962 to 1972, the Department of Agricultural Research and Experimentation underwent several transformations including a change of name. Thus, in 1968 it was designated as the Research and Experimentation Office and in 1971 it was once again called the National Department of Agricultural Research. The organization of the department at this stage, was as follows:

a) Head Offices

– Experimental Statistics and Economic Analysis Team

– Scientific Documentation and Dissemination Team

b) Central Technical Divisions

– Rural Research and Engineering Division

– Plant Industry Research Division

– Soils Research Division

– Agricultural Research and Technology Division

– Zoopathology Research Division

c) Decentralized Organisms

– Agricultural Technology and Nutritional Center

– New Regional Agricultural Research Institutes
* of the North

* of the Western Amazon

* of the North East

* of the East

* of the Mid-west

* of the Mid-south

* of the West

* of the Meridional

* of the South

In April 1972, the Ministry of Agriculture constituted a Working Group to study, evaluate and reformulate agricultural research at a federal level.

The IICA Representative in Brazil at that time participated in this Working Group as well as several other technicians of the Institute, on an unofficial basis.

After an evaluation of the existing situation, this Group elaborated a document which was presented to the Minister of Agriculture, wherein the general diagnostic study was set forth. In addition the principal deficiencies of the agricultural research situation of the country were pointed out. The document also suggested that a sub-system for agricultural research be instituted, and integrated into the National Research System. The report concluded with a recommendation to create a national agricultural research organism with sufficient human and material resources, and the necessary administrative malleability essential for research work. As a result of this work, the Government of Brazil passed Law No. 5,851 of September 7, 1972 creating the Brazilian Agricultural Research Institute (EMBRAPA).

By Decree No. 72,020 of March 28, 1973, the Statutes of EMBRAPA were approved and the mechanisms were established for the elimination of the National Department of Agricultural Research.

At the behest of the Brazilian Government, the IICA Representative in Brazil at that time, Mr. José Irineu Cabral, assumed the Presidency of EMBRAPA and another IICA technician Mr. Edmundo da Fontoura Gastal was put in charge of one of the main offices of that institution.

Taking into consideration the need to establish an action plan for the installation of the new institute, EMBRAPA signed a contract with IICA which made possible the training of different national and international groups of technicians. Nine projects resulted from the work of these groups, coordinated by Mr. Angel Marzocca of IICA; the projects are currently in the process of implementation, in collaboration with IICA.

At the same time, EMBRAPA signed an agreement with FINEP – the institution that finances studies and

projects that is closely linked to the Ministry of Planning and General Coordination – whereby financing up to US\$3,750,000 was obtained to carry out the above-mentioned projects.

With the creation of EMBRAPA, a new era of agricultural research was inaugurated for Brazil. EMBRAPA is not just a new organism created to attend the agricultural activities of the sector; it is an institution which also attempts to establish a new system in accordance with previously planned norms (Sectorial System for Agricultural Research), and to seek in progressive stages, to catalyze the work of the organisms and institutions responsible for agricultural research throughout the country.

Efforts are made to select the projects that are of prime importance for the development of the national economy, encompassing all the sectors interested in this process, including the private sector.

In accordance with the philosophy of this system, the demand for research will be stimulated, and the establishment of mechanisms to facilitate the diffusion of technology resulting from research. Thus, the close coordination of the research organisms with those responsible for rural extension and technical assistance is imposed.

A similar interaction is being sought between research activities and the universities, with the aim of training or up-grading researchers, and ascribing to these establishments of learning some basic research assignments, under the coordination and with the support of the federal research system.

Although EMBRAPA is responsible for general programming, coordination and supervision of agricultural research activities throughout the country, the conducting of research may be done on a decentralized basis, assigning the work to the States of the Federation, insofar as they possess the necessary technical and material conditions to do so. Whatever the way, all research will be carried out in collaboration with the Federal States.

The Management Program (IICA/AID)

IICA's main objective for the decade of the 70's is to help the countries to stimulate and promote rural development, within an hemispheric and humanistic concept. In order to achieve this objective, IICA has chosen as a strategy of action, the strengthening of the national institutional systems working in the field of rural development.

Within this general policy, IICA, with its own resources and an AID donation, has undertaken a

program with the immediate aim of strengthening the Institute's internal capacity so as to be able to offer technical cooperation and support in management to the public and private organizations working in the rural sector of the Latin American countries.

With this in mind, a central team of technicians has been established in Costa Rica, with peripheral support from management specialists from the other IICA Zones. The central team is working on in-depth studies in management with the aim of developing and/or adapting the methodologies, analytical designs and techniques needed for solving the management problems encountered in the organizations working in rural development. The central team also provides support to the peripheral team of management experts in the Zones, who also serve as a source for the diffusion in IICA and in the countries, of the methodologies and strategies developed and proved.

The Management Program activities are directed towards detecting the variables within the management process which exert the greatest influence on the efficiency and effectiveness of the public and private organisms in the agricultural sector. Once the more significant variables have been identified with respect to the specific problems under consideration, management models are designed and corrective strategies and instruments formulated. This work is always conducted with the active collaboration and participation of the personnel from the institutions who must later apply the new methodologies and strategies in accordance with the realities of each country.

The starting point and the logical conclusion of a scheme concerning management variables can be found in the objectives of an organism or group of organisms, that design activities with the specific purpose of attaining these objectives.

The next stage, or planning, is achieved through a programming process to determine what, how, when and who will be responsible for the actions. Adequate programming is not possible without an adequate knowledge of the available resources in the three dimensions of quality, quantity and time. Resulting programs and projects provide a basis for coordination, control and evaluation. Programs cannot be carried out without an operative organization. And finally, success depends on all these factors as well as an adequate control of the given circumstances under which the actions are carried out. Success can be definitively measured by the degree of attainment of the objectives.

In this scheme, the coordination is a complex and dynamic factor inherent throughout all the administrative process and flows through the diverse elements of the administrative process taking shape until it achieves

the harmonious execution of the actions. For analytical purposes, the coordination process could be divided into two logical stages:

- a. Preparatory stage: that is, the preparation for carrying out the actions in a coordinated manner. This preparation requires: a clear and uniform perception of the objectives by all the departments of an organism, or by all the different organisms participating in the action; joint programming of work to be done; the determination as to which organization will do each part of the work; the specification of resources which each department or organism must contribute for the adequate realization of its functions within the organization.
- b. Work stage: that is, the coordinated execution of the programmed projects or actions, and the control and evaluation of work accomplished.

In the two years of existence of the Management Program, a wide range of management analysis methodologies have been utilized in studying the agricultural service organism in different countries. The common denominator of all the problems encountered and of all the corrective strategies proposed would seem to center on the lack of inter-institutional coordination.

The problem of inter-institutional coordination can be analyzed at three levels: the producer level, the operative level of the service organisms, and the central or superior level of both. Although each level may well express its problem with respect to the inefficiency and inefficacy of inter-institutional actions in a different manner, they are found to be closely inter-related. It is therefore feasible to initiate studies with any one of the three levels, and to draw conclusions concerning the coordination behavior of the other two.

Nonetheless, the Management Program has generally initiated its studies at the producer level as it is at this level where the results of institutional efforts conjoin, to later ascend to the operational and central levels of the service organisms with the aim of detecting where the causes for the deficiencies in the producer-level services originate.

An AID/Washington mission comprised of Messrs. E. Shaeffer and W. Tate of the Latin American Bureau, and J. Koteen and K. Kohrner of the Technical Assistance Bureau, stayed in San José from 14 to 17 March 1974 conducting an evaluation of the work accomplished by the IICA/AID Management Program over its past year of activities. The mission met several times with members of the Management team; interviewed high government officials of the public agricultural sector (P.A.S.), met with officials from the AID/Costa Rica office, and IICA functionaries.

At the end of the visit in Costa Rica, the mission moved on to Managua, Nicaragua to continue the study. Mr. Francisco Nadal, Deputy Program Head accompanied the mission. In Nicaragua, the mission held several meetings with the Vice-Minister of Agriculture and the Director of UNASEC (Sectorial Analysis Unit of the Ministry), other functionaries of the P.A.S., AID/Nicaragua and the IICA representative in Nicaragua.

Irrigation Program in the Temperate Zone of South America

A brief summary of the progress achieved with respect to the specific objectives of this program are presented:

Efforts to take the best advantage of the existing irrigation systems with the aim of increasing agricultural production, increasing the number of people employed per surface unit, and achieving a more equitable distribution of the resulting profits was the main objective the program concentrated on during its third year of existence (1973-74). This objective is more than justified since the five countries involved in the program have approximately 50 percent of the total irrigated acreage in Latin America, and only limited areas and in different degrees, satisfy the aims outlined. What is even more important, is the fact that the majority of the institutions responsible for the development of irrigation in the region, in recognition of this deficiency, have sought the Program's actions to help overcome these problems.



International courses on the operation of irrigation districts are of great importance within the Hemispheric Irrigation Program.

On an objective basis, there are several factors which negatively affect the rapid attainment of Program objectives. It is evident that to accomplish these aims depends in large measure on the basic political and administrative decisions taken with respect to such aspects as the use of the waters, land tenure, research, technical assistance, credit, agricultural marketing, provision of inputs, participation of the users, etc. It is absolutely essential to up-date and coordinate all the pertinent instruments into one modality that at the same time complies with the humanistic inspiration which guides IICA action. In actual fact however, although there is an appreciable number of executives of the institutions involved in these processes that are aware of the magnitude of the problems and the urgent need for their solution, it may be noted that in many cases the political, social and economic conditions needed to facilitate the obtaining of the objectives in a timely manner are not forthcoming.



New and modern techniques for the utilization of water produce more and better crops.

Nevertheless, it is estimated that the activities conducted within the program during the 1973-74 period have contributed, to the extent of program possibilities, to the strengthening of irrigation institutes in the five countries involved. Thus, at a national level, it can be seen that the incorporation of an irrigation specialist in January 1974 to the Lima office, has permitted the initiation of a series of specific activities oriented towards supporting the General Directorate of Waters of the Ministry of Agriculture in Peru, in its efforts to up-date the management of the irrigation systems for which it is responsible, to bring them in line with the legal norms of deep social and technical content put into effect by means of the 1969 laws on Agrarian and General Reforms concerning waters. These actions complement the training provided on this subject matter at the II National Peruvian Course on the Operation, Conservation and Development of Irrigation Districts. In Brazil, and with the collabo-

ration of the Irrigation Specialist who was hired at the end of 1972 with funds from the IICA-MINTER Agreement, the training and research actions have increased considerably in support of the improved development of irrigation in the North-east Region of the country, a zone which has been declared of priority attention by the Government of Brazil. In addition, progress has been achieved on the pertinent institutionalization through the elaboration of a project which envisions an adequate joint coordination of the resources available to the different federal and state organisms with responsibilities in this field, in such an extensive and promising area. In Chile, despite the set-back occasioned by the untimely death of Mr. Miguel Balbi Basauri, training, advisory and technical support actions were continued with the Ministries of Agriculture and Public Works, and for which purpose a new agreement was subscribed between IICA and the two Ministries (20-2-74). Under this new contract, the support actions concerning the correct implementation and adoption of norms and methodologies for the management of the Chilean irrigation systems has been extended to a national level, surpassing the scope of the Digua Basin Irrigation Project of previous years. In Argentina, the advisory services, diagnostic studies and training provided, have contributed to the adoption and unification of criteria tending to favor a better utilization of the resources involved in the irrigation areas by the different national and provincial institutions in the country. This has facilitated to a great degree, the application of a coordinated policy at a national level to be implemented by the Undersecretariat of Hydro Resources of Argentina, as soon as current resource limitations are overcome. In Uruguay, it was also possible to contribute in some measure to the accomplishment of program objectives.



The channeling of irrigation water is one of the basic requisites for its best utilization.

At a multinational level, positive results have been achieved within the project concerning the strengthening of irrigation institutions. The II Meeting of the Program Advisory Committee facilitated the close inter-connection of the highest executives of the institutions responsible for irrigation in the countries of the region, and their getting acquainted with one another, as well as to continue the valuable exchange of experiences between them on solutions to problems held in common. At this meeting, the participants issued a series of recommendations which will ensure a better future orientation of the program. Within the project concerning the exchange of technicians it was possible to provide 9 technicians with this opportunity from institutions in Argentina, Brazil, Peru and Uruguay, who were able to take advantage of the experience acquired and progress achieved in Peru and Argentina, on specific aspects of irrigation development processes. Lastly, the institutions working in this field were provided with documented sources of information to contribute to the taking of decisions with respect to the evident need to up-date the norms and modalities being applied concerning the charging of users for services received, within the concepts of administration, operation and conservation of the public irrigation systems.

Also of significance was the participation of the Program Coordinator at the International Seminars sponsored by AID and held in Utah, USA and Quito, Ecuador on "Aid's Role in On-farm Water Management Research and Implementation" and "The Legislation of Waters in the Countries of the Andean Agreement", respectively, which provided opportunity to inform on the objectives and progress achieved within the program, and on the Institute itself.

Collaboration was also provided the IICA Office in Ecuador on the organization of the I National Ecuadorian Course on the Operation, Conservation and Development of Irrigation Systems, of interest to CEDEGE, currently underway in the Babahoyo Project, Provincia de los Ríos, in Ecuador. Also worthy of mention is the fact that the Program Coordinator, at the behest of the Director General, participated on the IICA/Internal Committee which elaborated the project for the amplification of the Program to other zones of the Hemisphere. This project served as the basis for the pertinent decision taken by Board of Directors of IICA at the Annual Meeting held in May 1974, in Caracas, Venezuela.

To finalize this summary of program actions, it is considered useful to transcribe part of the Resolution IICA/RAJD.Res.3(13/74) taken by the Board of Directors at the Thirteenth Annual Meeting held in Caracas, concerning the irrigation program:

1. That the geographic expansion and amplification of the Irrigation Program objectives should be based on

a preliminary study and especially on the diagnosis of the necessities, problems, current situation resources and irrigation and drainage priorities in the aforementioned regions.

2. That during the 1974/75 fiscal period, the expansion of the Program (Southern Zone Irrigation Program) shall be initiated with the incorporation of three irrigation specialists to conduct the diagnostic studies mentioned in paragraph 1, and to start some of the activities, according to priorities established in the respective countries; this extension will imply a program-budget increase for 1974/75 of U.S.\$100,000,00.
3. That the Director General should submit to the next Annual Meeting of the Board of Directors, a new proposal for the support of the Program, based on studies concerning requirements and adequate resources for its integral development and the achievement of its objectives as indicated herein.
4. That the Director General considers in his proposal the irrigation and drainage activities of other international organizations, such as IDB, FAO, the World Bank and others, in order to reach an efficient coordination with those organizations.
5. That the title "Hemispheric Irrigation Program" be changed to "Soil and Water Conservation and Management Program" as a more comprehensive expression of the Program's objectives.

Hemispheric Marketing Program

The IICA Hemispheric Marketing Program has been very active during the period covered by this report, so as to comply with the basic objective of cooperating in the technical aspects of developing efficient agricultural production and distribution systems in the countries of Latin America, in accordance with the policies and plans for socio-economic progress in each country.

The operational structure of the program is outlined below, detailing the outstanding aspects at a country level, IICA's action and the strategies and methodologies utilized:

Each marketing specialist in the program, works within the following structure:

- a) A brief description of the current situation of the country with respect to the agricultural marketing sub-system of the country.
- b) A description of the activities which the technician will be responsible for.

- c) Emphasis on the problems and priorities at the country level.

The following predominant aspects of the structure with respect to the country and the program's actions have been noted:

- 1) A diversity of agricultural marketing problems in the Latin American countries. However, there are problem areas and priorities held in common by several countries, such as the central markets, small farmers and storage markets, price-fixing, etc.
- 2) Apparent institutional instability of the national organisms.
- 3) Many diverse and confused marketing policies and programs from the point of view of their inter-coordination.
- 4) Lack of qualified personnel in the field of agricultural marketing, particularly at the technical and operative levels. This is especially evident in the Andean, Antilles and Northern Zones.
- 5) Lack of basic information for decision-taking by the marketing organisms.
- 6) Limited local capacity for the elaboration of marketing projects.

These limitations, as a functional problem of marketing, were manifest in the following manner:

- Partial or total lack of food such as milk and rice, as in Ecuador.
- Under-utilization of facilities within the public sector.
- Distribution of foodstuffs at the level of low-income urban consumers.
- Inputs distribution.
- Speculation and hoarding.
- Illegal exportation of food products.
- Increasing marketing costs on all products - transportation has increased because of the 'energy crisis'.
- Packing, labor and construction - costs have increased very suddenly.

IICA action was carried out in the following manner:

- 1) An Executive Meeting was held on the Problems and Policies of Agricultural Marketing in Colombia - oriented towards the establishing of a national marketing policy.
- 2) Direct advisory services in Ecuador, on the creation of ENAC, on its organization and implementation.
- 3) Consulting services to the Government of Ecuador on a study of Guayaquil and its area of influence.
- 4) Consulting services in Peru to the Economics Department of CENCIRA on marketing aspects, and support to marketing research.
- 5) Cooperation in Peru on the formulation and execution of the Marketing Technical Assistance Program, for the General Marketing Directorate of the Ministry of Agriculture and Livestock, and on the formulation of marketing plans for the Ministry of Agriculture, OSPA and the Department of Economic Studies of the General Marketing Directorate.
- 6) Consulting services in Venezuela to the Office of Economics and Statistics of the Ministry of Agriculture and Livestock, and the Marketing Corporation.
- 7) Meeting in Venezuela on Collection and Distribution Centers. Participants from various Latin American countries, including Colombia and Costa Rica.
- 8) Advisory services in Bolivia on marketing aspects to the National Rice Institute.
- 9) Diagnostic study and analysis of the marketing institutional sub-system of Central America.
- 10) Advisory services on the diagnosis of marketing problems in the agricultural sector of Nicaragua, UNASEC, and cooperation on the programming of a study to design an urban food distribution system for Managua.
- 11) Development of a general analytical and diagnostic methodology for the problems of the marketing and institutional sub-systems.
- 12) Technical advice and support on research to the official marketing organisms of Cos-

ta Rica, for a national marketing policy within the Economic Development Plan for 1974-1978.

- 13) Diagnostic study and analysis of the internal agricultural marketing system of Haiti, with the aim of identifying the priority problems and 'bottle-necks', and to make specific recommendations to improve the system through projects oriented towards the strengthening of the national institutions.
- 14) Institutional diagnostic study on marketing in Argentina, Uruguay and Paraguay so as to identify priority problems and advise the key agricultural products marketing institutions.
- 15) Cooperation with other international and regional institutions and universities, such as FAO, ICAITI, Harvard University, ADC/RTN, ROCAP, etc.

Once the most common of the priority action areas in the hemisphere have been determined and the action strategies and methodologies considered for immediate short range action, according to the zone and the size of the countries, the following aspects were emphasized:

- 1) To concentrate efforts made by the program's technicians so as to achieve the major possible impact.
- 2) To articulate program activities with other IICA actions in a direct manner, at country, regional, and hemispheric levels.
- 3) To make the best possible use of reciprocal training projects, in accordance with the recommendations made at the Meeting of Directors, held in San Andrés, in November 1973.
- 4) To develop more clearly defined and operational activity criteria at national and regional levels.
- 5) To strengthen national training institutions in marketing - formal and informal educational organisms and centers.
- 6) To develop systematic mechanisms to serve as sources of information on technicians and programs.
- 7) To study alternatives for the intervention of the public sector in the marketing process.
- 8) Basic information on important agricultural marketing problems in the Latin American countries.

Regional Cooperative Program for the High Andes

This program was established as per Resolution IICA/JD-658 approved by the Board of Directors in April 1969, which determined the setting up of a Cooperative Program for the Study, Research and Improvement of Plants and Animals Native to the High Andes.

The program was initiated with the I Meeting of Agrostologists, held in La Paz, Bolivia in January 1971, with participant delegates from Argentina, Bolivia, Chile, Ecuador and Peru. Meetings were also held in the succeeding years: II in Puno, Peru in April 1972; III in Jujuy, Argentina in June 1973; and the IV in May 1974, in Pasto, Colombia. Colombia was included in the 1973 and 1974 meetings.

The recommendations and conclusions emanating from the four meetings are of considerable scope and practical realism, directed towards benefitting the rural man of the Andes, as per IICA's philosophy with respect to its hemispheric and humanistic projections.

The High Andes encompasses an area of more than 30 million hectares, and has a population of approximately 12 million people. The area has an unusually varied ecology which requires rapid and adequate solutions to solve feeding and working problems. The Andes' 'Campesino' develops a subsistence agriculture only, mostly in animal husbandry, with some deficient breeding work in sheep, cattle, Camellidae, swine, etc., there is also a lack of forage through poor pastures management.

Personnel Training

Two training courses were given in Oruro, one on Animal Husbandry and Pastures in July 1973 and one on making the most of Natural Agricultural Resources in the High Andes, in July 1974. Both courses were well accepted, and were successful in training personnel, through field practice in the evaluation of pastures and in the recognition of native grasses.

Three Bolivian technicians - two agronomists and one veterinarian - were sent to the Main Research Center for South American Camellidae at La Raya (IVITA) in Peru, for in-service training in alpaca production systems. The training period was for three months, from January through March of 1974.

Forages

One of IICA's most pressing activities, and on the recommendation of the I Meeting of Agrostologists, is the Phenological Evaluation of Introduced Pastures



The Latin American agricultural youth is willing to prove that it is a potential source of unlimited human resources for the rural development of America.

begun in 1971, with 32 different experiments with 16 introductions and four replications, of perennial forages. The experiments were expanded with 6 introductions added in 1972. Experiments were conducted in Argentina, Bolivia, Chile, Ecuador and Peru. Results in Bolivia, at Río Seco de La Paz, at 4,080 meters altitude, from an experiment carried out by the Promotion Corporation of Bolivia, and in two experiments at the Condoriri Experimental Station at 3,800 meters, of the Technical Bolivian University of Oruro, indicated that the forage cultivars of highest yielding capacity at one cutting were the Manawa Rye (*Lolium perenne* x *L. multiflorum*), the Tetrablend 444 (*Lolium multiflorum*) and *Festuca elatior*, without irrigation. The yield was approximately of 10 to 12 tons of hay per hectare. At Río Seco, 50 units of nitrogen and 100 of phosphorus were used, while the Condoriri experiment was without fertilizer.

Alfalfa at Río Seco proved to be low yielding due to the physical conditions of the soil, which did not have good drainage. On the other hand, at Condoriri the Moapa, Warrior and Santa Lucía cultivars proved to be precocious bearers, with a yield of from 8 to 12 tons of hay per hectare.

These preliminary results were instrumental in the Islas Verdes Foundation at Uanamuyo, at 3,900 meters altitude, obtaining seven tons of Tetrablend 444 and Moapa alfalfa seed from Northrup King Co. in the USA, to supply forage for their swine-rearing program, planting 16 hectares with Tetrablend and 18 with Moapa.

In 1974, the Oruro Development Corporation established demonstration plots of exotic forages at Caracollo. IICA supplied seed for this purpose of the following species: Alfalfa Ranger, *Agropyron elongatum*, *Festuca arundinacea*, *Dactylis glomerata*, *Eragrostis curvula*, etc.

Native Grasses

In 1972, IICA in cooperation with the University of Utah Mission in Bolivia, established a collection of native grasses with 200 introductions at the Patacamaya Experimental Station. At the Condoriri Experimental Station there is a vegetative propagation plantlet for the more important native grasses, for their phenological study. Small collections are also maintained at the Belén and Río Seco Experiment Stations.

Collections of local native grasses are also maintained at the UNTA, Puno and La Raya (IVITA) stations in Peru since 1972, and at Machachi in Ecuador, by the Ministry of Agriculture and Livestock.

The exchange of native species was begun in 1974, between UNTA and La Raya (Peru), the Abrapanga

(INTA) Station in Jujuy, Argentina, and Condoriri, Bolivia.

The outstanding species are of the following genera: *Poa*, *Agropyron*, *Stipa*, *Hordeum*, *Festuca*, *Pennisetum*, etc. Many are disappearing through over-grazing, and IICA is supporting research and promotion efforts so that these grasses may serve as the basis for the recuperation of the pastures.

It has been observed at Río Seco, which has an annual rainfall of 600 mm, that in the management of native pastures, recuperation can be achieved in five years without grazing, bringing the yield up to 3.6 tons of dry matter, while preserving the soils from erosion. However, for recuperation purposes, fences are essential, and the "campesino" does not use them through lack of education and economic resources.

Native Crops

Quinoa, with its high protein (15-17%), vitamin and mineral content, is an excellent food for the Andean area. IICA is supporting the dissemination of this crop, native to the Andes highlands. One hundred and thirty introductions were distributed from the Condoriri Experimental Station to the Universities in Puno, Peru (Technical University of the Altiplano UNTA), in Nariño, Colombia and in Jujuy, Argentina. In addition, 11 selections of quinoa were sent to the Agrarian University of La Molina (Peru) for bromatological analyses, and in 1972, 30 kilos of Sajama seed were sent to the UNTA for seed production. In 1974, 16 hectares were cropped with a yield greater than 3 tons per hectare of seed. In 1973, three kilos of Sajama seed were sent to the Promotion Corporation of Arica, Chile, and they have requested two tons of seed this year to plant in the Altiplano to the north of Chile.

Seed was obtained from Quechuco, Valdivia, Chile and from Ecuador, and the BCMON cultivar was obtained from Pasto Colombia. These have been distributed to the universities of Nariño, Puno and Jujuy.

The Development Corporation of Oruro has planted five hectares of Sajama this year, in Caracollo.

The Tarhui (*Lupinus mutabilis*), is a native grain legume with a content of 16 to 26 percent edible oils and from 37 to 52 percent protein; in addition it has glucosides which give the grain a bitter taste, but which are soluble in water and can be eliminated in the industrialization process. This crop has a possible yield of from one to two and half tons per hectare, and through the association with its root bacteria, can fix from 80 to 120 units of nitrogen in the soil.

Nitrogen is a very scarce, high-priced fertilizer which the 'campesino' can ill afford to buy for his potato crop. Since 1972, material has been collected from Bolivia, Ecuador and Peru, and two collections have been started at the UNTA in Puno, Peru, and at Condoriri, in Bolivia.

The Development Corporation of Oruro, on the recommendation of IICA, has planted two hectares of Tarhui in Caracollo, with seed from Yunguyo (Puno) and from Cuzco; the crop is being grown under irrigation.

Various

In 1973, IICA introduced the following forages into Bolivia:

Sweet potato (*Ipomoea batatas*): the Chilca Yellow variety from the Agricultural Experiment Station of La Molina in Peru. This crop serves the double purpose of providing an edible tuber root, and abundant foliage with protein content of 13.1 percent; it has been distributed in Santa Cruz, Beni, Chuquisaca and Cochabamba in the valleys and tropical areas.



Working closely with rural youth is an important phase of incorporating the youngsters into efforts for improving the standard of living of the 'campesino' families.

Tropical grass forages were introduced to the Elar Experimental Station of Maracaibo, Venezuela, such as: German grass (*Echinochloa* sp.) adaptable to humid, floodable areas: Elephant grass (*Pennisetum purpureum*), variety Taiwan 146, which is resistant to grazing; Pangola grass, variety Transval, which is resistant to the virus disease which produced dwarf characteristics. These introduction have been distributed to the Bolivian Promotion Corporation in Santa Cruz, and the Development and Public Works Committee of Chuquisaca, with considerable success, although the reports on yield are still lacking.

Since 1972, hybrids of corn and grain and forage sorghums have been distributed to the Saavedra Experiment Station, to the Abapó Isozog Project in the Santa Cruz Department, and to the Colonization Institute for observations in the Beni highlands.

Northrup King Co. has sent forage, sorghum and corn seed for distribution to requesting institutions.

The Inter-American Rural Youth Program (PIJR)

The main purpose of the PIJR is to provide leadership in: a) the strengthening of the expansion and development of national institutional programs in the countries of Latin America and the Caribbean, working to provide rural youth with opportunities for informal education, so they may take their place in society, and strive for improvements in the standard of living in their communities and country; b) increasing the educational content of the 4-H clubs so that the youth may participate in an informed and active manner, in the development processes.

In compliance with these objectives, the most significant progress over the period being covered in this report, has been in the following:

Continued assistance to the 4-S clubs of Nicaragua, in the emergency project for food production. The Board of Directors of UNASEC met with the Minister of Agriculture of that country so as to inform him about the financing being provided on these projects.

An important segment of PIJR action in Latin America is dedicated to the orientation, training and supervision of groups of Latin American youth who travel on an exchange basis to the United States: 6 participants from Costa Rica; 6 IFYE delegates (2 to Mexico and 4 to Venezuela); 15 YDP volunteers - 2 to the PRODESH project in Chiapas, Mexico, 3 to Guatemala, 4 to Costa Rica, 4 to Venezuela and 2 to Paraguay.

Another important PIJR event was the Regional Seminar on Food Production and Project Utilization, which PIJR coordinated in Guatemala, in the third

trimester of 1973. Representatives and rural youth program supervisors attended from Mexico, El Salvador, the Dominican Republic, Honduras, Nicaragua, Costa Rica and Guatemala. The participants of each delegation prepared a plan for the adaptation of methodology demonstrated at the seminar, based on the Guatemala Kellogg Project, for the individual conditions of their respective countries.

A similar Seminar was held in Paraguay. In addition, the II Inter-American Seminar for Support to Rural Youth Institutions was held in Brazil in November.

In January 1974, a summary of the PIJR work plan for that year was distributed, emphasizing the implementation of the Kellogg Foundation grant.

During the past semester, work has been continued on the preparations for the Inter-American Rural Youth Conference to be held in San José, Costa Rica in October 1974 with the following main topic: "Rural Youth and Decisions for the Decade of the 80's."

Support to Professional Associations

A constant concern in IICA has been to support the professional associations in the agricultural sector of the region. Thus IICA has kept in close touch with the Latin American Plant Sciences Association (ALAF), now changed to the Latin American Association for Agricultural Sciences (ALCA) as per a decision taken at the last inter-American meeting held in Panama in



IICA support to the professional associations of Latin America is a permanent measure. In the photograph, the Director General of IICA, Dr. José Emilio G. Araujo signs a new agreement with the President of ALAF (ALCA), Dr. Luis Marciano.

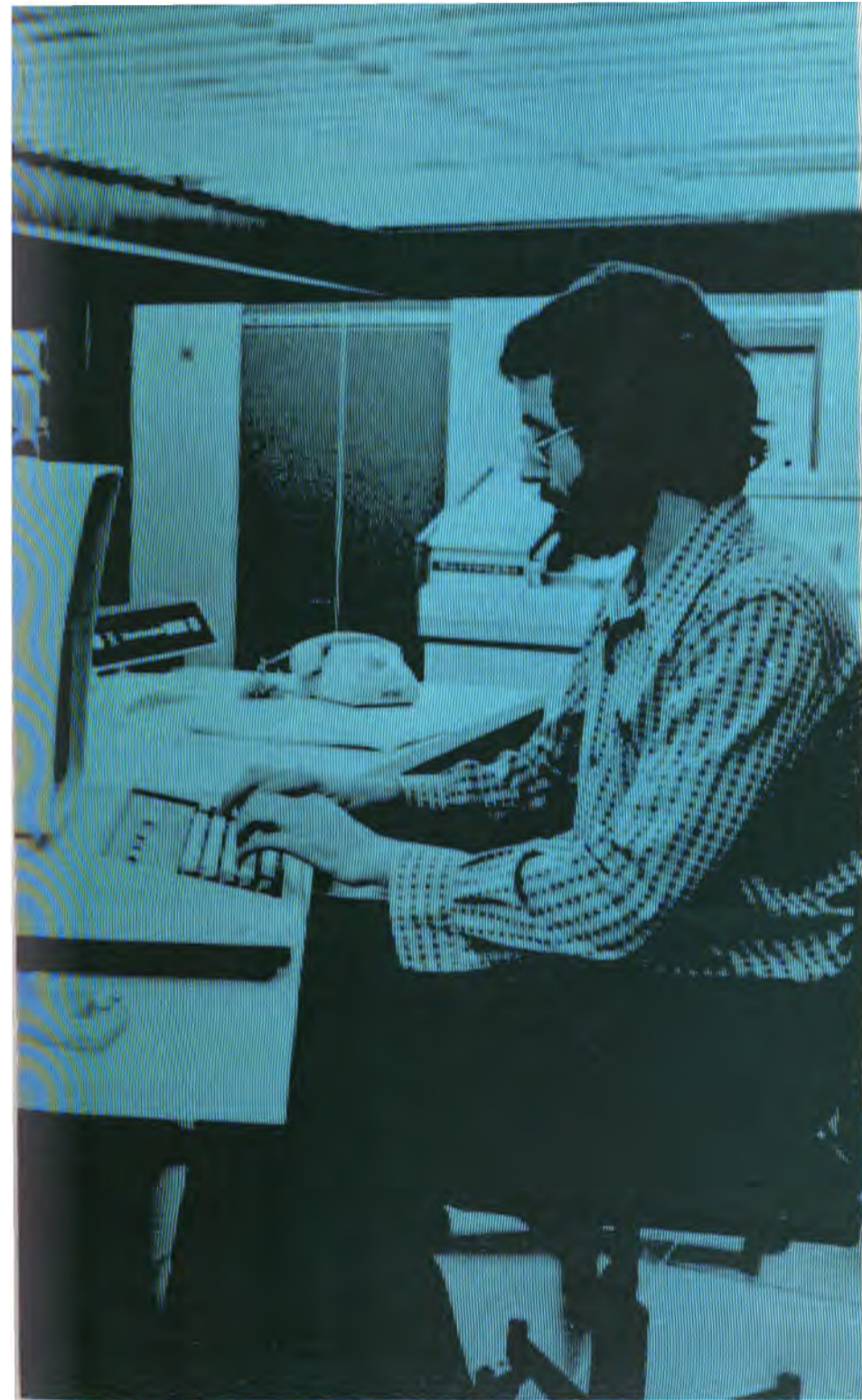
March, 1974. IICA maintains the Executive Secretariat of this Association, having just recently signed a new agreement to this end.

Contact has also been maintained with the Inter-American Association of Agricultural Librarians and Documentalists (AIBDA), with the headquarters of the Executive Secretariat in Turrialba, at the Inter-American Centre for Agricultural Documentation and Information (IICA-CIDIA). IICA is also working

closely with the Latin American Association for Higher Agricultural Education (ALEAS), the Latin American Association of Animal Production (ALPA), and others.

The catalytic and professional rapprochement functions performed by these associations are important factors in the development of the Latin American professional, and IICA, recognizing this fact, makes every effort to stimulate their work and to support them insofar as is possible.





Chapter VIII.

INFORMATION AND DOCUMENTATION



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INFORMATION AND DOCUMENTATION

Introduction

Parallel to the operative restructuring of IICA in accordance with hemispheric and humanistic projection policies, and with the advances made from 1970 to the present time, the information and documentation policies have also been restructured so as to assume the role that should be played, as essential development factors, in this age of communications.

Every possible effort has been made so that information and documentation, within the responsibilities of IICA in the development of the rural sector, become a true system for the 'generation of opinion in search of truth'; to be able to fulfill a creative function in the social, economic and cultural interests of rural communities. Hence the tendency defined in the General Plan, towards institutional action in this area, with specific and continuous objectives and goals.

Public Information

Mention is made of this program with the purpose of identifying the spheres of action included: IICA general information governed by the Hemispheric Program of Public Information, under the responsibility of the Division of Public Information of the Executive Offices, and the information and documentation of a scientific or technical nature, which is the responsibility of the Inter-American Centre for Agricultural Documentation and Information (IICA-CIDIA).

Worthy of note at this point are the four information sub-systems that function within IICA: technical information, diagnostic studies, internal information and public information.

The Public Information Program has had greater activity during the fiscal period covered by this report, as in addition to the usual work governed by the regulations of the Hemispheric Program for Public Information as approved by the Council of Directors in November 1972, and the production of public information, it has also assumed the technical administration of the Print Shop, to be transferred from Turrialba

where it was located for many years, to San José. The equipment will be installed near the Executive Offices in San José, until such time as the building for IICA headquarters is built, where it will be installed on a permanent basis, and should function with greater efficiency at the service of the IICA information programs in general.

The Print Shop has been reorganized and up-dated with a new programming system to accommodate the increasing activities in general information, along with the activity increases within the seven Lines of Action of the IICA General Plan.

Inter-American Centre for Agricultural Documentation and Information

The specific objectives of the Centre are to cooperate with the efforts of countries to adopt agricultural information and documentation policies, to



The automatization of information is one of the major accomplishments of recent times, compensating in part for the ever-increasing volume of newly appearing knowledge.

ensure the transformation of libraries and documentation centers in the Member States into vital sources of information capable of supporting national and sectorial rural development planning; to collabo-

rate with these countries on the strengthening and creation of structures to process, store and produce agricultural information; to stimulate analytical studies of the current situation of agricultural information and documentation, and participate in them with the aim of strengthening and creating national documentation and information systems; to participate in the integration of information from the national documentation and information systems of the Hemisphere, and coordinate the operation and development of the Inter-American Agricultural Information System (AGRINTER); to participate in the coordination and co-participation of AGRINTER in the world information systems, particularly AGRIS - the International Information System for Agricultural Sciences. Program action is based on the group of country-level projects, articulated at regional hemispheric (AGRINTER), and world-wide (AGRIS) levels. This is achieved on the basis of projects with national documentation structures (libraries and documentation centers).

With the aim of perfecting its working systems, IICA entered upon a process of evolution as of 1973, consistent with programming improvements for the identification of priority-type activities; improvements in strategy so as to be able to undertake these activities with the available resources; policy improvements consonant with the promotional type of action of the Institute in documentation and information matters, and the design of a model for the application of diagnostic studies to the documentation and information sub-systems in the countries. These activities are conducted in cooperation with the Regional Offices and the country representatives, with advisory services provided by the Associate Deputy Director General's Office for Planning.

CIDIA has also been revising its strategy so as to be able to better attain programmed objectives. This strategy currently consists in: priority action on advisory services on national diagnostic studies; training human resources at different levels, in the countries themselves and at the Center; coordinating the operation of AGRINTER and providing simultaneous support to the development of centers and national documentation and information sub-systems in the countries; production of basic, key literature in books and journals.

Most of the medium-range and long term efforts are being given to the first and third activities. Together with priority action in technical assistance, the innovative responsibility of greatest consequence for CIDIA, consists in promotion work, to stimulate and support the establishment of AGRINTER.

IICA-CIDIA, as Coordinator Center of AGRINTER for Latin America and the Caribbean, and as Regional Input/Output Center of Information for AGRIS, is not

only an information system or an information and documentation organism for IICA, but is in essence, a component part of the information system of the Member States, following the decisions of these countries, as agreed upon at the FAO Regional Meeting for Latin America, held in Cali, Colombia, in August-September, 1972.

The establishment of AGRINTER has meant the need to introduce automation methods, and their adoption by the countries.

IICA-CIDIA has been making a special effort in its program, and insofar as resources permit, to provide the Member States with the information needed by the planners and those who make the political decisions (Project on Documentation for Development Planning, submitted for consideration by the Planning Office).

Canadian assistance to CIDIA in support of AGRINTER through its inter-connection with AGRIS, will be a very significant contribution which will permit the acceleration of the development of both projects underway; in the obtaining of priority objectives in benefit of the countries; and finally in the future projection of its programs.

Areas of Support to the Regional Offices and Country Representations

These areas of concentrated effort include:

a. **Planning Institutional Building.** To this end, the Center fosters, participates and advises on the establishment of agricultural information policies at government level, preferably for sectorial planning; provides consulting services on the planning and establishment of national agricultural information systems; analyzes the agricultural documentation and information sub-systems, as an integral component of sectorial diagnostic studies; provides advisory services on library coordination and integration projects at multinational levels, and for limited geographic areas; promotes the strengthening, development or creation of national documentation centers or libraries, and the creation or development of library networks; provides support to the countries and participates in the development of AGRINTER; provides advisory services to the countries on the preparing of projects and proposals for financing in the individual country or as part of foreign aid; provides assistance on the operation of country projects financed by bilateral or multilateral sources; co-operation and promotional actions provided on the holding of inductive national meetings, of different types, to foster the development of the information systems.

b. **Human resources in institutional building.** Action in this field is oriented towards: the promotion



The studies of the Latin American youth should be supported by a proper infrastructure of information, by means of specialized libraries.

of and assistance to the planning and organization of training courses for national librarians and documentalists. Priority is given to cooperation with the basic AGRINTER nuclei of the countries, to the library science schools or institutions with similar interests. Cooperation and promotional action is provided on the planning and development of training courses for those destined to utilize the information in the national institutions, as well as on national technical writing courses. Training is offered in the countries to librarians and documentalists working in national 'information input' centers of AGRINTER. Cooperation is provided on the holding of national and hemispheric conferences and meetings, so as to contribute in this manner to the up-dating of information, the exchange of experience and the fostering of leadership qualities on the national scene.

This work is directly achieved in the following manner: offering hemisphere-wide training courses for librarians and documentalists; accelerated seminars (Workshops) on advances in agricultural documentation and information throughout the hemisphere, with the CIDIA Center functioning as field laboratory; the training of librarians, the organization and administration of training courses for librarians and documentalists; training on the editing and publication of agricultural journals, and in technical writing.

c. The generation and transformation of information. This CIDIA program provides support to the country representations in work related to sectorial development, in the following areas of concentration: advisory services and support in the strengthening and development of the technical, human and economic

Table 3. Distribution of Short Bibliographies

July 1973 – June 1974

Countries	No. of Bibliographies	No. of References
AMERICA		
Argentina	2	85
Belize	1	45
Bolivia	23	571
Brazil	92	2,653
Canada	1	16
Colombia	104	2,866
Costa Rica	86	2,564
Dominican Republic	2	81
Ecuador	122	3,290
El Salvador	6	152
Guatemala	3	86
Haiti	2	85
Honduras	34	1,267
Mexico	32	1,106
Nicaragua	6	193
Panama	13	314
Peru	34	888
Puerto Rico	10	306
United States	7	223
Venezuela	16	374
EUROPE		
England	6	287
Belgium	1	27
AFRICA		
Morocco	11	838
Liberia	18	567
ASIA		
Thailand	1	65
AGRINTER		
National Nucleus of Venezuela	443	12,283
Total	1,076	31,232

Table 4. Publications Distribution *

NUMBER OF	AMERICA	EUROPE	AFRICA	ASIA	OCEANIA	TOTAL
Countries	24	20	14	10	3	71
Institutions	720	168	32	56	20	996
Publications	10,397	1,006	233	329	113	12,078

* This table summarizes the number of countries, institutions and publications distributed throughout the 1973-74 fiscal period, throughout the Hemisphere and World.

Table 5. Countries, institutions and number of publications distributed throughout the Americas in 1973-74 by CIDIA.

Country	Nº of Institutions	Nº of Publications
Argentina	119	1,114
Bolivia	16	315
Brazil	139	2,113
Canada	7	93
Colombia	57	637
Costa Rica	42	392
Cuba	6	189
Chile	27	348
Dominican Republic	9	181
Ecuador	21	442
El Salvador	5	183
Guatemala	20	269
Guyana	4	28
Haiti	3	97
Honduras	6	185
Jamaica	2	60
Mexico	47	741
Nicaragua	7	162
Panama	4	159
Paraguay	7	141
Peru	42	760
Puerto Rico	7	72
Trinidad & Tobago	4	27
United States	70	754
Uruguay	20	225
Venezuela	29	710

* Does not include publications distributed from the Executive Offices

components of the national centers and cooperative libraries of AGRINTER; consulting services on the generation and utilization of national libraries, bibliographic banks, collective catalogs of periodic publications, etc.; support and advisory services on the establishment and development of the national documentation and information systems.

AGRINTER Objectives

As AGRINTER is an innovation in IICA-CIDIA activities, and as it necessary to be more familiarized with its operative mechanisms, its objectives with respect to the following aspects are heretofore explained:

a. To coordinate and integrate at a regional level, the national efforts on structures related to documentation and identification, processing and dissemination of local agricultural information.

b. To stimulate national and regional cooperation, in an effort to attenuate the differences in the levels of application of technology.

c. To promote a better utilization of the human, economic and documentary resources of Latin America and the Caribbean, through regional coordination, operational and integration efforts.

d. To have readily accessible in each country all information related to the agricultural sector, and



Technical information efforts should be complemented with a through job of dissemination, so as to take existing information to the users.

foster the utilization of this documentation by the different types of people in agricultural pursuits.

e. To support the planning, education, research and rural development through the application of modern methods to attain better repository dissemination and utilization systems of the available documentary resources in the region.

The System is oriented towards satisfying the needs for recent and retrospective agricultural information by the individuals or institutions. The needs are determined by means of analytic studies to identify interest profiles. The scope of the System is determined in accordance with the information needs of the users, taking into consideration the areas of knowledge requested, the geographic and linguistic spheres covered, and the type of documentation. The areas of knowledge are defined, taking into account the literature in agricultural and related sciences. The System employs a scheme of categories and an interest index for defining the areas of knowledge.

With respect to structure and functions, the System has been organized on a sufficiently flexible basis so as to allow the integration and voluntary participation of all countries, through basic nuclei in each country. In this manner, the System is open to voluntary cooperation and participation. The basic structure of the systems functions by means of a Coordinator Nucleus and basic country nuclei.

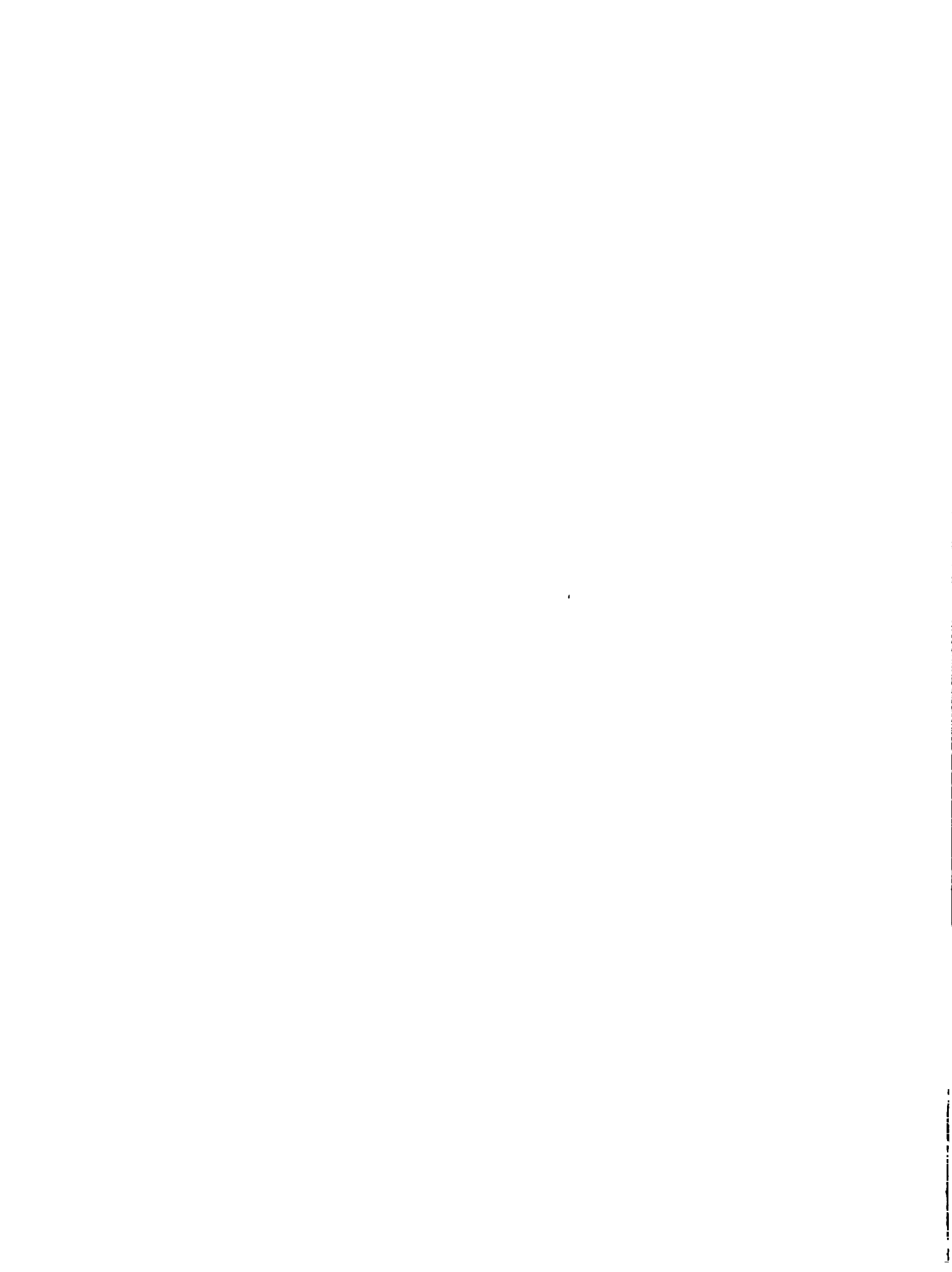
The System also provides the following services: access to current and retrospective agricultural documentation produced in or for the region; national nuclei access to existing world agricultural documentation. This is achieved by the following means: an agricultural bibliography for Latin America and the Caribbean; a bibliography on specific topics of interest for the region; the production of collective catalogs of

agricultural publications (the first phase covers journals); the exchange of bibliographies; reproduction of documents. Progress in short term efforts has been achieved through the following: the provision of tapes; the selective dissemination of information; research results; telecommunications services. Medium and long term plans: annotated bibliographies; literature reviews; translations. System publications (bibliographies) are provided on a courtesy basis to the basic nuclei of the countries.

In closing, reference should also be made to the creation of three new operative units within IICA-CIDIA: the Documentation and Information Unit; the Library Unit, with two dependencies - the library in Turrialba and the library in Bogota; and the Technical Editing Unit, with three dependencies: Publication of Journals; Publication of Books and other Educational Material; and the hemispheric distribution system for publications.

The reorganization of the Print Shop was mentioned in the section reporting the activities of the Public Information Division. One of the most important new responsibilities will be directly related to the Books and Educational Materials Program, structured so as to comply with the Kellogg Foundation Grant for this purpose, and other Program requirements.

The Kellogg Foundation, with its traditional altruistic and educational spirit, made a grant to the Inter-American Institute of Agricultural Sciences for the preparation and publication of teaching works. This grant is in two parts: a donation of 200 thousand dollars in annual contributions of 40 thousand dollars for the publication of textbooks so necessary for agricultural scientific progress, and a donation of 75 thousand dollars for the expansion of the Print Shop and the modernization of its equipment, so as to comply more efficiently with the IICA Information and Documentation Program.





Chapter IX.

COOPERATIVE PROGRAM FOR THE DEVELOPMENT OF THE AMERICAN TROPICS

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COOPERATIVE PROGRAM FOR THE DEVELOPMENT OF THE AMERICAN TROPICS

Background Information

The Board of Directors of IICA, at the Seventh Annual Meeting held in May 1968, recommended that the Director General appoint a Technical Committee to study the objectives, organization, localization, financing and operation of a cooperative program for the development of the tropics (Resolution IICA/JD-626-2).

In due time, this Technical Committee presented its report to the Director General who then submitted it for consideration by the Eighth Annual Meeting of the Board. Resolution IICA/JD-658-28 concerning the initiation of a Cooperative Program for the Development of the American Tropics was approved at this meeting, and the Director General was authorized to hold a preliminary meeting of the Advisory Committee. The meeting was held in October 1969, and the bases for future action of the Advisory Committee were elaborated. In November of the same year, the Director General requested the Ministers of Agriculture of the Amazon countries, to appoint a National Coordination Committee, and one Representative for each country, to the Advisory Committee. This Committee held its first meeting in January 1970, to elaborate a plan of action, define the objectives and goals of the Program, its administrative aspects and the budget for the 1970-71 fiscal period.

At the Ninth Annual Meeting, the Board of Directors accepted the Committee's recommendations, and agreed on a budget to get the Program underway. The Executive Secretariat of the Program established its headquarters at the Amazon School of Agronomy, in Belém, Pará, Brazil, by April 1971.

Program Structure

The Programs's structure consists in an Advisory Committee comprised of six representatives from Bolivia, Brazil, Colombia, Ecuador, Peru and Venezuela, and four IICA representatives plus the Executive Secretary; National Coordination Committees in each country, comprised of the organisms working on the



Research in tropical zones has increased with the study of new production systems.

development of the region; the Executive Secretariat, with one full-time functionary, for the multinational coordination of activities.

To date, five meetings of the Advisory Committee have been held, in Belém, Pará, Brazil; in Manaus, Amazonas, Brazil; in Guayaquil, Ecuador; in Lima, Peru; and the fifth and last one in Santa Cruz, Bolivia, in April 1974.

As of the Third Meeting, the representatives agreed that the Program should concentrate its action in the priority areas of Ecology, Forestry, Animal and Pastures Production and Agriculture, taking into account in each case and supporting the efforts being made in each country of the region to utilize its resources to the best possible advantage.

Production Systems for the Humid American Tropics

With the purpose of obtaining information in the areas mentioned above, to discuss the problems and their possible solutions, IICA-TROPICOS organized a series of meetings by means of which it has been possible to compile the basic information available on

the programs underway, and on the institutional and human resources available in the region.

The recommendations and conclusions of each of these meetings have been submitted for consideration and analysis at the country level, by inter-disciplinary work groups. The results of these studies will serve as a starting point for the elaboration of an integrated project for production systems in the humid American Tropics (land utilization systems) for a sustained and economically feasible utilization of the Amazon ecosystem. This project is in the process of being elaborated.

The Executive Secretariat of the IICA-TROPICOS program has offered a number of graduate scholarships with the purpose of training a nucleus of technicians of the region in aspects of agricultural, animal husbandry and forestry production systems. Over the next few years, these technicians should be assuming the leadership of the research projects on production systems in this area.

Agricultural Documentation and Information Program

In this field, IICA-TROPICOS has worked successfully with the governments of the region on the organization of units responsible for these functions, in each, country. Towards the end of 1973, Peru initiated CEDIA in Iquitos, and within the next few months, Brazil will have in operation in Belém, a headquarters for the Regional Network of Agricultural Documentation and Information for the Amazon with an annual budget of a quarter of a million dollars. Bolivia and Venezuela have also been working on similar projects.

IICA-TROPICOS has thus complied with the recommendation of the Advisory Committee. On the basis of three years of experience, the Committee started working on a new long-term plan of action at the Fifth Meeting, held in Bolivia, so as to prepare a new plan to be submitted for consideration of the Board of Directors by the Executive Offices of IICA.

The Meeting at Santa Cruz de la Sierra, Bolivia

A report on program accomplishments in the countries of the region was presented at this meeting. A summary is herewith presented, so as to have an idea of the progress achieved and goals attained:

a. Bolivia

In this country, an ample road-building program was designed so as to attain the integration of the Bolivian tropics with the principal centers for internal consumption as well as for export. The migration of popula-

tions from the areas of high demographic growth indices towards tropical zones has also been contemplated.

According to the information supplied by the representative from this country, the Ministry of 'Campesino' Affairs and Agriculture has research, agricultural extension, rural community development, renewable natural resources, agricultural credit, animal husbandry and other support programs working for the tropics. In addition, the University is assigning considerable importance to the tropics, through the creation of a College of Tropical Agriculture in Santa Cruz. In this region, there are also the College of Veterinary Medicine and Agricultural Sciences at Cochabamba, and Veterinary Sciences at Beni. The tropical zone of Bolivia also has five experiment stations working on various research projects, for example the Ecological Mapping of the country, which has been concluded.

b. Brazil

The National Coordination Committee has held three meetings in Belem, and continues to cooperate with the Executive Secretariat of the Program. Eight national institutions are working with the Committee as well as several others, which although not part of the Committee, are working actively in the tropics.

The following can be cited as one of the main accomplishments to date: the Ministry of Agriculture, after the Symposium on Fauna and Fisheries, created the National Park of Tapajós, along the borders of the river of this name, and the National Park of the Amazon, along the transamazonian highway. Two ecological stations have also been created, one on the border of the Trombetas river, to study the turtle, and the other on the border of the Tapajós river, for tropical studies.

c. Colombia

The National Committee held six meetings, from 1 July 1973 through 15 April 1974, to analyze and choose the recommendations emanating from the Program meetings, to adapt them to local projects being developed in the tropical zones.

Definitive support was given to the activities of the Renewable Natural Resources Institute (INDERENA) on the conservation and development of renewable resources, and the representatives were chosen to participate in activities programming by the Advisory Committee at its Fourth Meeting. Five national institutions are collaborating with the committee which has allowed for the strengthening of the experiment stations in tropical zones.



Another expectation for tropical zones is the exploitation of rapid growth forestry species.

d. Ecuador

The National Committee cooperated on the organization of the Technical Programming Committee for the Development of the Humid American Tropics, held in Guayaquil, from 10 to 14 December 1973, with the participation of representatives of all the countries in the Program.

Three functionaries from the National Fisheries Institute participated in the Symposium on Wild-Life and Amazon River and Lake Fisheries, held towards the end of 1973.

The current organization of the Ministry of Agriculture and Livestock has been more directly oriented towards the development of the country. Emphasis in this aspect, should be placed on the following:

In the tropical area, INIAP research is conducted at four experiment stations located in different ecological regions, on improving crops and developing beef and dairy animal husbandry, and pig-rearing.

So as to work on the development of the different crops, specific programs have been structured at a national level. In the Ecuadorian tropical region, are the programs on banana, tropical fruits, rice, corn, cotton and hard fibers, sugar cane, the promotion of agricultural organizations, agricultural diversification, tobacco and tea. There are also specific programs underway in animal husbandry.

With technical assistance, the government has initiated an ample credit program to facilitate the development of animal husbandry. The cattle program includes an ambitious plan of massive repopulation, with the



Tropical fauna is deserving of special attention within the Program, because of the tremendous possibilities for exploitation.

aim of importing 50,000 cows and an adequate number of bulls. Up to the end of last year, 5,000 cebu-type animals were imported from Central America.

e. Peru

The National Committee held three meetings throughout the 1973-74 period, and participated in events programmed by the Advisory Committee, at an international level, as well as other activities pertaining to the tropics.

Worthy of mention is the fact that a large number of institutions are working on tropical activities. Special note should be taken of the creation of the Documentation Center for the Amazon, in Iquitos, and the attention being given by the government to tropical matters, through the allocation of greater resources for the development of this area.

f. Venezuela

The National Committee met three times during the period being reported, to discuss the administrative directives with respect to activities of the national organisms members of the Committee. Tropical agriculture has become increasingly important in government plans, with considerable attention being given to stimulating the development of the Venezuelan Amazon region.

Recommendations of the Advisory Committee

The conclusions arrived at, at the Fifth Meeting of the Advisory Committee have been productive. Some of them are mentioned below, to provide some idea of the program's progress and its future perspectives:

a. The promotion of a meeting of Ministers of Agriculture of the countries involved in the Program, with the aim of providing a general frame of reference for the development of the American Tropics, in accordance with the technical conclusions arrived at by the Program.

b. The strengthening of the IICA-TROPICOS Program at national and international levels.

c. The proposal of an adequate mechanism to stimulate compliance with the recommendations approved at the international meetings organized by the Program.



The Program maintains an efficient documentation service, of great technical and informative impact.

d. The National Coordination Committee should make greater possible efforts to incorporate into their membership representatives of all the institutions working in the tropical regions of each country, with the aim of facilitating compliance with the above-mentioned recommendations.

e. The Executive Secretariat, should coordinate an activity with FAO and the governments of the region, which contemplates the evaluation and management of soils in the Amazon region, within the frame of reference established in Document FAO-PNUD-RLA 70/457, and the Sub-regional Project for Latin America, called 'The Utilization of Lands in the Amazon Basin', whereby the Cooperative Program for the Development of the American Tropics would act as regional coordinator.

f. The integration of a Committee of highly qualified scientific technicians, with the aim of studying the work programs conducted by the governments and private sector of the countries involved in the IICA-TROPICOS Program, so as to identify these activities with the Advisory Committee projects, to ensure that colonization and other work being conducted for the development of these areas, be done within the most adequate frame of reference.

Conclusions

For additional information on Program activities, reference is made to the table of activities conducted in the period being reported, and the publications, as indicated in the respective sections of this Report.



Chapter X.

FINANCIAL SUMMARY

Chapter X

FINANCIAL SUMMARY AND ANALYSIS OF THE FINANCIAL STATEMENTS

Cash in Banks

The cash position as of June 30, 1974 was stronger than last year, principally because of another year of good quota payments, which exceeded 100 percent of the budget approved. Except for funds required for immediate expenditures, the cash on hand was invested in certificates of deposit, earning interest for short terms.

Accounts Receivable – Quotas from Member States (Tables 6, 7, 8, 9 and Figure 1.)

The collection of quotas from prior years plus the current fiscal year amounted to 102.9 percent of the budget approved. Of the \$ 5,710,527 collected during the year, \$1,225,677 was from prior year quotas, and the balance of \$ 4,484,850 were quotas from the current fiscal year, or approximately 78.5 percent of the total collected.

With the exclusion of Cuba, eight countries were up-to-date as of June 30, 1974. In addition to those eight countries, eleven countries made payments against balances owed. Of these eleven additional countries, seven owed one year's quota. Four countries made no payment during the year, against balances owed.

In total, quotas due at the end of the fiscal year were \$ 1,734,291, of which \$ 668,320 were quotas from prior years, and the balance of \$ 1,065,971 were current quotas due.

Accounts Receivable

Nearly the entire amount shown represents amounts due from contracts and agreements with other organizations and governments entities for specific programs or projects. In such cases, actual payment may not be received precisely before June 30, but these balances

Table 6. Quota Funds. Financial Statement as of 30 June 1973 compared with Statement as of 30 June 1974

(United States Dollars)

ASSETS	30 June		LIABILITIES	30 June	
	1973	1974		1973	1974
Cash on hand & in banks	1,433,507	219,017	Loans Payable	57,000	38,000
Short-term deposits		1,550,000	Accounts Payable	4,512	6,482
Quotas Receivable,			Third Party Funds	60,018	54,334
Member States	1,893,997	1,734,291	Rotating Funds	589,790	703,427
Accounts Receivable	230,166	317,844	Reserves	62,264	= 15,919
Inventories	147,124	83,364			
Prepaid expenses	40,939	77,857	SUBTOTAL	773,584	818,162
Amortizable Investments	57,000				
			Funds & Donations Received for Specific Purposes	317	117,724
Other Assets	<u>13,154</u>	<u>10,851</u>	General Working Fund	3,041,986	3,057,338
	<u>3,815,887</u>	<u>3,993,224</u>		<u>3,815,887</u>	<u>3,993,224</u>

do not represent doubtful payments, only a difference in the payment schedule and the year-end closing date.

made in houses and furniture in the Center at Turrialba with an original loan of \$ 190,000. This amount has been nearly completely amortized, with the final payment to be made in October, 1975.

Amortizable Investments

This item has been eliminated from the accounts of IICA and has been transferred to the accounts of CATIE in Turrialba, as part of the final liquidation of accounts resulting from the legal separation of that Center from IICA. The item represented investments

Other Assets

This account reflects balances from interoffice transfers, normally liquidated early in the new fiscal year.

Table 7. Quota Movement of Member States for Fiscal Year ending 30 June 1974

(United States Dollars)

Member States	Quotas Receivable	Quotas for the year	Total owed	Total collec- tions	Total owed as of	Increase (Decrease) of balance owed between
	30.6.73	1973-74	1.7.73	1973-74	30.6.74	30.6.73 30.6.74
Argentina	340,474	365,096	705,570	340,474	365,096	24,622
Bolivia	91,397	16,738	108,135		108,135	16,738
Brazil	491,413	343,128	834,541	491,413	343,128	(148,285)
Canada		355,681	355,681	355,681		
Colombia	79,593	81,597	161,190	76,035	85,155	5,562
Costa Rica	16,541	16,738	33,279	17,260	16,019	(522)
Chile	287,016	86,305	373,321	113,133	260,188	(26,828)
Dominican Republic	100,460	16,738	117,198		117,198	16,738
Ecuador	21,396	16,738	38,134	28,520	9,614	(11,782)
El Salvador	37,764	16,738	54,502	29,781	24,721	(13,043)
Guatemala	(1,627)*	21,968	20,341	21,968	(1,627)	
Guyana		11,075	11,075	11,075		
Haiti	123,602	16,738	140,340		140,340	16,738
Honduras	17,086	16,738	33,824	17,086	16,738	(348)
Jamaica		16,738	16,738	16,738		
Mexico		377,650	377,650	377,680	(30)	(30)
Nicaragua	31,074	16,738	47,812	14,056	33,756	2,682
Panama	8,000	16,738	24,738	8,000	16,738	8,738
Paraguay	98,393	16,738	115,131		115,131	16,738
Peru	69,181	42,891	112,072	112,072		(69,181)
United States		3,474,702	3,474,702	3,474,702		
Uruguay	82,234	30,338	112,572	28,581	83,991	1,757
Venezuela		<u>176,272</u>	<u>176,272</u>	<u>176,272</u>		
SUBTOTAL	1,893,997	5,550,821	7,444,818	5,710,527	1,734,291	(159,706)
Cuba	<u>538,165</u>	<u>69,044</u>	<u>607,209</u>		<u>607,209</u>	<u>69,044</u>
TOTAL	<u>2,432,162</u>	<u>5,619,865</u>	<u>8,052,027</u>	<u>5,710,527</u>	<u>2,341,500</u>	<u>(90,662)</u>

* This amount represents a payment in addition to the quota established for the 1972-73 fiscal year.

Table 8. Status of Quotas. Comparison between periods ending 30 June 1972 and 30 June 1974

(United States Dollars)

	Fiscal year 1972-1973		Fiscal year 1973-1974	
Situation as of July 1				
Prior year quotas	2,063,025 (100 ⁰ /o)		1,893,997 (100 ⁰ /o)	
Current quotas	4,981,670 (100 ⁰ /o)	7,044,695 (100 ⁰ /o)	5,550,821 (100 ⁰ /o)	7,444,818 (100 ⁰ /o)
Payments Received during the Year				
For prior years	1,204,571 (58.4 ⁰ /o)		1,225,677 (64.7 ⁰ /o)	
For the current year	3,946,127 (79.2 ⁰ /o)	5,150,698 (73.1 ⁰ /o)	4,484,850 (80.8 ⁰ /o)	5,710,527 (76.7 ⁰ /o)
Situation as of June 30				
Collection for prior years	858,454 (41.6 ⁰ /o)		668,320 (35.3 ⁰ /o)	
Collections for the current year	<u>1,035,543 (20.8⁰/o)</u>	<u>1,893,997 (26.9⁰/o)</u>	<u>1,065,971 (19.2⁰/o)</u>	<u>1,734,291 (23.3⁰/o)</u>

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

Table 9. Comparison of Quota Budget with Collections for the Years 1969-70 through 1973-74

(In thousands of dollars)

Year	Quotas for the year*	Total collections for the year	Percentage
1969-1970	3,624	3,559	98.2
1970-1971	4,023	3,780	94.0
1971-1972	4,425	3,901	88.1
1972-1973	4,982	5,151	103.4
1973-1974	5,550	5,710	102.9

* Does not include the quotas corresponding to Cuba.

Fixed Assets

The assets accounts of IICA do not reflect the value of its land, building, crops, vehicles, and other

properties, in as much as expenditures for the acquisition of such assets are considered as being current, and are charged against the budget for that period. Certain construction and furniture costs financed with loans

FIGURE 1

QUOTAS FROM MEMBER STATES

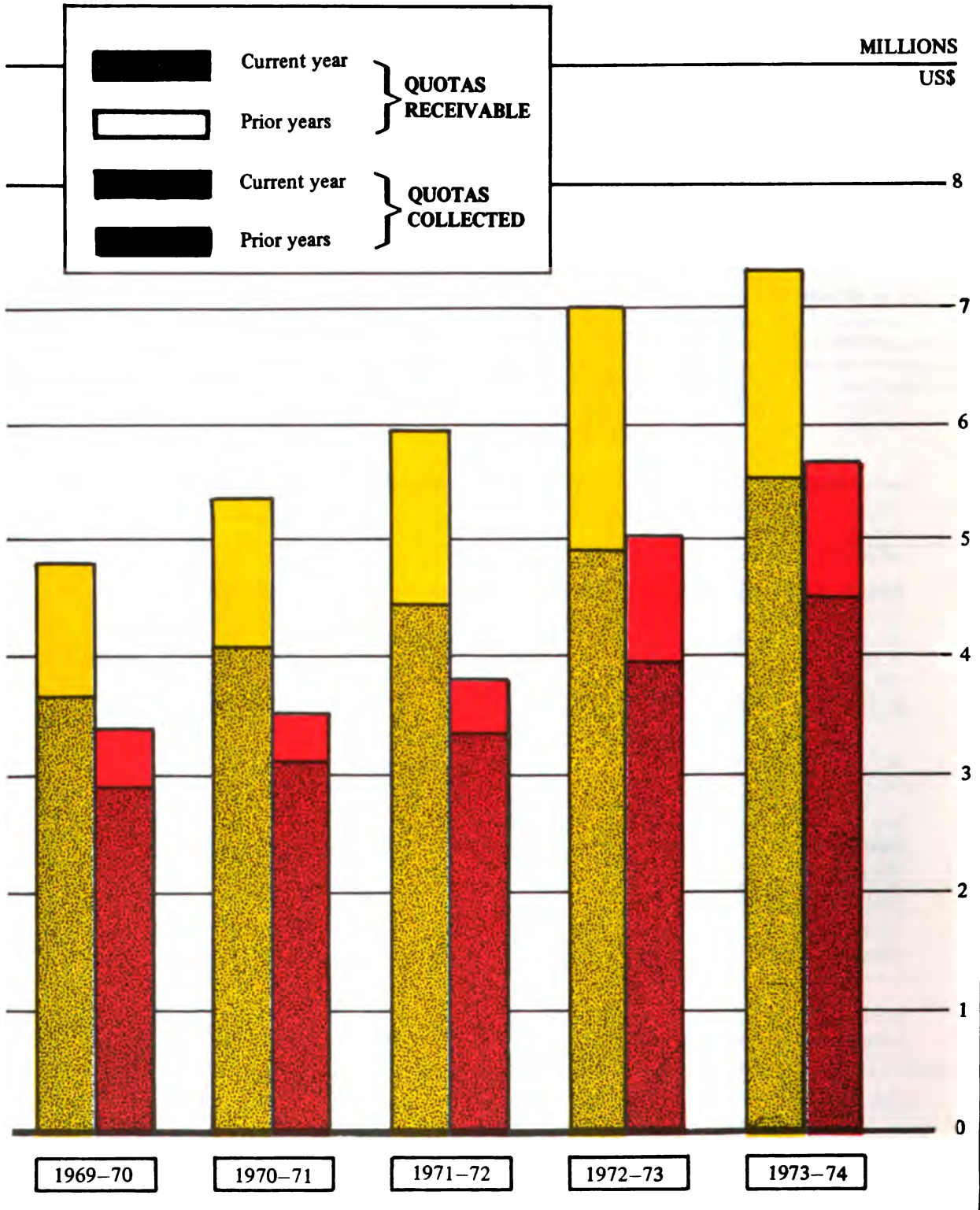


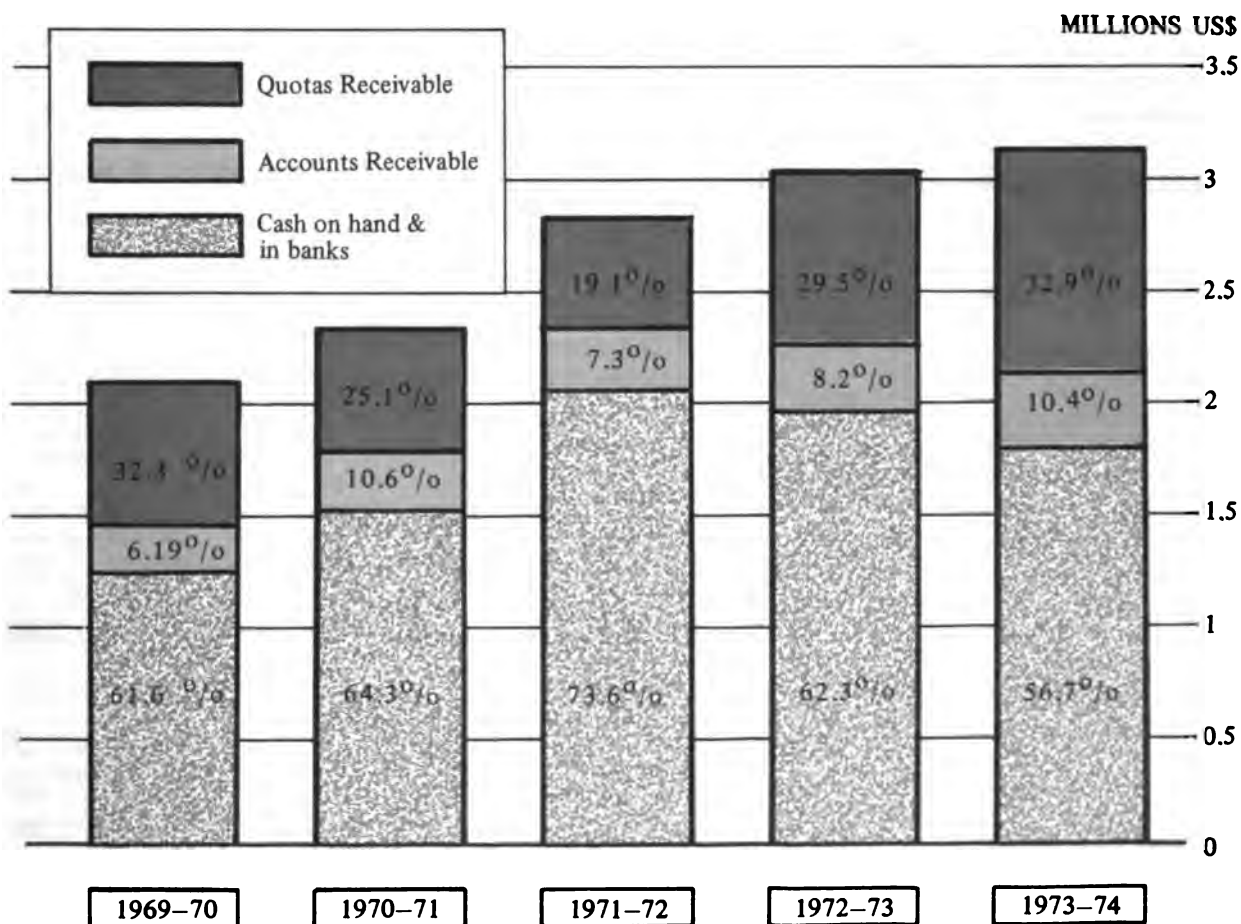
Table 10. Summary of the Status of the General Working Fund

(United States Dollars)

Balances at the beginning of the year		
Quotas Receivable	1,893,997	
Other	<u>1,147,989</u>	3,041,986
Difference between income & disbursements during the year		
Income	5,617,157	
Disbursements	<u>5,601,805</u>	<u>15,352</u>
Balance at the end of the year		
Quotas Receivable	1,734,291	
Other	<u>1,323,047</u>	<u>3,057,338</u>

FIGURE 2

COMPOSITION OF THE GENERAL WORKING FUND



are deferred and amortized to the extent possible with income from rental of residences, dormitories and furniture.

Loans Payable

This balance represents the last two payments of an original loan from the bank of \$ 190,000 for the construction of housing in the Center (CATIE) at Turrialba. Payments are made with income from rental received, and when necessary, supplemented with miscellaneous income received from commercial operations at the Center.

Accounts Payable

This amount has been kept very low, by cancelling amounts due as quickly as possible after presentation.

Third Party Funds

This account reflects advance payments on contributions from foundations, government entities or other organizations for specific purposes agreed to by the Institute. Funds are expended as activities agreed to are carried out.

Revolving Funds

This is an accumulated amount represented by funds such as those for constructions, equipment, publications, personnel, movement, scholarships and legal severance pay.

Reserves

This has been reduced to a very small amount, which was assigned for use by IICA-CIDIA from miscellaneous income earned by that Center.

General Working Fund

The increase in the general working fund was very little during the last year, principally due to three factors:

- 1) With collections of quotas being better in the last year, it was possible to carry out authorized programs at nearly the level of the budget approved.
- 2) Expenditures for special activities authorized by the Board of Directors to be charged directly to the fund, and reimbursed the following year.

Table 11. Summary of Income and Disbursements of the General Working Fund – 1 July 1973 – 30 June 1974
(United States Dollars)

	INCOME		DISBURSEMENTS
Quotas from Member States	5,550,821	BUDGET	
Others	1,336	Line of Action I	542,918
Reimbursement to the General Working Fund, from Budget	65,000	Line of Action II	962,366
		Line of Action III	592,530
		Line of Action IV	829,098
		Line of Action V	42,946
		Line of Action VI	399,353
		Line of Action VII	621,004
		Other Activities & Services	280,515
		Coordination & Supervision of Programs	450,553
		Executive Offices	495,062
		General Costs & Provisions	197,653
		Equipment (Investments)	22,306
			<u>5,436,304</u>
		Special Disbursements by Resolutions of the Board of Directors	28,952
		Transfer of balances from IICA accounts to CATIE	<u>136,549</u>
Total Income	<u>5,617,157</u>	Total Disbursements	5,601,805
		Increase in the General Working Fund	<u>15,352</u>
	<u><u>5,617,157</u></u>		<u><u>5,617,157</u></u>

Table 12. Budget Execution
(In thousands of dollars)

Fiscal Year	Approved Budget*	Actual Expenses	Percentage
1968-69	3,305	3,126	94.6
1969-70	3,624	3,330	91.9
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

* Does not include quotas corresponding to Cuba.

Table 13. Budget Execution by Level of Programming and Budget Units
(United States Dollars)

	Andean Zone	Northern Zone	Office for the Antilles	Southern Zone	CATIE Turrialba	IICA- CIDIA	IICA- CIRA	External Coordin.	Tech. Asst. & Planning	Executive Offices	TOTAL
Line of Action I	46,910	84,492	19,662	95,632		208,311	10,498		77,413		542,918
Line of Action II	201,036	124,175	31,058	351,094	210,857				44,146		962,366
Line of Action III	136,892	52,348	7,805	82,095	313,390						592,530
Line of Action IV	176,819	175,909	78,912	318,731	71,319				7,408		829,098
Line of Action V	14,928	18,864		9,154							42,946
Line of Action VI	82,874	138,647	21,475	96,947			59,410				399,353
Line of Action VII	199,229	140,703	17,606	177,571			15,784		70,111		621,004
Other Activities & Services	6,298	8,392		5,184		29,301	937	133,684	96,719		280,515
Coordination & Supervision of Programs	97,537	69,670		108,871	99,434	30,736	44,305				450,553
Executive Offices										495,062	495,062
Equipment (Investments)	4,465	9,559	4,740	3,068					474		22,306
SUBTOTAL											
* General Costs & Provisions	45,387	40,153	9,653	55,956	26,495	13,032	6,977				197,653
TOTAL	<u>1,012,375</u>	<u>862,912</u>	<u>190,911</u>	<u>1,304,303</u>	<u>721,495</u>	<u>281,380</u>	<u>137,911</u>	<u>133,684</u>	<u>296,271</u>	<u>495,062</u>	<u>5,436,304</u>

* Expenses have been distributed according to the percentages presented in the Program-Budget for 1973-74

FIGURE 3

PROGRAM BUDGET EXECUTION

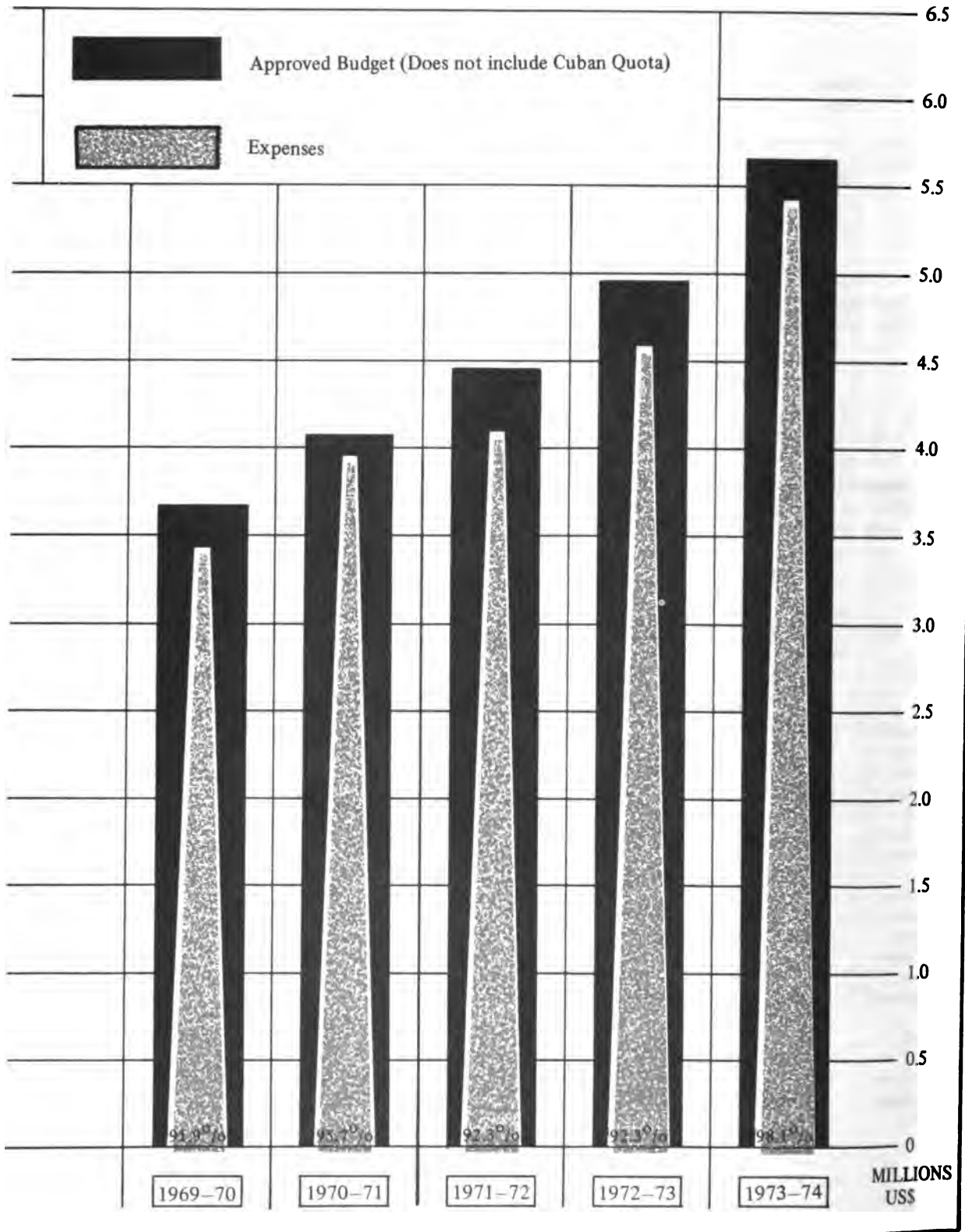


FIGURE 4

BUDGET EXECUTION BY PROGRAMMING LEVEL

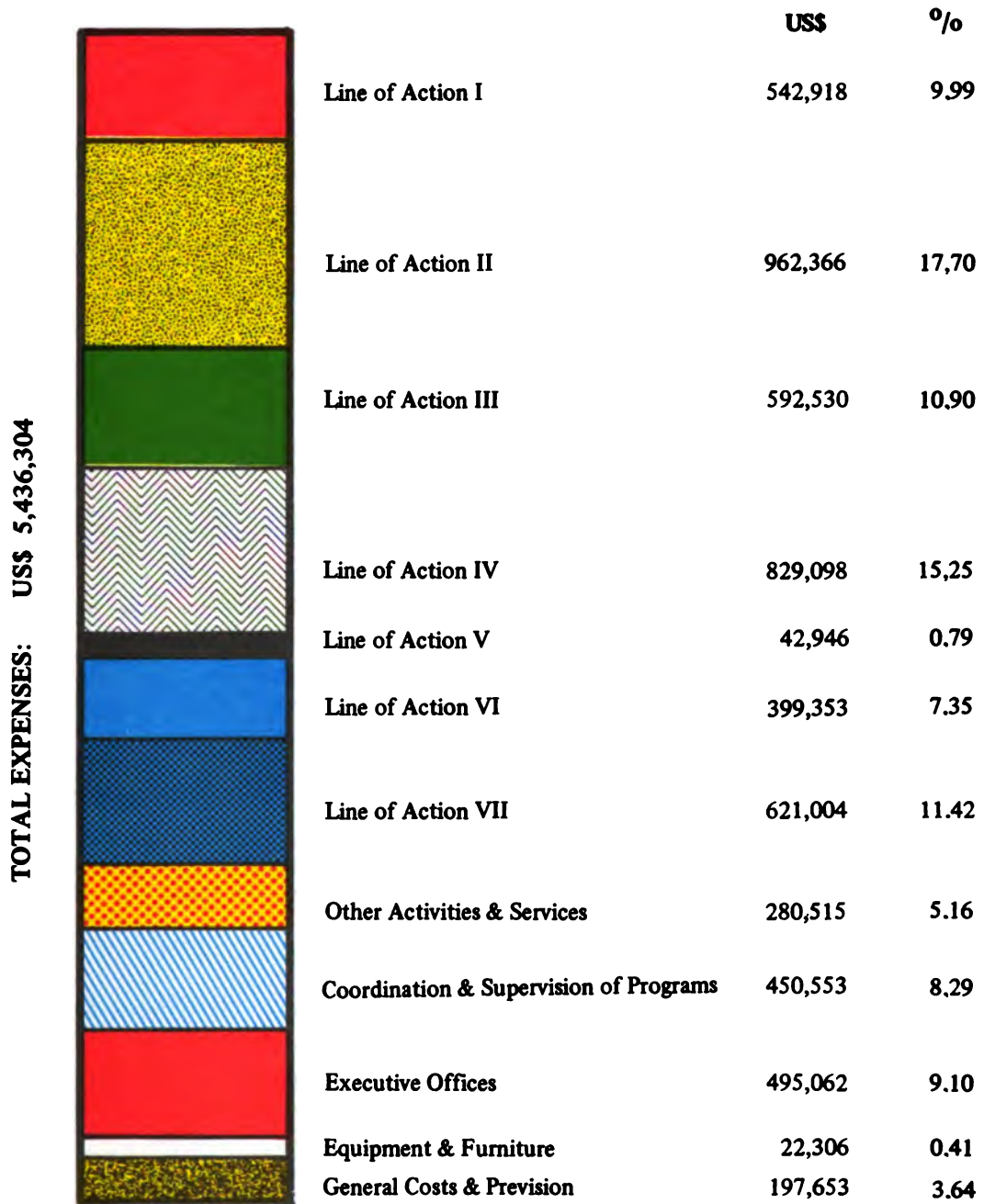


Table 14. Income and Disbursements of Funds Received for Specific Purposes**(United States Dollars)**

	Balance as	Operations during the year		Balance as
	of 30 June 1973	Income	Disbursements	of 30 June 1974
Funds Deposited in Special Accounts				
U.S. Atomic Energy Commission	7,901	75,353	70,084	13,170
Project 206 of the OAS Technical Cooperation Administration –Inter– American Program for Rural Development & Agrarian Reform	4,288	95,400	99,688	
Agreement between the Institute and various Governments and institutions (Table 14a.)	87,042	572,034	668,566	(9,490)
SUBTOTAL	99,231	742,787	838,338	3,680
Funds Included in General Accounts				
American Cocoa Research Institute (ACRI)	(6,787)	29,160	35,374	(13,001)
The Rockefeller Foundation – Promotion of ALAF in Latin America	(778)	5,594	4,816	
Council of Higher Education in the American Republics	5,323		3,715	1,608
Co–operative Program for the Study & Control of Coffee Rust	821		1	820
Donation from the Government of the Netherlands	1,139		1,139	
Donation from the Government of Venezuela	707			707
Dow Chemical N.V. Latin America	202		202	
Inter-American Association of Agricultural Librarians and Documentalists (AIBDA)	7,603	16,301	15,897	8,007
National Council for Development & Planning (CONADEP)	917		840	77
Central American Institute for Industrial Research & Technology (ICAITI)	(5,723)	19,000	9,419	3,858
International Coffee Office (OIC)	(3,107)	2,711		(396)
Kellogg Foundation– Texts & Teaching Materials Program		115,000	11,791	103,209
Kellogg Foundation – Support for the Inter-American Rural Youth Program		164,521	152,171	12,350
Canadian International Development Agency		5,000	4,656	344
'Gerald Murray' Donation		500	359	141
SUBTOTAL	317	357,787	240,380	117,724
TOTAL	99,548	1,100,574	1,078,718	121,404

Table 14 a. Income and Disbursements for Agreements with Governments and Institutions
(United States Dollars)

Description	Balance as of 30 June 1973	Operations Income	during the year Disbursements	Balance as of 30 June 1974
Agreement between the Agrarian Reform & Colonization Agencies of the Central American Isthmus and the Institute on the establishment of a program for training and studies in Agrarian Reform (PRACA/IICA)	15,298	46,450	43,453	18,295
Agreement between the National University of Colombia and the Colombian Agrarian Reform Institute to enter into relations with the Institute with a view to establishing an Agrarian Reform Center (INCORA/IICA)	(1,477)	40,298	44,521	(5,700)
Agreement between the Government of Ecuador and the Institute	6,043	51,956	59,918	(1,919)
Agreement between the Ministry of Agriculture & Livestock and the Ministry of Public Works of Venezuela with the Institute	(27)	30,373	30,413	(67)
Agreement between the Government of Colombia and the Institute on the National Agricultural Training Program	1,302	43,789	44,773	318
Memorandum of Understanding between the Ministry of Agriculture of Brazil and the Director General of the Institute	8,997	74,074	73,669	9,402
Agreement between the Executive Committee of the Plan for the Economic Recovery of the Cocoa Industry (CEPLAC) and the Institute	69,304	92,593	83,950	77,947
Agreement between the Federal Government of Brazil and IICA on technical assistance to the Irrigation Training Program of the Ministry of the Interior (MINTER)	18,657	47,530	68,338	(2,151)
Specific Agreement with the Ministry of Agriculture of Chile and IICA (DDEPA/IMA/IICA)	15,408	77,048	95,602	(3,146)
Agreement between the Ministry of Agriculture of Chile, the Ministry of Public Works & Transportation and IICA for advising and collaborating in a program for the creation of Water & Land Conservation districts	22,855	23,012	46,213	(346)
Agreement with the Universities of Chile for the establishment of a permanent Graduate Program in Agricultural Sciences and Forestry	9	1,479	2,029	(541)
Agreement with the Inter-American Development Bank (IDB) for the training program on the preparation and evaluation of agricultural projects	(69,327)	43,432	75,687	(101,582)
	<u>87,042</u>	<u>572,034</u>	<u>668,566</u>	<u>(9,490)</u>

3) The net transfer of accounts from IICA to the new Center CATIE in Turrialba, which was part of the final balance in the separation from IICA, in keeping with the contract.

The new level of the general working fund was \$3,057,338 against \$ 3,041,986 as of June 30, 1973.

As has been explained before, the composition of this fund is not all cash; however, during the last year the amount represented by cash and accounts immedi-

ately receivable increased in proportion to the amount represented by uncollected quotas, giving more liquidity to the fund.

Of the total amount in the fund as June 30, 1974, 32.9 percent was cash, 10.4 percent was accounts receivable, and the remaining 56.7 percent was in uncollected quotas.

The Institute has considered that an amount in cash equal to three months operation, or 25 percent of the

FIGURE 5

SUMMARY OF QUOTA BUDGET EXPENSES

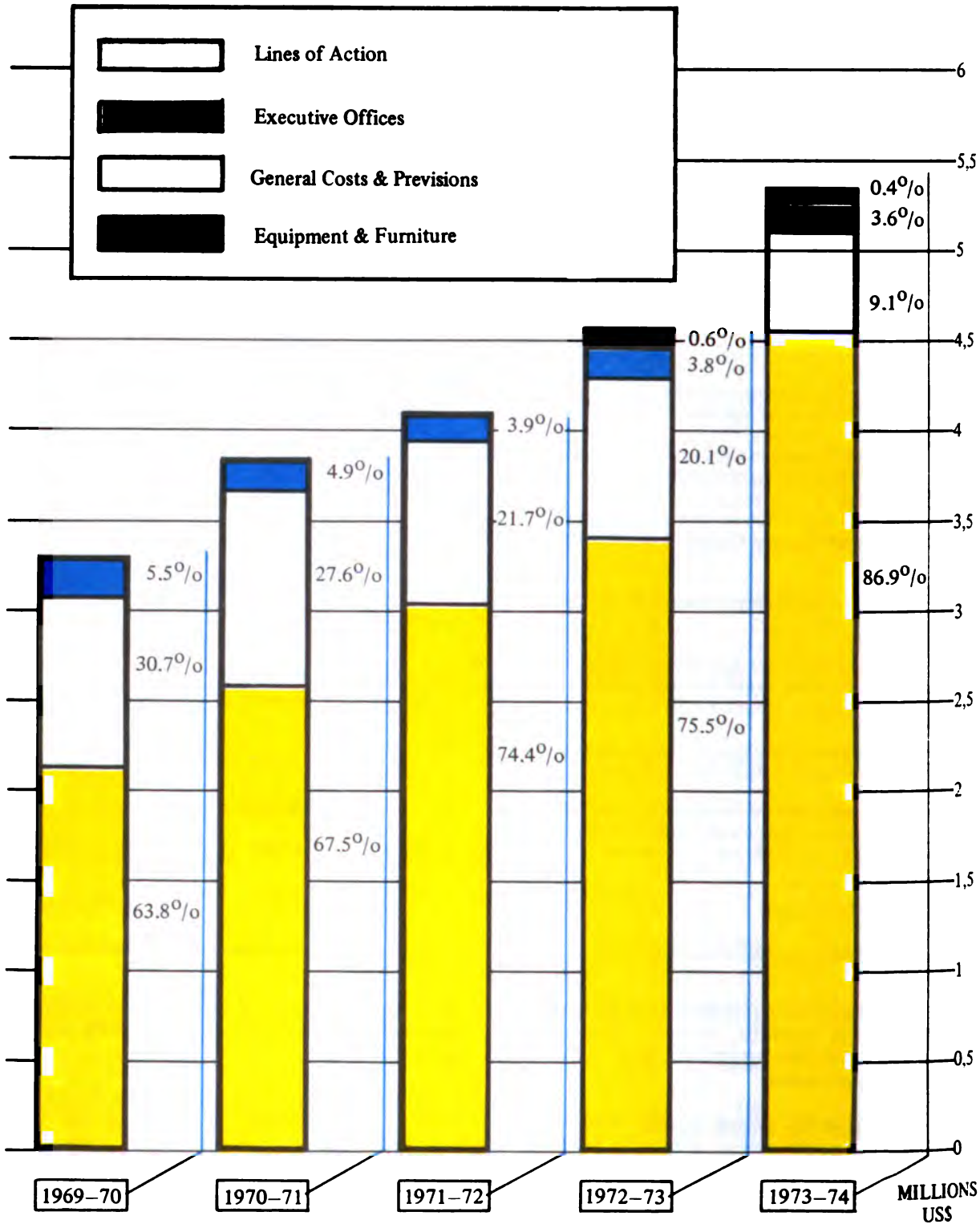


Table 15. Consolidated Statement of Income and Disbursements

(United States Dollars)

	Balance	Operations during the year		Balance
	as of 30 June 1973	Income	Disbursements	as of 30 June 1974
Funds from Quotas and others	3,041,986	5,617,157	5,601,805	3,057,338
Funds received for specific purposes	<u>99,548</u>	<u>1,100,574</u>	<u>1,078,718</u>	<u>121,404</u>
	<u>3,141,534</u>	<u>6,717,731</u>	<u>6,680,523</u>	<u>3,178,742</u>

* Includes US\$65,000 from the Program-Budget.

budget authorized, is necessary to assure proper coverage of expenditures for periods of time during the fiscal year when quota payments are not forthcoming. The liquidity in the fund, considering a large part of the receivables from contracts and agreements, which provides additional potential liquidity to the cash on hand, still provides less than that 25 percent, considered to be ideal.

The Board of Directors, however, at its annual meeting in May of 1975, will study this fund in order to establish its level and new regulations for its use.

A summary of income and disbursements appears in Table 11.

Cost Distribution by Line of Action (Table 13, Figures 3, 4 and 5)

Annual expenses charged to organizational units by Line of Action and other costs items are shown in Table 13.

Total budget expenses amounted to 98.1 percent of the budget approved. Figure 4 reflects graphically that 86.9 percent of the budget expenses were for activities in the various Lines of Action, or program area, whereas the remaining percentage was reflected in expenses for management, administration, general services, equipment, and general costs and provisions. This reflects the policy of applying a minimum of budget funds to the latter mentioned items, and increasing the percentage spent on programs. The increase over last

year in the percentage spent on program activities was approximately 11 percent.

Increased quota collections during the year provided funds for expenses, representing a larger percentage of the budget approved.

Funds Received for Specific Purposes (Table N^o 14)

The expenditure plan for funds received by IICA through contracts, donations, contributions, and other special agreements, does not always coincide with IICA's fiscal year. For purposes of this report, the movement of such funds is presented in such a way in table N^o 14, that they correspond to IICA's fiscal year, in order to facilitate the analyses on a fiscal year basis.

Table N^o15 shows a consolidated statement showing the movement of all funds for fiscal year 1973-1974 in comparative form with the previous fiscal year.

General Comments

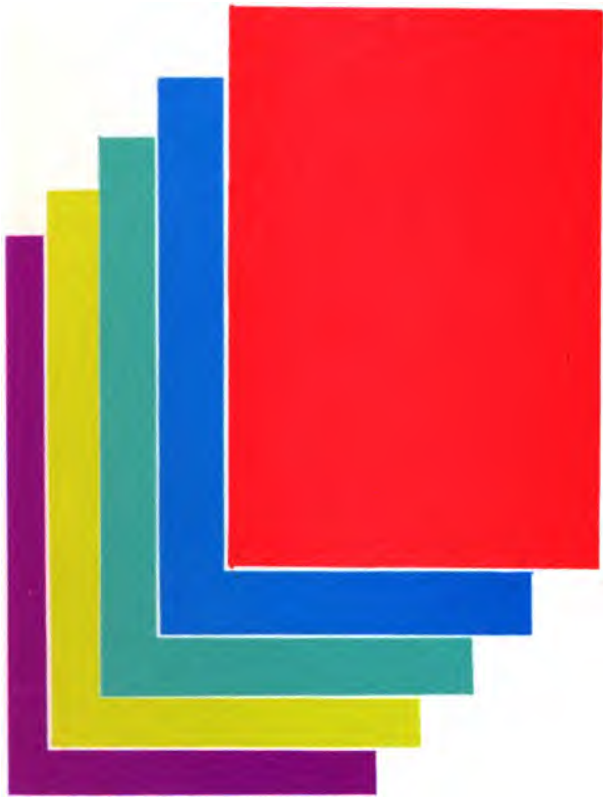
Although quota collections have increased in the last two years, it is difficult, still, to anticipate the cash income during the year. For that reason, the necessity to maintain IICA on a cash basis, and in addition, maintain certain safe liquidity in the general working fund, it is sometimes necessary to curtail or postpone some planned activities approved in the budget. During the last fiscal year, this curtailment was much less than in prior years, amounting to approximately 2 percent only.

**SUMMARY OF THE REPORT BY PRICE WATERHOUSE & CO.
ON THE FINANCIAL STATEMENTS OF IICA**

We have examined the accompanying financial statements (Exhibits 1 through 8) of the Inter-American Institute of Agricultural Sciences for the year ended June 30, 1974; Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. In accordance with the instructions of the Director General of the Institute, we did not request direct confirmation from the Member States of the uncollected quotas as of June 30, 1974; however, we were able to satisfy ourselves as to the amounts of these quotas by other auditing procedures.

In our opinion, subject to the matters mentioned in the preceding paragraph, the accompanying financial statements present fairly the assets and liabilities of the Inter-American Institute of Agricultural Sciences as of June 30, 1974 and the results of its operations for the year then ended, in accordance with the accounting principles explained in Note 1 which were applied on a basis consistent with that of the preceding year.

Price Waterhouse & Co.



APPENDICES



Appendix I.
IICA ACTIVITIES
DURING THE
1973 ~ 74 PERIOD



**IICA'S ACTIVITIES DURING THE
1973-74 PERIOD**

The activities described in the following list and which appear in Table 16 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 at 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 considerably greater than the total for last year (852 activities within the Lines of Action in the Member States, as compared to 787 for last year).

Table 16. Summary of IICA Activities Carried out by Lines of Action and by Countries.

Country	LINES OF ACTION							Activities and Services	Total per Country	
	I	II	III	IV	V	VI	VII			
Argentina	7	9	1	14	—	2	4	—	37	
Bolivia	3	12	5	4	—	1	4	1	30	
Brazil	9	18	16	21	—	—	15	4	83	
Canada	—	—	—	—	—	—	—	—	—	
Colombia	10	10	4	10	—	4	19	3	60	
Costa Rica	85	23	3	19	—	5	19	26	180	
Chile	6	12	3	8	—	6	4	—	39	
Dominican Republic	3	8	3	5	—	2	1	1	23	
Ecuador	7	7	7	5	2	6	5	—	39	
El Salvador	3	7	2	5	—	3	1	1	22	
Guatemala	8	13	1	4	—	3	2	—	31	
Guyana	—	—	—	—	—	—	—	—	—	
Haiti	4	2	—	15	—	1	3	—	25	
Honduras	4	1	4	2	—	4	2	—	17	
Jamaica	—	—	—	1	—	—	—	—	1	
Mexico	3	11	—	5	—	4	1	1	25	
Nicaragua	3	3	1	4	—	—	7	—	18	
Panama	5	—	4	2	—	2	4	—	17	
Paraguay	4	5	3	10	—	2	2	—	26	
Peru	7	7	11	16	1	10	7	1	60	
Trinidad & Tobago	—	—	—	—	—	—	—	—	—	
United States	—	—	—	1	—	—	—	—	1	
Uruguay	11	2	2	13	1	—	4	—	33	
Venezuela	7	20	2	6	—	6	6	—	47	
Multinational Activities	6	6	5	11	1	4	1	2	36	
Activities outside the area	—	—	—	—	—	—	—	—	—	2
TOTAL	195	176	77	181	5	65	111	40	850	852

ARGENTINA

Line I. Analysis of and Information on Rural Development

1. Tendency and situation analysis of the agriculture and cattle development in Argentina. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity I.S.121.
2. Preliminary diagramming of the Agricultural Institutional System in Argentina. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity I.S.122.
3. Elaboration of the IICA's action plan for Argentina. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity I.S.123.
4. Elaboration and publication of the CEDIE Information series. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity I.S.231.
5. Elaboration and publication of a series on the Organization and Administration of Research and Teaching. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity I.S.233.
6. Training in Agricultural Libraries and Documentation. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity I.S.234.
7. Advisory services provided on the Organization of the Central Library of the Provincial University of Jujuy. San Salvador de Jujuy. (July 1973, Jujuy) – Activity I.S.
2. Advisory services provided on the analysis of data from Socio-Economic Environment Studies for Innovation Purpose. (1 July 1973 through 30 June 1974, Balcarce) – Activity II.S.131.
3. Advisory services provided the Agricultural Sciences Graduate School in Argentina. (1 July 1973 through 30 June 1974, Castelar, Balcarce) – Activity II.S.121.
4. Advisory services provided on the Graduate Courses of Argentina. (1 July 1973 through 30 June 1974, Castelar, Balcarce) – Activity II.S.122.
5. Advisory services provided the Secretariat of AUDEAS. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity II.S.221.
6. Improvements in the Pedagogical Capacity of the Faculty. (1 July 1973 through 30 June 1974, La Plata) – Activity II.S.222.
7. Academic improvements of the Faculty. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity II.S.223.
8. Characterization of the Occupational Roles of the Agriculture Section. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity II.S.224.
9. Elaboration and Publication of the Series on Research and Teaching Studies. (1 July 1973 through 30 June 1974, Buenos Aires) – Activity II.S.232.

Line II. Agricultural Education

1. Second meeting of the Work Group to Analyse the Use of Credit as a Unit of Evaluation. (January 1974, Necochea, Buenos Aires) – Activity II.S.114.

Line III. Agricultural Research

1. In-Service Training on the Analysis of Socio-economic factors in Relation to the Innovation Technique. (22 April – 30 June 1974, Cuenca del Aolado) – Activity III.S.332.

Line IV. Promotion of Agricultural Production

1. Seminar and advisory services on the Credit Orientation Program.
(August 1973, Buenos Aires) – Activity IV.S.111.
2. Advisory service to two Venezuelan technicians on Agricultural Marketing.
(7 January – 6 March 1974, Buenos Aires) – Activity IV.S.153.
3. Advisory Services and Training on Marketing for Cooperative Entities.
(1 July 1973 through 30 June 1974, Buenos Aires) – Activity IV.S.222.
4. Problem Identification and Advisory Services to Agricultural Marketing Institutions.
(1 July 1973 through 30 June 1974, Buenos Aires) – Activity IV.S.223.
5. Study of Cattle Marketing in North Argentina.
(May – June 1974) – Activity IV.S.224.
6. Second Meeting of the Irrigation Program Committee.
(April 1974) – Activity IV.S.511.
7. Advisory Services to National and Provincial Irrigation Entities.
(1 July 1973 through 30 June 1974) – Activity IV.S.421.
8. Study of the Incidence of Irrigation Costs in Agricultural Production Costs.
(1 January – 30 June 1974) – Activity IV.S.423.
9. IV National Course on the Operation, Conservation and Development of Irrigation Systems.
(22 April – 17 May 1974, Jujuy) – Activity IV.S.426.
10. Animal Industry Study in the A-5 Region of the ATLAS.
(1 July 1973 through 30 June 1974, Balcarce) – Activity IV.S.511.
11. Animal Industry Study in the A-1 Region of the ATLAS.
(March – June 1974) – Activity IV.S.513.
12. Animal Industry in the A-4 Region of the ATLAS.
(March – June 1974, Buenos Aires) – Activity IV.S.516.
13. Intensive Course on the Administration, Operation and Conservation of the Irrigation System.

(August 1974, Córdoba) – Activity IV.S.424.

14. Advisory Services on the Administration of Irrigated Areas.
(16 October – 14 December 1973) – Activity IV.S.132.

Line VI. Promotion and Implementation of Structural Changes

1. Training Cycle on the Elaboration and Administration of the Agricultural Structure Regulating Projects.
(15 May – 11 June 1974, Buenos Aires) – Activity VI.S.111.
2. Advisory Services on the Implementation of the Agricultural Structure Regulating Projects.
(February 1973 – June 1974, Resistencia, Chaco) – Activity VI.S.112.

Line VII. Administration of Agricultural Policy

1. Advisory Services provided on Planning Methodology in Argentina.
(21 January – 30 June 1974, Buenos Aires) – Activity VII.S.141.
2. Training Cycle on the Elaboration, Evaluation and Administration of Agricultural Projects.
(15 May – 11 June 1974, Buenos Aires) – Activity VII.S.142.
3. Advisory Services on Regional Development Plans of the Central Region of Santiago del Estero.
(August 1973, La Banda) – Activity VII.S.312.
4. Training and Advisory Services on Regional Development Plans of the Santiagueña y Chaqueña Region.
(July 1973 – February 1974, Chaco) – Activity VII.S.313.

BOLIVIA

Line I. Analysis of and Information on Rural Development

1. Up-dating of Information on the Evolution of Agriculture and the Agricultural Institutions in Bolivia.
(1 July 1973 through 30 June 1974, La Paz) – Activity I.A.111.
2. Advisory Services provided the Agronomy Department of the San Simón University, on the

improvement of services.
(June 1974) – Activity I.A.251.

3. Basic Courses on Technical Writing.
(May 1974, Cochabamba) – Activity I.A.252.

Line II. Agricultural Education

1. Advisory Services provided the Higher Agriculture Education Institutions of Bolivia to Reorganize ABIEAS.
(1 July 1973 through 30 June 1974, La Paz) – Activity II.A.211.
2. Second Meeting of ABEAS.
(July 1973, La Paz) – Activity II.A.212.
3. Advisory Services to the Faculties of Animal Production in Bolivia.
(March and June 1974, La Paz, Santa Cruz de la Sierra) – Activity II.A.213.
4. Course on University Teaching Methodology.
(February 1974, Tarija) – Activity II.A.214.
5. First Meeting on Animal Production Training in Bolivia.
(June 1974, Santa Cruz) – Activity II.A.215.
6. National Course on Dasonomy.
(January 1974, Tarija) – Activity II.A.217.
7. Advisory Services on Forestry at the University of Tarija.
(August 1973 through June 1974, Tarija) – Activity II.A.218.
8. Advisory Services provided the Technical University of Oruro.
(1 July 1973 through 30 June 1974, Oruro) – Activity II.A.219.
9. Meetings of the Directive Committee of the Toledo-Oruro Project.
(1 July 1973 through 30 June 1974, Oruro) – Activity II.A.311.
10. Training Cycle for Personnel of the Extention and Rural Development Project of Oruro Training in Agriculture Projects.
(1 July 1973 through 30 June 1974, Oruro) – Activity II.A.312.
11. Socio-Economic Study of the Area.
(1 July 1973 through 30 June 1974, Oruro) – Activity II.A.313.
12. Programming and Aid on the Execution of Projects in the Area.

(1 July 1973 through 30 June 1974, Oruro) – Activity II.A.314.

Line III. Agricultural Research

1. Advisory Services provided the Agricultural Research Division of the Ministry of “Campesino” Affairs and Agriculture of Bolivia.
(November 1973 through June 1974) – Activity III.A.111.
2. Advisory Service and Working Meetings with Forest Research Organization of Bolivia.
(September 1973 through May 1974) – Activity III.A.221.
3. Support to Area Development Research, Oruro Department.
(July 1973, Oruro) – Activity III.A.321.
4. Course on the making the most of the Natural Agricultural Resources of the High Andes in the Oruro Area.
(July 1974, Oruro) – Activity III.A.322.
5. National Work Meeting on the Socio-Economic Aspects of Agricultural Research in Bolivia.
(June 1974, Cochabamba) – Activity III.A.411.

Line IV. Promotion of Agricultural Production

1. Work Meetings with Marketing Institutions.
(1 July 1973 through 30 June 1974, La Paz) – Activity IV.A.111.
2. Advisory Services on Marketing provided the Rice Institute, (ENA), the Industry and Trade Ministry and the Ministry of “Campesino” Affairs and Agriculture.
(1 July 1973 through 30 June 1974, La Paz) – Activity IV.A.113.
3. IV National Meeting on Animal Husbandry and Pastures.
(30 June – 5 July 1974, Cochabamba) – Activity IV.A.421.
4. Advisory Services on Forage Production.
(June 1973 through March 1974) – Activity IV.A.423.

Line VI. Promotion and Implementation of Structural Changes

1. Support to the Oruro Project.
(September 1973 through June 1974) – Activity VI.C.313.

Line VII. Administration of Agricultural Policies

1. Advisory Services on the Planning of the Regional Development Corporation of Oruro. (April 1974, Oruro) – Activity VII.A.111.
2. Study of the Administration and Management of the Agriculture Development Organizations of the Altiplano Region. (July 1973 through 30 June 1974, La Paz) – Activity VII.A.221.
3. Advisory Services provided the Ministry of "Campesino" Affairs on Political, Organization and Management Aspects. (17 July – 4 August 1973, La Paz) – Activity VII.A.222.
4. V Meeting of the Advisory Committee of the Cooperative Program for the Development of the American Tropics. (April 1974, Santa Cruz de la Sierra) – Activity VII.A.262.

BRAZIL

Line I. Analysis of and Information on Rural Development

1. Collaboration to the Central Library of the Federal Rural University of Rio de Janeiro. (January 1974, Rio de Janeiro) – Activity I.D.121.0
2. Coordination of the Participation in AGRINTER and AGRIS in Brazil. (May 1974, Brasilia) – Activity I.D.129.
3. Compiling and Examination of Official Documents. (June 1974, Rio de Janeiro) – Activity I.S.131.
4. Advisory Services provided on the Promotion of Feasibility Studies of the Agricultural Documentation and Information System. (1 July 1973 through 30 June 1974, Belem, Para and Pelotas, RGS) – Activity I.S.221.
5. Support to the Federal University of Viçosa on its Program of Collaboration to the Scientific and Technological Information Subsystem. (1 July 1973 through 30 June 1974, Viçosa, MG) – Activity I.S.223.
6. International Technical Meeting on Technical and Scientific Publications. (June 1974, Porto Alegre) – Activity I.S.271.
7. Advisory Services provided the Affiliates of ABEAS on the Establishment of Teaching Support Units and on the Organization of Courses on Teaching Methodology. (1 July 1973 through 30 June 1974) – Activity I.S.
8. Editing of Publications. (1 July 1973 through 30 June 1974, Rio de Janeiro) – Activity I.S.
9. Advisory Services to the Integrated Investments Program, RS, on the Publication of Completed Studies (May 1974, Pôrto Alegre, RS) – Activity I.S.

Line II. Agricultural Education

1. International Technical Meeting of Coordinators of Graduate Courses in Plant Production. (March 1974, Piracicaba, SP) – Activity II.S.112.
2. First Work Group Meeting to Analyze the Use for Credit as an Evaluation Unit. (August 1973, Piracicaba, S.P.) – Activity II.S.113.
3. Support to the Executive Secretariat of ABEAS on the Running of the Graduate Coordination Council for Agricultural Sciences. (1 July 1973 through 30 June 1974, Rio de Janeiro) – Activity II.N.131.
4. Advisory Services to the University of Brasilia on the Implementation of the Graduate Course in Communications. (1 July 1973 through 30 June 1974, Brasilia) – Activity II.S.134.
5. Collaboration provided ABEAS on the Organization of Meetings of the Graduate Coordination Council for Agricultural Sciences. (May 1974, Rio de Janeiro) – Activity II.S.135.
6. Joint Meeting of the Advisory Committee on Education (7th) and the Graduate Advisory Committee (3rd.). (May 1974, Belo Horizonte, MG) – Activity II.S.212.
7. Elaboration of a Plan for the Training of Human Resources for Agricultural Development, at the Professional Level. (1 July 1973 through 30 June 1974, Rio de Janeiro) – Activity II.S.231.
8. Participation in the XIII Annual Meeting of ABEAS.

- (October 1973, Pelotas, RS) – Activity II.S.231.1.
9. Support provided the Operations of the Executive Secretariat of ABEAS. (1 July 1973 through 30 June 1974, Rio de Janeiro) – Activity II.S.232.
 10. Organization of a Seminar on Curricula and Advanced Agricultural Teaching Methods. (October 1973, Pelotas, RS) – Activity II.S.234.
 11. Advisory Services provided the Federal University of Minas Gerais on the Creation of a Center for Pedagogical Training for University Professors. (1 July 1973 through 30 June 1974, Belo Horizonte, MG) – Activity II.S.235.
 12. Publication of Manuals of Teaching Methodology and on the Organization of Teaching Support Units. (UAD). (1 July 1973 through 30 June 1974, Rio de Janeiro) – Activity II.S.237.
 13. Collaboration provided the Department of Rural Engineering of the Federal University of Pelotas to Organize and Implement a Course on Agricultural Engineering. (1 July 1973 through 30 June 1974, Pelotas, RS) – Activity II.S.238.
 14. International Seminar on Curriculum Technology. (May 29-31 1974, Belo Horizonte, MG) – Activity II.S.
 15. II Inter-American Seminar on Rural Youth Support Entities. (November 1973, Campinas, SP) – Activity II.S.
 16. Advisory Services provided EMBRAPA on Personnel Training Programs at an M.S. and Ph.D. level. (August 1973, Brasilia) – Activity II.S.
 17. Advisory Services provided the Brazilian Literacy Movement (MOBRAL) in the Training of "Mobilization Agents" (Social Workers). (June 1974, Rio de Janeiro) – Activity II.S.
 18. Support to the Consortium of Universities of Rio Grande Do Sul. (June 1973 through July 1974) – Activity II.S.133.
- Line III. Agricultural Research**
1. Meeting of the Advisory Committee of the Co-operative Program. (June 1974, Brasilia) – Activity III.S.111.
 2. Advisory Services on the Preparation of an Investment Program for the Strengthening of Agricultural Research. (October 1973 through June 1974, Brasilia) – Activity III.S.212.
 3. Advisory Services provided EMBRAPA on Documentation and Information. (August 1973, Brasilia) – Activity III.S.214.
 4. Participation in a Meeting on "Cacao e Seringa na Amazonia". (January 1974, Belem, Pará) – Activity III.S.
 5. Advisory Services provided the Foundation Agronomical Institute of Parana (IAPAR). (January 1974, Londrina, Parana) – Activity III.S.
 6. Facilitate Graduate Studies possibilities for CEPLAC technicians in the Area of Diversification. (August 1973, Viçosa) – Activity III.S.241.
 7. Facilitate Training Trips to CEPLAC Specialists. (January 1974, Itabuna, Ba.) – Activity III.S.241.2.
 8. Advise CEPLAC on its work plans and on the Reformulation of Structures. (1973, 1974, Itabuna) – Activity III.S.241.3.
 9. Collaborate on the Programming of the Cocoa Research Center. (1973, 1974, Itabuna) – Activity III.S.241.4.
 10. Advice on the Reformulation and Implementation of Research Projects. (1973, 1974, Itabuna) – Activity III.S.241.5
 11. Intensive Course in Plant Physiology. (March and June 1974, Itabuna) – Activity III.S.242.
 12. Course on Plant-Water Relationships. (March and June 1974, Itabuna) – Activity III.S.245.
 13. Intensive Course on Research Methodology to Induce Rain. (27-28 September 1973, Itabuna) – Activity III.S.246.
 14. Advisory Services provided the Agricultural Diversification Program of CEPLAC. (November 1973, Itabuna) – Activity III.S.247.
 15. Advisory Services provided the Food Technology Program of CEPEC. (1973, 1974, Itabuna) – Activity III.S.248.

16. Advisory Services provided on the Organization and Administration of Libraries. (1973, 1974, Itabuna) – Activity III.S.249.

Line IV. Promotion of Agricultural Production

1. Collaboration on the Organization, Installation and Operation of the "Institute of Irrigation Technology and Training of the Northeast". (1 July 1973 through 30 June 1974, Petrolina) – Activity IV.S.131.
2. Course on Draining on Farm Lands. (7 November through 14 December 1973, Petrolina and Sao Gonçalo) – Activity IV.S.131.0
3. Collaboration in the Programming of the 1974 Activities of the IICA–MINTENER Agreement. (November 1973, Petrolina) – Activity IV.S.131.1.
4. Technical Meeting on the "Morada Nova" Irrigation Project, of DNOCS. (30 July through 3 August 1973, Morada Nova, Ce.) – Activity IV.S.131.5.
5. First Meeting of Irrigation and Draining Professors of the Universities of the Northeast. (July 1973, Petrolina) – Activity IV.S.131.6
6. Course on Land Systematization. (22 October through 11 November 1973, Caucaí, Ce.) – Activity IV.S.131.7.
7. Collaboration on an Irrigation Engineering Course. (6 August through 15 Dec. 1973, Paraíba, CG) – Activity IV.S.136.
8. Technical Meeting on the "BEBEDOURO" Irrigation Project of SUVALE. (October 1973, Petrolina) – Activity IV.S.139.
9. Agro-economic Studies of Livestock in Regionalized Areas of Brazil (RGS). (December 1973 through June 1974, Pelotas, RS) – Activity IV.S.515.
10. Collaboration on the Organization of an Inventory and Analysis of Research Work. (1 July 1973 through 30 June 1974) – Activity IV.S.131.3.
11. Advisory Services provided Research Programs on Irrigated Agriculture in the Northeast. (1 July 1973 through 30 June 1974) – Activity IV.S.131.4.

12. Course on Research Methods and Techniques in Irrigated Agriculture. (January 14 through February 22 1974) – Activity IV.S.131.8.
13. Meeting of Research Coordinators on Irrigated Agriculture. (February 12 through 14 1974) – Activity IV.S.131.9.
14. General Course on Irrigation, for Agronomy Students. (July 1973, Petrolina) – Activity IV.S.132.
15. Course on Irrigated Pastures. (March 1974) – Activity IV.S.132.0
16. Course on Cooperativism and the Marketing of Agricultural Products. (April 15 through May 10 1974) – Activity IV.S.132.1.
17. Course on Vegetable and Fruit Production. (27 May through 12 June 1974) – Activity IV.S.132.2.
18. Course for Irrigation Instructors. (7 August through 14 September 1973, Petrolina) – Activity IV.S.134.
19. Course on the Economics of Hydraulic Resources Projects. (August 1973, Rio de Janeiro) – Activity IV.S.133.
20. Course on Irrigated Agriculture for Middle Level Rural Technicians. (28 August through 27 September 1973, Sao Gonçalo) – Activity IV.S.135.
21. Course on Cooperativism, Rural Management and the Marketing of Agricultural Products. (18 September through 12 October 1973, Recife Pe.) – Activity IV.S.137.

Line VII. Administration of Agricultural Policy

1. International Symposium on Wild Life and River and Lake Fishing in the Amazon. (26 November through 1 December 1973, Manaus, Am.) – Activity VII.S.234.
2. Advisory Services to the Brazilian Institute of Agricultural Research (EMBRAPA) on the Elaboration of Guidelines for Agricultural Research for the Amazonia (Humid Tropics). (May 1974, Brasilia, D.F.) – Activity VII.S.255.

3. Meeting of the National Coordination Committee of the Cooperative Program of Brazil. (March 1974, Belem, Pa.) – Activity VII.S.261.1.
4. Meeting for the Programming of IICA's Activities in Brazil. (February 1974, Rio de Janeiro) – Activity VII.S.263.
5. Participation in the VII Brazilian Congress of Library Science and Documentation. (20 July to 4 August 1973, Belem, Pa.) – Activity VII.S.264.
6. Coordination of the Project "Socio-Economic Diagnosis of the Cocoa Region". (1 July 1973 to 30 June 1974, Itabuna, Bahia) – Activity VII.S.331.
7. Elaboration of the Final Diagnostic Studies Document. (1 July 1973 through 30 June 1974) – Activity VII.S.334.
8. Course of Economic Analysis. (16 January to 16 February 1974, Ilheus, Ba.) – Activity VII.S.335.
9. Advisory Services on the Development of the Documentation Center for the Amazonia. (August 1973, Belem, Para) – Activity VII.S.
10. Advisory Services to the Agronomic Institute of Parana (IAPAR) Foundation. (January 1974, Londrina, Parana) – Activity VII.S.
11. Advisory Services to the Faculty of Agricultural Sciences of Para, (FCAP) on the Establishment of the Career in Veterinary Medicine. (May 1974, Belem, Para) – Activity VII.S.251.
12. Advisory Services to the Association of Credit and Rural Assistance of the State of Para (ACAR-PARA) on the Socio-Economic Study of the State of Para. (1 July 1973 through 30 June 1974, Belem, Para) – Activity VII.S.252.
13. Advisory Services on the Coordination of the Work Group responsible for the Preparation of the Integrated Investment Program of RGS. (1 July 1973 through 30 June 1974, Pôrto Alegre) – Activity VII.S.321.
14. Advisory Services on Formulation Techniques for the Integrated Investment Program (RGS) and Specific Projects. (July 1973 through September 1974, Pôrto Ale-

gre) – Activity VII.S.322.

15. Advisory Services on Agricultural Zoning Aspects. (1 July 1973 through 30 June 1974, Pôrto Alegre) – Activity VII.S.323.

COLOMBIA

Line I. Analysis of and Information on Rural Development

1. Collaboration provided IICA–CIDIA on a Specialized Bibliographic Documentation Service. (1 July 1973 through 30 June 1974, Bogota) – Activity I.C.111.
2. Collaboration provided IICA on the Compiling of Agricultural Bibliographic Information in Colombia. (1 July 1973 through 30 June 1974, Bogota) – Activity I.C.112.
3. Collaboration provided IICA–CIDIA on the Editing and Distribution of the Magazine "Desarrollo Rural en las Americas". (15 April to 15 August 1973, Bogota) – Activity I.C.113.
4. Compilation of Information on the Evolution of Agriculture and Agricultural Institutions in Colombia. (January – May 1974, Bogota) – Activity I.C.114.
5. Up-dating and Analysis of Information on the Evolution of Agriculture and the Institutions of the Sector. (August 1973 to June 1974, Bogota) – Activity I.A.121.
6. Presentation of AGRINTER to the International Documentation Federation, Latin-American Committee –FID/CLA. (October 1973, Bogota) – Activity I.D.125.
7. Promotion of the Implementation of National Sub-systems of Information in Agricultural Sciences and the Strengthening of the Agricultural Library in Colombia. (January 1974, Bogota) – Activity I.D.128.
8. Bibliography on Rural Cadastral Surveying. (1 July 1973 through 30 June 1974, Bogota) – Activity I.D.353.
9. Support provided the Communications Seminar on the Anti-Foot and Mouth Disease Campaign. (July 1973, Bogota) – Activity I.A.

10. Meeting with the Regional Directors to Discuss the Scope in the Programming of IICA's Activities.
(November) – Activity I.P.153.

Line II. Agricultural Education

1. Collaboration provided IICA's Graduate Program (30 July to 13 August 1973, Bogota) – Activity II.A.22.
2. Course on Teaching Methodology for ICA's Graduate Students.
(April – June 1974, Bogota) – Activity II.A.121.
3. Course on University Teaching Methodology.
(February 1974) – Activity II.A.214.
4. Survey of Colombian Faculties of Agricultural Sciences.
(1 July 1973 to 30 June 1974) – Activity II.A.221.
5. Course on Teaching Methodology for Professors of the Faculty of Agronomy, Dasonomy and Animal Husbandry of the University of Tolima.
(January 1974, Ibague) – Activity II.A.222.
6. Course of Teaching Methodology for Professors of the Faculties of Agricultural Sciences of the University of Cordoba.
(March 1974, Monteria, Cordoba) – Activity II.A.223.
7. Creation of Educational Change Units to Work on Plans for Extended Contact in Advanced Agricultural Teaching Methodology.
(May 1974, Medellin, Santa Marta and Ibague) – Activity II.A.224.
8. Advisory Services provided the Faculty of Forestry Engineering in Ibague.
(7 May to 28 June 1974, Ibague) – Activity II.A.225.
9. Support to the IV Forestry Congress of Colombia.
(August – December 1973, Bogota) – Activity II.A.226.
10. Reciprocal Training of Extension Supervisors.
(June 1974) – Activity II.A.334.

Line III. Agricultural Research

1. In-Service Training for Researchers on the

Production of Grain Legumes.
(December 1973) – Activity III.N.162.

2. Training of Panamanian Technicians in the Production of Grain Legumes.
(March–May 1974) – Activity II.N.182.
3. IV Meeting of the Regional Cooperative Program of the High Andes.
(May 1974, Pasto) – Activity III.A.311.
4. National Work Meeting on the Socio-Economic Aspects of Agricultural Research in Colombia.
(October, Palmira) – Activity III.A.421.

Line IV. Promotion of Agricultural Production

1. In-Service Training for High Level Personnel of the National Rice Company.
(January 1974, Valle del Cauca and Bogota) – Activity IV.A.115.
2. National Executive Meeting of Colombian Marketing Organizations.
• (October 1973, Bogota) – Activity IV.A.122.
3. In-Service Training for Three Ecuadorian Technicians in Marketing.
(17 June to 17 July 1974) – Activity IV.A.134.
4. In-Service Training on Marketing for four Peruvian Technicians, in Colombia.
(March 1973 and 5 to 25 May 1974) – Activity IV.A.143.
5. Studies on the Colonization Problems in Colombia.
(August 1973 to January 1974, Bogota) – Activity IV.A.221.
6. Studies on the Coordination of the Organizations of Rural Extension, Agricultural Research and Agricultural Credit of the Bank for Agrarian, Industrial and Mining Credit.
(1 July 1973 to 30 June 1974, Bogota) – Activity IV.A.311.
7. Seminar on Criteria for Colonization Programs.
(June 1974, Bogota) – Activity IV.A.222.
8. Advisory Services provided INCORA on Programming Techniques, Control and Evaluation of Colonization Programs.
(August 1973 to March 1974) – Activity IV.A.224.
9. Promotion on the Elaboration of the National Plan for the Marketing of Agricultural Products

in Colombia.

(1 July 1973 to 30 June 1974) – Activity IV.A.123.

10. The Compilation and Preliminary Analysis of Information Relative to the Agricultural Marketing Organizations in Colombia.
(1 July 1973 to 30 June 1974) – Activity IV.A.124.

Line VI. Promotion and Implementation of Structural Changes

1. Advisory Services provided INCORA on the IICA–FAO Research on Communitary Enterprises.
(1 July to 30 August 1973, Bogota) – Activity VI.C.111.
2. Andean Regional Course on Communitary Enterprises.
(May 1974, Bogota and Cali) – Activity VI.C.115.
3. In-Service Training on Cadastral Surveying and Farm Evaluation.
(15 April to 31 May 1974) – Activity VI.A.154.
4. Collaboration provided IICA's office in Venezuela for the National Meeting on "Campesino" Organization.
(February to May 1974, Bogota) – Activity VI.C.213.

Line VII. Administration of Agricultural Policy

1. Advisory Services provided the Autonomous Regional Corporation of the Cauca in the Preparation and Evaluation of High Level Agricultural Projects.
(February – June 1974, Cali and Bogota) – Activity VII.A.151.
2. Regional Seminar on the Coordination of Agricultural Extension, Research and Credit.
(March 1974, Bogota) – Activity VII.A.211.
3. Participation in the IV National Forestry Congress (Colombia).
(October 1973, Bogota) – Activity VII.S.264.
4. Courses on Teaching Methodology at a Basic Level.
(January and February 1974) – Activity VII.A.311.
5. II Short Course on Technical Drafting.
(July 1973, Bogota) – Activity VII.A.312.

6. IV Seminar on Communications for Development.
(September 1973, Bogota) – Activity VII.A.315.
7. Basic Course on Teaching Methodology.
(30 July to 10 August 1973, Bogota) – Activity VII.A.316.
8. Course on Rural Sociology.
(26 November to 7 December 1973, Bogota) – Activity VII.A.317.
9. Course on Teaching Methodology at a Basic Level.
(25 February to 8 March 1974, Bogota) – Activity VII.A.318.
10. Seminar on Agricultural Marketing.
(April 1974, Bogota) – Activity VII.A.322.
11. Executive Meeting on Agricultural Marketing Problems and Policies.
(October 1973, Bogota) – Activity VII.A.323.
12. Course on Threshing and Drying for Laboratory Assistants from IDEMA.
(17 December 1973 through 5 January 1974, Bogota) – Activity VII.A.331.1.
13. III Seminar on Communications for Development.
(July 1973, Bogota) – Activity VII.
14. V Seminar on Communications for Development.
(10 to 18 June 1974, Bogota) – Activity VII.
15. Information course for Visiting Technicians.
(27 February to 22 May 1974, Bogota) – Activity VII.
16. Course for the Training of Laboratory Purchasers.
(25 March to 17 May 1974 and 20 May to 13 June 1974, Bogota) – Activity VII.
17. Publication of the Proceedings of the Regional Agricultural Planning Seminar and Special Document on the State of Planning in Latin America.
(January – March 1974, Bogota) – Activity VII.CS.111.
18. Course on Rural Management.
(March 1974, Bogota) – Activity VII.A.332.
19. Course on the Preparation and Evaluation of Agricultural Projects.
(August – September 1973, Bogota) – Activity VII.A.343.

COSTA RICA

Line I. Analysis of and Information on Rural Development

1. Development and Coordination of the Inter-American Information System for Agricultural Sciences (AGRINTER).
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.121.
2. Organization of the V Round-table of the Inter-American Program of Agricultural Libraries and Documentation-AGRINTER.
(1 July to 31 August 1973, Turrialba) – Activity I.D.122.
3. Compatibility Analysis of the Inter-American Information System for Agricultural Sciences AGRINTER, with AGRIS.
(November 1973, Turrialba) – Activity I.D.123.
4. Coordination of CIDIA with the Information Activities of the Regional Office of FAO, Chile.
(1 August 1973 through 30 July 1974, Turrialba) – Activity I.D.126.
5. Study and Analysis of the Automated Catalogs of Agricultural Libraries and their Application in Latin America and the Caribbean.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.127.
6. Organization and Coordination of CIDIA's Operations as "Regional INPUT Center" of AGRIS for Latin America and the Caribbean.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.132.
7. Preparation of a Selective List of Periodic Agricultural Publications in Latin America and the Caribbean for its Integration to AGRIS.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.134.
8. Evaluation of CIDIA's Participation in the Experimental Phase of AGRIS.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.135.
9. Participation in the "Work Group" for the Establishment of an International Information System on Coffee.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.136.
10. Guidelines for the Organization of Courses for Information Users.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.211.
11. Cooperation in the Study of Information Users, for the AGRINTER-AGRIS Systems.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.213.
12. Coordination of the Survey on the Need for Texts in Agricultural Training in the Hemisphere.
(July – December 1973, Turrialba) – Activity I.D.214.
13. Course of Institutional Technical Writing for ICE.
(July – August 1973, San Jose) – Activity I.D.215.
14. Strengthening of DESAGRO's Information Department.
(July – September 1973, Turrialba) – Activity I.N.221;
15. XVII International Course on Agricultural Libraries and Documentation.
(March – June 1974, Turrialba) – Activity I.D.221.
16. First Inter-American Seminar on Advances in Agricultural Documentation.
(August – September 1973, Turrialba) – Activity I.D.222.
17. Training of Personnel from the National Documentation and Information System.
(August – September 1973, Turrialba) – Activity I.S.222.
18. Conferences in the Library of the University of Costa Rica on "Characteristics and Problems of Basic Literature."
(October – November 1973, San Jose) – Activity I.D.223.
19. Up-dating sessions for Librarians and Documentalists.
(September – November 1973, Turrialba) – Activity I.D.224.
20. Support to the Operation of the Executive Secretariat of the Inter-American Association of Librarians and Documentalists.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.231.
21. Advisory Services to the Executive Secretariat of the Inter-American Association of Agricultural Librarians and Documentalists-AIBDA.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.232.
22. Support on the Organization of the V Meeting of the International Association of Agricultural

- Librarians and Documentalists – IAALD, and the IV Meeting of the Inter-American Association of Agricultural Librarians and Documentalists–AIBDA.
(July 1973 through June 1974, Turrialba) – Activity I.D.233.
23. Scholarship for Library Science Studies.
(March – June 1974, Turrialba) – Activity I.A.241.
 24. II International Meeting on Technical and Scientific Publications.
(August 1974, Turrialba) – Activity I.S.272.
 25. Promote the Formation and Development of Collections for the Libraries and Documentation Centers.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.311.
 26. Translation into Spanish of the List of Subject Categories of AGRIS.
(May 1974, Turrialba) – Activity I.D.311.0.
 27. Reprinting of the work “Agrarian Reform in Latin America” by A. Franco.
(January 1974, San Jose) – Activity I.D.331.1.
 28. Technical Analysis and Processing of Documents.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.312.
 29. Services of Inter-Library Cooperation.
(July 1973 through June 1974, Turrialba) – Activity I.D.313.
 30. Compilation of Basic Lists of Agricultural Publications for Libraries and Documentation Centers.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.314.
 31. Preparation of a Cataloguing Manual for Latin America and the Caribbean, specializing in Agricultural Sciences, Natural Resources, Cartography.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.315.
 32. Elaboration of a List of Titles in Spanish for Agricultural Libraries.
(1 July 1973 through 30 June 1974, Turrialba) – Activity ID.316.
 33. Translation into Spanish of FAO’s Vocabulary for Agricultural Sciences.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.318.
 34. Translation into Spanish of the Manual for Bibliographic Description of AGRIS.
(November 1973 through June 1974, Turrialba) – Activity I.D.319.
 35. Editing of Four Issues of the Journal “Turrialba”.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.321.
 36. Editing of Three Issues of the Journal “Desarrollo Rural en Las Americas”.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.322.
 37. Editing of Four Issues of the Bulletin for Agricultural Libraries.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.323.
 38. Editing of Publications on Communications.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.324.
 39. Publication of the Book “Introduction to Soil Chemistry”, by H.W. Fassbender.
(June 1973 through July 1974, Turrialba) – Activity I.D.331.
 40. Publication of the Book “Introduction to Statistics” by W. Caballero.
(July 1973 through June 1974, Turrialba) – Activity I.D.332.
 41. Publication of the Book “Manual of Soil Physics”, by W. Forsythe.
(July 1973 through June 1974, Turrialba) – Activity I.D.333.
 42. Publication of the Book “Introduction to the Physics and Chemistry of Foods”, by F. del Valle.
(July 1973 through June 1974, Turrialba) – Activity I.D.334.
 43. Publication of the Pamphlet: “Professors are Needed who wish to Publish their Books”.
(January 1974, Turrialba) – Activity I.D.335.
 44. Editing of the Series of Slides for a Course in Botany.
(June 1974, Turrialba) – Activity I.D.336.
 45. Publication of the Book “Soil Mineralogy” by E. Besoain.
(June 1974, Turrialba) – Activity I.D.337.
 46. Editing of the Series of Slides for a Course on Phytopathology.
(June 1974, Turrialba) – Activity I.D.338.

47. Publication of the Book "Manual on the Administration of Agricultural Enterprises" by G. Guerra.
(February 1974, Turrialba) – Activity I.D.339.
48. Participation in the Preparation of an Agricultural Bibliography for Latin America and the Caribbean.
(1 July 1974 through 30 June 1974, Turrialba) – Activity I.D.341.
49. Preparation of a Collective Catalog of Periodic Publications of Select Libraries from Latin America and the Caribbean.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.342.
50. Latin American Index of Theses in Agricultural Sciences, Supplement.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.343.
51. Bank of Agricultural Bibliographies for Latin America and the Caribbean.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.344.
52. Question and Answer Service, Specialized Bibliographies.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.345.
53. Reprographic Services.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.346.
54. Agricultural Information on Microcards for Latin America and the Caribbean.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.347.
55. Bibliography on Tropical Forages and Grasses.
(July 1973, Turrialba) – Activity I.D.351.
56. Bibliography on the Regeneration of Tropical Forests.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.352.
57. Bibliography on Meliaceae; Supplement.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.354.
58. IICA contributions to the Literature on Agricultural Sciences.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.355.
59. Literature on Library Sciences and Agricultural Documentation.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.356.
60. Directory of Abbreviations in Agricultural Sciences.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.357.
61. Bibliography on Multiple Crops.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.358.
62. Coordination of the Distribution System of IICA Publications at an Hemispheric Level.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.361.
63. IICA-CIDIA distribution of Publications.
(July 1973 through June 1974, Turrialba) – Activity I.D.362.
64. Elaboration of a Distribution Manual for IICA Publications.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.363.
65. The study and Identification of Interested Publics for the Distribution of IICA Publications.
(10 January 1974 to 30 June 1974, Turrialba) – Activity I.D.364.
66. Informative Bulletin of IICA-CIDIA.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.371.
67. Pamphlet on the Structure and Operation of IICA-CIDIA.
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.372.
68. The preparation and Provision of Data and Statistics on IICA-CIDIA Activities for the Series "Services to the Countries".
(1 July 1973 through 30 June 1974, Turrialba) – Activity I.D.373.
69. Collaboration with the University of Costa Rica on the Elaboration of a Thesis Preparation Manual.
(January – May 1974, Turrialba) – Activity I.D.
70. Course on the Utilization of Agricultural Scientific Literature.
(January – March 1974, Turrialba) – Activity I.D.
71. Assistance in the Preparation of Thesis Bibliographies in the Graduate School of the University of Costa Rica.

- (1 July 1973 through 30 June 1974, Turrialba)
– Activity I.D.
72. Tutorship on Thesis Research for the Graduate School of CATIE.
(1 July 1973 through 30 June 1974, Turrialba)
– Activity I.N.
73. Study on Basic Information for the Rural and Institutional Analysis of Costa Rica.
(1 July 1973 through 30 June 1974) – Activity I.N.111.
74. Meeting on Diagnostic Studies for the Economic Development Advisors of the Regional Offices.
(July 1973, San Jose) – Activity I.P.111.
75. Revision and Consolidation at a Hemispheric Level of the Regional Diagnostic Studies.
(May 1974, San Jose) – Activity I.P.114.
76. Preparation of a New Document on Institutional Development.
(July 1973, San Jose) – Activity I.P.121.
77. Meeting of the Advisors on Institutional Development of the Zones to Discuss the Document and to Seek its future Implementation.
(March 1974, San Jose) – Activity I.P.122.
78. Preparation of a Content Study of the Actions of IICA Lines to determine the Different Social Aspects implicitly or explicitly covered by each one.
(July 1973 through September 1973, San Jose) – Activity I.P.131.
79. Preparation of a Draft for a Discussion on the Main Concepts and Methodologies that may Constitute the Doctrine and Strategies of IICA on the Subject of Social Development.
(September 1973 through January 1974, San Jose) – Activity I.P.132.
80. Meeting of Regional Advisors on Social Development to Consider IICA Doctrine and Strategies concerning the Social Aspects of Rural Development.
(March 1974, San Jose) – Activity I.P.133.
81. Studies to Elaborate an Institutional Model for Agricultural Documentation and Information.
(July 1973 through June 1974, Turrialba) – Activity I.P.141.
82. Meeting to Elaborate an Institutional Model for Research.
(April 1974, San Jose) – Activity I.P.142.
83. Studies to Elaborate a Model for an Institutional Sub-system of Promotion.
(1 July 1973 through 30 June 1974, San Jose) – Activity I.P.143.
84. Studies to Elaborate an Agrarian Reform Model.
(1 July 1973 through 30 June 1974, San Jose) – Activity I.P.144.
85. Studies to Elaborate a Model for a Sectorial Leadership Sub-system.
(1 July 1973 through 30 June 1974) – Activity I.P.145.
- Line II. Agricultural Education**
1. In-Service Training to Professors of the Schools of Agronomy of the Universities of Central America.
(January – April 1974, San Jose) – Activity II.N.121.
2. Regional Seminar on Agricultural Development.
(January 1974, San Jose) – Activity II.N.123.
3. Regional Seminar on Forestry Sciences.
(April 1974, Turrialba) – Activity II.N.124.
4. Course on University Teaching Methodology.
(January 1974, Turrialba) – Activity II.N.129.A.
5. Conference on Agricultural Production Systems for the Tropics.
(February 1974, Turrialba) – Activity II.N.129.b.
6. Courses at the Faculty of Agronomy, University of Costa Rica (Livestock Economy and Soil Analysis).
(1 July 1973 through 30 June 1974, San Jose) – Activity II.N.161.
7. Course on the Management of Agricultural Enterprises, for Bank Officers.
(1 January through 30 June 1974, San Jose) – Activity II.N.163 .
8. Action to Strengthen the Faculty of Agronomy through Technical Orientation in the Revision of its Programs. (1 July 1973 through 30 June 1974, San Jose) – Activity II.N.171.
9. Management and Coordination of the Contract UCR-IICA.
(1 July 1973 through 30 June 1974, San Jose) – Activity II.N.181.
10. Graduate Training of a Professor in Animal Production.

(January 1974 – January 1976, Turrialba) – Activity II.A.235.

11. Seminar on Extension Planning in Costa Rica. (October 1973, Alajuela) – Activity II.N.411.
12. Collaboration in Teaching at the Faculty of Agronomy and the Graduate School of the University of Costa Rica by Means of Student Theses Practices. (1 July 1973 through 30 June 1974, San Jose) – Activity II.N.
13. Meeting of IICA Educators. (September 1973, Turrialba) – Activity II.N.
14. Graduate Training of Professors in Animal Production. (January 1974 through 30 June 1974, Turrialba) – Activity II.A.235.
15. Preparation of Documents on Graduate Education in Latin America. (April – May 1974, San Jose) – Activity II.P.113.
16. Preparation of a Document on Course Accreditation. (April – May 1974, San Jose) – Activity II.P.114.
17. Programming Meeting of Line II. (September 1974, Turrialba) – Activity II.P.115.
18. Meeting of Graduate Educators. (February 1974, San Jose) – Activity II.P.116.
19. Coordination of the President of ALEAP with IICA. (1 July 1973 through 30 June 1974, San Jose) – Activity II.P.121.
20. Meetings with ALEAP. (February – March 1974, San Jose) – Activity II.P.122.
21. ALEAP Correspondence. (1 July 1973 through 30 June 1974, San Jose) – Activity II.P.123.
22. ALEAP Semestral Bulletin. (1 July 1973 through 30 June 1974, San Jose) – Activity II.P.124.
23. Other Roles of the ALEAP Secretariat. (1 July 1973 through 30 June 1974, San Jose) – Activity II.P.125.

Line III. Agricultural Research

1. Studies on Aspects concerning the Economic Handling and Evaluation of Beef Cattle. (October 1973, San Jose) – Activity III.N.
2. Study on Aspects concerning the Economic Handling and Evaluation of Dairy Cattle. (October 1973, San Jose) – Activity III.N.
3. Facilitate Training for a CEPEC Librarian. (August – September 1973, Turrialba) – Activity III.S.241.0.

Line IV. Promotion of Agricultural Production

1. Graduate-Level Training in Animal Production for a Haitian Functionarie. (1 January to 30 June 1974, Turrialba) – Activity IV.L.131.
2. Participation in Technical Multinational Meeting on the Regional Multiple Cropping Program. (April 1974, Turrialba) – Activity IV.S.211.
3. Reciprocal Training in Livestock Development. (4 April 1974) – Activity IV.N.223.
4. Short Course on Animal Husbandry. (16-17 July 1974) – Activity IV.N.272.
5. Development of a General Methodology for the Analysis and Diagnosis of the Marketing Problems of Costa Rica. (July – September 1973, San Jose) – Activity IV.N.361.
6. Analysis and Diagnosis of the Marketing Institutional Sub-system of Costa Rica. (August 1973 through March 1974, San Jose) – Activity IV.N.362.
7. Technical Advisory Services and Support to Research of the Official Marketing Organizations of Costa Rica. (1 July 1973 through 30 June 1974, San Jose) – Activity IV.N.363.
8. Technical Meeting of the Team of the Hemispheric Marketing Program for Agricultural Products. (April 1974, San Jose) – Activity IV.N.381.
9. Technical Publications of the Hemispheric Marketing Program for Agricultural Products. (1 July 1973 through 30 June 1974, San Jose) – Activity IN.N.382.

10. Publication of a Pamphlet on the Hemispheric Marketing Program and the Dissemination of New Information. (November 1973 through June 1974, San Jose) – Activity IV.N.383.
11. Participation of a High-Level Consultant during the Annual Technical Meeting. (April 1974, San Jose) – Activity IV.N.384.
12. Development of Instruments for Systematic Action. (1 July 1973 through 30 June 1974, San Jose) – Activity IV.N.385.
13. Revision of Existing Inventories and Verification of the Nature and Objectives of the Most Important Organizations with the IICA Country Representatives. (November 1973 through May 1974, San Jose) – Activity IV.P.111.
14. Elaboration of a Typology of National Organizations Working with Rural Youth. (January to June 1974, San Jose) – Activity IV.P.112.
15. Elaboration of a Document Including a Conceptual Framework of Work with Rural Youth, according to the Hemispheric and Humanistic Projection of IICA. (October 1973, San Jose) – Activity IV.P.121.
16. Meeting with Specialists in Extension and Education, and Regional Advisors in Social Development to Consider the Conceptual Framework of IICA in the matter of Rural Youth and to work on the Formulation of the IICA Doctrine on this Subject. (March 1974, San Jose) – Activity IV.P.12.
17. Training of 16 Young North Americans, ex-4-H Members, to participate in the YDP Program. (July – August 1973) – Activity IV.P.134.
18. Development of an Information Program for all Latin America, and the Caribbean. (1 July 1973 through 30 June 1974) – Activity IV.P.136.
19. Coordination of the Meeting of the Inter-American Executive Committee for Rural Youth. (September 1973) – Activity IV.P.137.
2. VIII Meeting of Agrarian Reform Executives of the Central American Isthmus. (February 1974, San Jose) – Activity VI.N.192.
3. Promotion of Agrarian Reform (Agrarian Reform Seminar for Journalists). (Marh 1974, La Catalina, Heredia) – Activity VI.N.196.
4. Advisory Services to National Agrarian Reform Organizations on the Elaboration of Plans, Programs and Projects. (1 July 1973 through 30 June 1974, San Jose) – Activity VI.N.199.
5. Technical Meeting on 'Campesino' Participation and Agrarian Reform. (June 1974, San Jose) – Activity VI.C.211.

Line VII. Administration of Agricultural Policy

1. Publication of the Quartely Bulletin "Desarrollo del Tropico Americano" (Development of the American Tropics). (1 July 1973 through 30 June 1974, Turrialba) – Activity VII.S.211.
2. Publication of Selected Bibliographies. (1 July 1973 through 30 June 1974, Turrialba) – Activity VII.S.212.
3. Bibliography on Species of Wild Life and River and Lake Fishing in Latin America. (November 1973, Turrialba) – Activity VII.S.212.A.
4. Publication of a Directory of Forestry Institutions and Technicians in the American Tropics. (1 July 1973 through 30 June 1974, Turrialba) – Activity VII.S.213.
5. Publication of the Current Forestry Policy, Legislation and Regulations in the American Tropics. (1 July 1973 through 30 June 1974, Turrialba) – Activity VII.S.214.
6. In-Service Training on Documentation and Information in Tropical Agriculture. (August – September 1973, Turrialba) – Activity VII.S.217.
7. Compilation and Cataloguing of Agricultural Information on the American Tropics. (1 July 1973 through 30 June 1974, Turrialba) – Activity VII.S.219.
8. Training of Amazon Region Personnel at a Graduate Level.

Line VI. Promotion and Implementation of Structural Changes

1. Advisory Services to ITCO. (1 July 1973 through 30 June 1974, San Jose) – Activity VI.N.161.

(January to June 1974, Turrialba) – Activity VII.S.221.

9. Participation in the XXI Annual Congress of the American Society of Horticultural Sciences, Tropical Region (ASHS). (July 1973, San Jose) – Activity VII.S.264.
10. Ulterior Development of the Program's Theoretical Framework. (1 July 1973 through 30 June 1974, San Jose) – Activity VII.P.111.
11. Research Approaches to Identify the Causes of a Problem. (November to December 1973, San Jose) – Activity VII.P.112.
12. Remedial Research Approaches. (November 1973 through January 1974, San Jose) – Activity VII.P.113.
13. Preparation and Adapting of Study Material for Teaching and Training Purposes. (September 1973 through May 1974, San Jose) – Activity VII.P.114.
14. Training of Personnel from National Organizations from the Agricultural Public Sector. (June 1973 through April 1974, San Jose) – Activity VII.P.115.
15. Presentation of the Results of the Analysis, Evaluation and Solutions Proposed both at a Rural-regional as well as a National Level. (August to September 1973, San Jose) – Activity VII.P.121.
16. Joint Work on the Management Program of the Agricultural Public Sector of Costa Rica to Implement the Proposed and Accepted Solutions. (October to November 1973, San Jose) – Activity VII.P.122.
17. Follow-up on the Implementation of Solutions, Results Analysis; Adapting and Improvement of Proposed Solutions. (December 1973 through May 1974, San Jose) – Activity VII.P.123.
18. Assist the Regional Agricultural Councils in the Preparation of the 1974 Work Plan. (September to December 1973, San Jose) – Activity VII.P.124.
19. Assist the Secretariat of the National Agricultural Council (CAN) in the Preparation of the 1974-77 Agricultural Development Plan and on its Implementation.

(September 1973 through May 1974, San Jose) – Activity VII.P.125.

CHILE

Line I. Analysis of and Information on Rural Development

1. Promotion and Induction of Strategies for the Establishment of a National System of Agricultural Information in Chile. (December 1973, Santiago) – Activity I.D.129.
2. Situation and Tendencies of the Agricultural Sector in Chile. (1 July 1973 through 30 June 1974, Santiago) – Activity I.S.141.
3. Registry of Institutions Responsible for Rural Development in Chile. (1 July 1973 through 30 June 1974, Santiago) – Activity I.S.142.
4. Advisory Services provided the General Directorate of Statistics on the Elaboration of the Agricultural Census for 1974. (1 July 1973 through 30 June 1974, Santiago) – Activity I.S.143.
5. Course on Scientific Communication. (May 1974, Santiago) – Activity I.S.291.
6. Round-table Discussion on Written Communication. (June 1974, Santiago) – Activity I.S.292.

Line II. Agricultural Education

1. Coordination of the Permanent Graduate Program. (1 July 1973 through 30 June 1974, Santiago and Chillan) – Activity II.S.141.
2. Support provided the Graduate Courses in Chile. (1 July 1973 through 30 June 1974, Santiago) – Activity II.S.142.
3. Study of the Demand for Graduate Training in Agricultural Sciences in Chile. (1 July 1973 through 30 June 1974, Santiago) – Activity II.S.143.
4. Graduate Seminar: The Graduate Program, its Characteristics and Objectives. (18-19 March 1974, Codegua) – Activity II.S.144.

5. Institutional Analysis of the Permanent Graduate Program in Agricultural and Forestry Sciences in the Republic of Chile.
(1 July 1973 through 30 June 1974, Santiago) – Activity II.S.145.
6. Support and Strengthening of the Permanent Committee of Agricultural and Forestry Sciences of the Chilean Universities (CAF).
(1 July 1973 through 30 June 1974) – Activity II.S.241.
7. Collaboration with the University of Chile (Faculty of Agronomy) in a Course on Crop Methodology.
(1 July 1973 through 30 June 1974, Santiago) – Activity II.S.242.
8. Collaboration provided the Catholic University of Chile on Horticulture Seminars.
(1 July 1973 through 30 June 1974, Santiago) – Activity II.S.243.
9. Improvement of the Pedagogical Capacity of the Faculty.
(1 July 1973 through 30 June 1974) – Activity II.S.244.
10. Promotion of Improvements in the Teaching of Veterinarian Medicine by Means of Faculty Meetings.
(1 July 1973 through 30 June 1974, Santiago, Valdivia, Chillan) – Activity II.S.245.
11. Support provided on the Celebration of the National Seminar on Agricultural and Forestry Training in Chile.
(1 July 1973 through 30 June 1974, Santiago) – Activity II.S.246.
12. Advisory Services provided the Ministry of Education of Chile.
(1 July to 1 September 1973, Santiago) – Activity II.S.247.

Line III. Agricultural Research

1. Training Personnel of the Economics Unit of INIA.
(1 July 1973 through 30 June 1974, Santiago) – Activity III.S.311.
2. Meetings on Production Systems.
(July – December 1973, Santiago) – Activity III.S.312.
3. Advisory Services in the Formulation and Analysis of Systems.
(1 July 1973 through 30 June 1974, Chillan) – Activity III.S.313.

Line IV. Promotion of Agricultural Production

1. Methodological Training in Technical Assistance.
(March 1973 through March 1974, Santiago) – Activity IV.S.141.
2. Definition of Agro-economic Production Systems, by Crop.
(1 July 1973 through 30 June 1974) – Activity IV.S.142.
3. Identification of Problems and Advisory Services to the Marketing Institutions of Agricultural Products.
(1 July 1973 through 30 June 1974, Santiago) – Activity IV.S.241.
4. II National Course on the Operation, Maintenance and Development of Irrigation Areas.
(13 August through 14 September 1973, La Serena, Coquimbo) – Activity IV.S.431.
5. Creation of the Digua Pilot District for Land and Water Conservation.
(1 July 1973 through 30 June 1974, Province of Linares) – Activity IV.S.432.
6. The Organization of Small Pilot Districts of Land and Water Conservation.
(1 July 1973 through 30 June 1974, Santiago) – Activity IV.S.433.
7. Technical Support to SAG-DICOREN.
(1 July 1973 through 30 June 1974, Province of Linares) – Activity IV.S.434.
8. Joint Meeting with FAO for the Adoption of Goals and Common Working Procedures with Rural Youth.
(January 1974, Santiago) – Activity IV.P.123.

Line VI. Promotion and Implementation of Structural Changes

1. Support provided the Production Programs in Agriarian Reform Areas for the 1973-76 Period.
(1 July 1973 through 30 June 1974, Santiago) – Activity VI.S.131.
2. Advisory Services provided to the National Program of Land Allocation in the Reformed Sector.
(12 October 1973 through 30 May 1974) – Activity VI.S.133.
3. First Course on Rural Administration for CORA Directors.
(June 1974, Talagante) – Activity VI.S.134.

4. Second Short Course on Rural Administration for Personnel of CORA. (24 June to 5 July 1974, Talagante) – Activity VI.S.134.1.
5. Advisory Services provided the National Program of Land Allocation. (November 1973 through January 1974, Santiago) – Activity VI.S.
6. Participation in the Final Draft of the IICA/FAO Regional Report on Changes in Agrarian Structures. (7 October through 7 November 1973, Santiago) – Activity VI.C.113.

Line VII. Administration of Agricultural Policy

1. Organization of the PEPA Course. (10 September 1973 through 31 January 1974, Santiago) – Activity VII.S.151.
2. Coordination and Presentation of the Course on the Preparation and Elaboration of Agricultural Projects (PEPA/Chile) (2 January to 20 April 1974, Santiago) – Activity VII.S.152.
3. A meeting on the Analysis and Selection of Documents from the Course (PEPA/Chile). (22 April to 12 May 1974, Santiago) – Activity VII.S.153.
4. Coordination and Advisory Services in the In-Service Training Stage of the PEPA Cycle. (May to September 1974, Santiago) – Activity VII.S.154.

DOMINICAN REPUBLIC

Line I. Analysis of and Information on Rural Development

1. Restructuring of the Information Service of the State Secretariat of Agriculture. (November 1973, Santo Domingo) – Activity I.L.
2. Publication of a Directory of National and International Institutions working in the Agricultural Sector of the Dominican Republic. (June 1973, Santo Domingo) – Activity I.L.
3. Directory of Agricultural Technicians of the Dominican Republic. (March 1974, Santo Domingo) – Activity I.L.

Line II. Agricultural Education

1. Courses on Agricultural Extension, Group Techniques, Planning and Evaluation. (April – May 1974, San Cristobal) – Activity II.L.
2. Course on Extension Methodology. (November – December 1973) – Activity II.L.
3. Collaboration on the Establishment of Five Model Extension Agencies. (December 1973 through March 1974) – Activity II.L.
4. Basic Courses for Extension Agents. (February – March 1974, CНИЕCA, San Cristóbal) – Activity II.L.
5. Collaboration provided on a Course on Extension Methodology. (November – December 1973) – Activity II.L.
6. Advisory Services provided on the Celebration of Agricultural Extension Year. (Santo Domingo) – Activity II.L.
7. Advisory Services provided the Rural Youth Program. (March 1974, Santo Domingo) – Activity II.L.
8. National Seminar on Agricultural Education for Rural Development. (October – November 1973, Santo Domingo) – Activity II.L.113.

Line III. Agricultural Research

1. Advisory Services provided on the Reorganization of Research Services for SEA. (August 1973, Santo Domingo, Santiago, and San Cristobal) – Activity III.L.
2. First National Seminar on Soil Conservation. (May 1974, Santo Domingo) – Activity III.L.
3. Diagnostic Study of the National Research Center (CНИЕCA). (August 1973) – Activity III.L.114.

Line IV. Promotion of Agricultural Production

1. The Production of Seed and Fruit Nurseries (DELNO). (August – November 1973, Valley 'Jaque del Norte') – Activity IV.L.131.

2. Institutional Analysis of Agricultural Marketing in the Dominican Republic. (November 1973 through June 1974, Santo Domingo) – Activity IV.L.232.
3. Compiling of Agricultural Marketing Information in the Dominican Republic. (November 1973 through June 1974, Santo Domingo) – Activity IV.L.233.
4. Promotion of an Intensive Agricultural Marketing Project in the Dominican Republic. (January – June 1974, Santo Domingo) – Activity IV.L.235.
5. The Production of Seed and Fruit Nurseries. (June – December 1973) – Activity IV.L.131.a.
4. Course on Agricultural Communications Methods for INIAP Technicians. (October 1973, Santa Catalina) – Activity I.A.223.
5. Course on Agricultural Communications Methods for INIAP Technicians. (October 1973, Pichilingue) – Activity I.A.224.
6. Advisory Services on Communications provided the INIAP Training Programs. (1 July 1973 through 30 June 1974) – Activity I.A.225.
7. Course on Communications for Rural Development for IBRAC Professionals. (October 1973, Quito) – Activity I.A.226.

Line VI. Promotion and Implementation of Structural Changes

1. Collaboration provided on the National Campaign for Rural Associations. (January – April 1974, Santo Domingo) – Activity VI.L.
2. Collaboration provided on the Course in Social Organization (CNEICA). (December 1973, San Cristobal) – Activity VI.L.

Line VII. Administration of Agricultural Policies

1. Collaboration provided the State Secretariat of Agriculture on a Study Trip for Technicians from this dependency to Puerto Rico. (December 1973, Santo Domingo) – Activity VII.L.

ECUADOR

Line I. Analysis of and Information on Rural Development

1. The Up-dating and Analysis of Information Training on the Evolution of Agriculture and of the Institutions of the Agricultural Sector of Ecuador. (1 July 1973 through 30 June 1974, Quito) – Activity I.A.131.
2. Support to the Ecuadorian Center of Agricultural Documentation (CEDA). (May 1974, Quito) – Activity I.A.221.
3. III Meeting of Agricultural Librarians and Documentalists of Ecuador. (May 1974, Quito) – Activity I.A.222.

Line II. Agricultural Education

1. Collaboration and Support to the Ecuadorian Association of Higher Agricultural Education Institutions. (1 July 1973 through 30 June 1974) – Activity II.A.231.
2. Advisory Services provided the Faculty of Forestry Education. (September 1973 through May 1974, Esmeraldas) – Activity II.A.232.
3. Advisory Services provided the Faculties of Animal Production. (1 July 1973 through 30 June 1974) – Activity II.A.233.
4. Course on University Teaching Methodology for Professors of Agricultural Sciences of the Ecuadorian Universities. (December 1973, Quito and Machala) – Activity II.A.234.
5. Intensive Short Course on Animal Production. (November 1973, Guayaquil) – Activity II.A.238.
6. Advisory Services to the Ministry of Agriculture and Livestock on its Rural Development Programs. (1 July 1973 through 30 June 1974, Quito) – Activity II.A.321.
7. National Meeting of Rural Administration Professors. (September 1973, Quito) – Activity II.A.236.

Line III. Agricultural Research

1. Advisory Services on Agricultural Research to Universities and INIAP.

(1 July 1973 through 30 June 1974) – Activity II.A.121.

2. Course on Technical Writing for INIAP Officers. (September 1973, Boliche) – Activity III.A.123.
3. Course on Technical Writing for INIAP Officers. (August – September 1973, Santa Catalina) – Activity III.A.124.
4. Regional Meeting of the Work Group on the Introduction of Forest Species. (October 1973, Quito) – Activity III.A.211.
5. Consulting and Work Meetings with the Forestry Research Organizations of Ecuador. (September 1973 through June 1974, Quito and Esmeraldas) – Activity III.A.241.
6. National Work Meeting on the Planning of Agricultural and Socio-Economic Research. (October 1973, Quito) – Activity III.A.431.
7. Course on Technical Writing for INIAP Officers. (August – September 1973, Quito) – Activity III.A.122.

Line IV. Promotion of Agricultural Production

1. Research into the National Services on Agricultural Marketing. (1 July 1973 through 30 June 1974, Quito) – Activity IV.A.131.
2. Advisory Services provided the National Marketing Directorate and Divisions. (1 July 1973 through 30 June 1974, Quito) – Activity IV.A.132.
3. National Course on Agricultural Marketing. (May 1974, Quito) – Activity IV.A.133.
4. Advisory Services and Technical Assistance in Colonization to National Organizations. (April, May and June 1974) – Activity IV.A.214.
5. Advisory Services on Animal Husbandry and Pastures to the Ministry of Agriculture and Livestock. (1 July 1973 through 30 June 1974, Quito) – Activity IV.A.431.

Line V. Multinational Integration

1. Elaboration of a Methodology for Regionalization Studies in Ecuador.

(1 July 1973 through 30 June 1974, Quito) – Activity V.A.111.

2. Advisory Services to the Regionalization Department of the Planning Office of the Ministry of Agriculture. (1 July 1973 through 30 June 1974, Quito) – Activity V.A.112.

Line VI. Promotion and Implementation of Structural Changes

1. Advisory Services and In-Service Training to the Project Department of IERAC. (1 July 1973 through 30 June 1974, Quito) – Activity VI.132.
2. Advisory Services to the Agrarian Reform Office of IERAC. (1 July 1973 through 30 June 1974, Quito) – Activity VI.A.133.
3. Up-dating of the Inventory on 'Campesino' Organizations and Case Studies. (April – June 1974) – Activity VI.A.221.
4. Training Course for Promotors of Agrarian Reform and Extension on "Campesino" Promotion Methods. (January – February 1974, San Pablo del Lago, Imbabura) – Activity VI.A.222.
5. Advisory Services to IERAC and the Department of 'Campesino' Organization of the Ministry of Agriculture and Livestock. (June 1974, Cayambe) – Activity VI.A.223.
6. National Course on the Elaboration of Agrarian Reform Projects. (March – April 1974, San Pablo del Lago) – Activity VI.A.131.

Line VII. Administration of Agricultural Policy

1. In-Service Training on Specific Projects. (1 July 1973 through 30 June 1974, Quito) – Activity VII.A.122.
2. Advisory Services to the Planning Office of the Ministry of Agriculture and Livestock. (1 July 1973 through 30 June 1974, Quito) – Activity VII.A.123.
3. Advisory Services to the Planning Office of the Ministry of Agriculture and Livestock, Division of Organization and Methods and Personnel Administration. (November 1973, Quito) – Activity VII.A.231.

4. Technical Meeting on Programming of Animal Husbandry Development of the American Humid Tropics. (December 1973, Guayaquil) – Activity VII.S.231.
5. Technical Meeting on Programming of Animal Husbandry Development of the American Humid Tropics. (December 1973, Guayaquil) – Activity VII.A.231.

EL SALVADOR

Line I. Analysis of and Information on Rural Development

1. Basic Information Study for the Rural and Institutional Analysis of El Salvador. (April to June 1974) – Activity I.N.121.
2. "Drafting and Preparation of Texts" in the "Graphic Arts" Course for Ministry of Agriculture Personnel, El Salvador. (October 1973, San Salvador) – Activity I.D.216.
3. National Service of Documentation and Bibliography of El Salvador. (July – December 1973) – Activity I.N.241.

Line II. Agricultural Education

1. Short Course on Teaching Methodology in Agricultural Sciences. (March 1974, San Salvador) – Activity II.N.127.
2. Training for Professors of the National School of Agriculture on Seminar of Education Evaluation. (April 1974, San Andres, Ciudad Arce) – Activity II.N.231.
3. Advisory Services to the Central American Association of Secondary Agricultural Education (ACEAS). (February 1974, San Salvador) – Activity II.N.315.
4. Elaboration of the National Extension Program, of El Salvador. (November 1973 through May 1974, San Salvador) – Activity II.N.421.
5. Elaboration of Five National Extension Projects. (July 1973, Santa Tecla) – Activity II.N.422.
6. Elaboration of Annual Programs, Projects and Plans. (July to September 1974) – Activity II.N.423.

7. Technical Cooperation for the Administration of the Extension Service. (September 1973 through May 1974) – Activity II.N.424.

Line III. Agricultural Research

1. Advisory Services to Salvadoran Institutions on Pulses Research Programs. (1 July 1973 through 30 June 1974) – Activity III.N.191.
2. Compilation of Genetic Material of Pulses. (November 1973) – Activity III.N.110.3.

Line IV. Promotion of Agricultural Production

1. Advisory Services on the Production of Improved Bean Seed. (November 1973 through January 1974) – Activity IV.N.121.
2. Programming and Evaluation of the Efficiency of the Bean Program. (April 1974) – Activity IV.N.122.
3. Training of the Personnel from CENTA's Pulses Program. (February to June 1974) – Activity IV.N.123.
4. Strengthening of the Credit Institutions of El Salvador. (April – May 1974) – Activity IV.N.151.
5. Analysis and Diagnosis of the Institutional Marketing Sub-System of El Salvador. (1 July 1973 through 30 June 1974, San Salvador) – Activity IV.N.341.

Line VI. Promotion and Implementation of Structural Changes

1. Studies of Existing Projects and New Projects on Agrarian Reform. (March 1974, San Salvador) – Activity VI.N.131.
2. National Agrarian Reform Seminar for Officers of the Armed Forces. (August – September 1973, San Salvador) – Activity VI.N.132.
3. International Technical Meeting on the Use of Rural Variables in Planning. (June 1974) – Activity VI.N.134.

Line VII. Administration of Agricultural Policy

1. Analysis Study of Agricultural Sectorial Management of El Salvador.
(1 July 1973 through 30 June 1974) – Activity VII.N.221.

GUATEMALA

Line I. Analysis of and Information on Rural Development

1. Study of Basic Information for the Rural and Institutional Analysis of Guatemala.
(March to June 1974) – Activity I.N.131.
2. Course on Technical Writing.
(28 January to 18 February 1974) – Activity I.N.210.2.
3. Advisory Services to and Participation in Regional Meetings.
(April 1 to 4 1974) – Activity I.N.210.4.
4. Publication of Information Bulletins.
(March to April 1974) – Activity I.N.211.
5. Press, Radio and Television Information.
(June 1973 through June 1974) – Activity I.N.212.
6. Distribution of Publications.
(1 July 1973 through 30 June 1974) – Activity I.N.213.
7. Publication and Editorial Services.
(1 July 1973 through 30 June 1974) – Activity I.N.291.
8. Course on Technical Writing and Library Use in the Faculty of Veterinary Medicine and Animal Husbandry of the University of San Carlos.
(October 1973, Ciudad de Guatemala) – Activity I.N.

Line II. Agricultural Education

1. Laboratory for Supervised Professional Exercises in Agronomy (First Workshop on the Growth and Operation of Groups and Leadership Techniques).
(February 1974, Ciudad de Guatemala) – Activity II.N.122.
2. Regional Seminar on Planning and Administration of Higher Agricultural Education.
(June 1974, Ciudad de Guatemala) – Activity II.N.126.

3. Regional Seminar on Education Evaluation.
(October 1973, Ciudad de Guatemala) – Activity II.N.128.
4. First Workshop on Curricular Objectives on Veterinary Medical Education.
(July 1973, Ciudad de Guatemala) – Activity II.N.129.
5. National Course on University Teaching Methodology.
(27 to 31 May 1974, Ciudad de Guatemala) – Activity II.N.129.b.
6. In-Service Training on Teaching Methodology in Agricultural Sciences.
(September – October 1973, Ciudad de Guatemala) – Activity II.N.129.c.
7. Advisory Services in Agricultural Extension to the Faculty of Agronomy of the University of San Carlos, Guatemala.
(February 1974) – Activity II.N.141.
8. Community Practices.
(7 January 1974) – Activity II.N.142.
9. In-Service Training on Teaching Methods for Teachers of Secondary Agricultural Schools.
(July 1973, Ciudad de Guatemala) – Activity II.N.231.
10. National Seminar on Education Evaluation.
(November 1973) – Activity II.N.241.
11. Regional Seminar on the Evaluation and Definition of Animal Husbandry Training in the Faculties of Agronomy of Central America.
(April – May 1974, Ciudad de Guatemala) – Activity II.N.314.
12. Technical Collaboration to Structure the Agricultural Extension Service.
(1 July 1973 through 30 June 1974) – Activity II.N.433.
13. Course on Teaching Methodology and Rural Sociology.
(July 1973, Barcena) – Activity II.N.434.

Line III. Agricultural Research

1. Advisory Services to Guatemalan Research Institutions on the Production of Pulses.
(July to December 1973) – Activity III.N.151.

Line IV. Promotion of Agricultural Production

1. 'Campesino' Training in the Handling of Livestock under Family Exploitation.
(November 1973) – Activity IV.N.211.

2. **Analysis and Diagnosis of the Institutional Marketing Sub-system of Guatemala.**
(October 1973 through June 1974, Ciudad de Guatemala) – Activity IV.N.311.
3. **Advisory Services on the Programming and Evaluation of Rural Youth Activities.**
(April 1974, Ciudad de Guatemala) – Activity IV.P.124.
4. **Coordination and Presentation of a Regional Seminar on the Production and Use of Food Projects.**
(July 1973) – Activity IV.P.132.

Line VI. Promotion and Implementation of Structural Changes

1. **Advisory Services on 'Campesino' Organization in the Implementation of the National Development Plan of Guatemala.**
(February 1974) – Activity VI.N.141.
2. **Course on Rural Administration for the Managers of INTA Cooperative Farms.**
(August – September 1973, Colon) – Activity VI.N.197.
3. **Training in the Presentation of Conferences on Rural Administration for Cooperatives.**
(October 1973, Barceñas) – Activity VI.N.

Line VII. Administration of Agricultural Policy

1. **Training and Evaluation of Agricultural Projects Cycle.**
(1 July 1973 through 30 June 1974, Ciudad de Guatemala) – Activity VII.N.111.
2. **Study concerning the Analysis of Agricultural Sectorial Management in Guatemala.**
(1 July 1973 through 30 June 1974) – Activity VII.N.211.

HAITI

Line I. Analysis of and Information on Rural Development

1. **Up-dating and Improving Information on the Haitian Agricultural Sector.**
(1 July 1973 through 30 June 1974, Port au Prince) – Activity I.L.121.
2. **An analysis of Two Organisms of the Haitian Agricultural Sector.**

(1 July 1973 through 30 June 1974, Port-au-Prince) – Activity I.L.122.

3. **The Recuperation of Documents on the Haitian Agricultural Sector.**
(1 July 1973 through 30 June 1974, Port-au-Prince) – Activity I.L.123.
4. **The elaboration of a Project on the Creation of a National Agricultural Documentation and Information Center for Haiti.**
(June through December 1974, Port-au-Prince) – Activity I.L.131.

Line II. Agricultural Education

1. **The Elaboration of a Project for the Strengthening of the Faculty of Agronomy and Veterinary Medicine.**
(1 July 1973 through 30 June 1974, Port-au-Prince) – Activity II.L.131.
2. **A Study of the Demand for Qualified Human Resources for the Agricultural Development of Haiti.**
(November through December 1974) – Activity II.L.134.

Line IV. Promotion of Agricultural Production

1. **Technical Cooperation in Agricultural Credit for Haiti.**
(October through December 1973, and June 1974, Port-au-Prince) – Activity IV.L.117.
2. **The Elaboration of a Forestry Development Project.**
(July 1973 through February 1974, Port-au-Prince) – Activity IV.L.161.
3. **Technical Cooperation on Forestry Aspects to Government and Private Organisms working in Haiti.**
(1 July 1973 through 30 June 1974) – Activity IV.L.162.
4. **The Elaboration of a Request for Qualified Human Resources for Forestry Development Purposes.**
(July 1973 through March 1974, Port-au-Prince) – Activity IV.L.163.
5. **The Institutional Analysis of Agricultural Marketing in Haiti.**
(1 July 1973 through 30 June 1974, Port-au-Prince) – Activity IV.L.211.
6. **A Study on the Taxation System as Applied to the Marketing of Agricultural Products in Haiti.**

(1 July 1973 through 30 June 1974) – Activity IV.L.211.0

7. The Storage of Agricultural Products in Haiti. (October 1973 through June 1974) – Activity IV.L.211.1.
8. The Compiling, Up-dating and Improving of Information on Agricultural Marketing in Haiti. (1 July 1973 through 30 June 1974, Port-au-Prince) – Activity IV.L.212.
9. An Analysis of the Importation of Agricultural Inputs and their Distribution, in Haiti. (1 July 1973 through 30 June 1974, Port-au-Prince) – Activity VI.L.213.
10. An Analysis of the 'Campesino' Marketing System in Haiti. (1 July 1973 through 30 June 1974, Port-au-Prince) – Activity IV.L.214.
11. Training of Haitian Personnel in Agricultural Marketing. (1 July 1973 through 30 June 1974, Port-au-Prince) – Activity IV.L.215.
12. The Elaboration of a Feasibility Study for the Expansion of an IICA Marketing Project in Haiti. (July through September 1973, Port-au-Prince) – Activity IV.L.216.
13. A Study on the Transportation System for the Internal Marketing of Agricultural Products in Haiti. (February through June 1974, Port-au-Prince) – Activity IV.L.217.
14. A Study on the Marketing of Specific Agricultural Products in Haiti. (January through June 1974, Port-au-Prince) – Activity IV.L.218.
15. A Study of the Prices for Agricultural Products in Haiti. (March through June 1974, Port-au-Prince) – Activity IV.L.219.

Line VI. Promotion and Implementation of Structural Changes

1. A Study of the Traditional Models of 'Campesino' Organization in Haiti. (June 1974, Port-au-Prince) – Activity VI.L.121.

Line VII. Administration of Agricultural Policy

1. Promotion of the Institutionalization of the Elaboration and Evaluation of Agricultural Devel-

opment Projects.

(July through December 1973, Port-au-Prince) – Activity VII.L.111.

2. Preparation of a Proposal for the Implementation of the International Technical Assistance needed for the Project. (August 1973 through June 1974, Port-au-Prince) – Activity VII.L.112.
3. Technical Cooperation provided the Department of Agriculture (DARNDR) on the Creation of a Sectorial Planning Office. (December 1973 through May 1974, Port-au-Prince) – Activity VII.L.122.

HONDURAS

Line I. Analysis of and Information on Rural Development

1. A Study of the Basic Information needed for the Rural and Institutional Analysis of Honduras. (March through June 1974) – Activity I.N.141.
2. Advisory Services Provided on and Participation at Regional Meetings. (February 1974, San Pedro Sula) – Activity I.N.210.4.
3. Advisory Services provided on the Establishment of a National Agricultural Documentation and Information Center for Honduras. (April – May 1974, Tegucigalpa) – Activity I.N.222.
4. Services on National Documentation and Agricultural Bibliographies for Honduras. (June through November 1973) – Activity I.N.261.

Line II. Agricultural Education

1. National Technical Meeting on the Incorporation of Basic Curricula for the Middle-level Agricultural Schools of Honduras. (October 1973, Tegucigalpa) – Activity II.N.261.

Line III. Agricultural Research

1. National Technical Meeting on the Organization and Planning of Agricultural Research in Honduras. (June 1974, Tegucigalpa) – Activity II.N.122.
2. Advisory Services provided the Honduras Research Institutions on Pulses Production.

(1 July 1973 through 30 June 1974) – Activity III.N.161.

3. In-service Training for Researchers working on Pulse Production.
(1 July 1973 through 30 June 1974, Tegucigalpa) – Activity III.N.162.
4. Collaboration provided to the XX Meeting of the PCCMCA.
(February 1974, San Pedro Sula) – Activity III.N.110.1.

Line IV. Promotion of Agricultural Production

1. In-service training for personnel from the Animal Husbandry Development Program in Honduras.
(June 1974) – Activity IV.N.253.
2. The Analysis and Diagnosis of the Institutional Marketing Sub-system of Honduras.
(October 1973 through July 1974, Tegucigalpa) – Activity IV.N.331.

Line VI. Promotion and Implementation of Structural Changes

1. Analytic Study of the "Campesino" Organizations of Honduras.
(November 1973 through March 1974, Tegucigalpa) – Activity VI.N.151.
2. Technical Meeting to Coordinate the Institutions working with the 'Campesino' Organizations.
(April 1974, Tegucigalpa) – Activity VI.N.152.
3. Seminar on Agrarian Reform for Military Personnel.
(July 1974, Tegucigalpa) – Activity VI.N.153.
4. Technical Meeting for the Planning of Settlements.
(May 1974, Tegucigalpa) – Activity VI.N.155.

Line VII. Administration of Agricultural Policy

1. National Seminar on the Ecological Zoning for Crops and the Agricultural Regionalization of Honduras.
(September 1973, Tegucigalpa) – Activity VII.N.142.
2. A Study for the Analysis of the Agricultural Management Sector of Honduras.
(July 1973) – Activity VII.N.231.

JAMAICA

Line IV. Promotion of Agricultural Production

1. Compiling Information on Agricultural Marketing in Jamaica.
(January through June 1974, Kingston) – Activity IV.L.222.

MEXICO

Line I. Analysis of and Information on Rural Development

1. A Basic Information Study for the Rural and Institutional Analysis of Mexico.
(1 July 1973 through 30 June 1974) – Activity I.N.151.
2. Collaboration provided the Secretariat of the Tropical Region of the American Society of Agricultural Sciences.
(1 July 1973 through 30 June 1974) – Activity I.N.152.
3. Graduate Training in Agricultural Dissemination.
(February 1972 through April 1974, Chapingo) – Activity I.N.210.1.

Line II. Agricultural Education

1. Training of Librarians from Higher Agricultural Education Institutions.
(March through May 1974, Chapingo) – Activity II.N.112.
2. Course on Teaching Methodology in Agricultural Sciences.
(December 1973, Ciudad Juarez, Chih.) – Activity II.N.114.
3. Course on Teaching Methodology at the National Agricultural School of Chapingo.
(February through March 1974, Chapingo) – Activity II.N.115.
4. Technical Writing Course.
(September 1973, Ciudad Victoria, Tamps.) – Activity II.N.116.
5. Advisory Services provided the Mexican Association of Higher Agricultural Education (AMEAS).
(October 1973 and June 1974, Saltillo, Coah. and Monterrey, N.L.) – Activity II.N.211.
6. Advisory Services provided the Antonio Narro School of Higher Agricultural Education.

(1 July 1973 through 30 June 1974, Saltillo, Coah.) – Activity II.N.212.

7. Seminar on Curriculum Evaluation (Arid Zones). (June 1974, Saltillo, Coah.) – Activity II.N.213.
8. Teaching Methodology Courses for the Agricultural Technology Schools of the SEP. (December 1973, Ciudad Delicias, Chih.) – Activity II.N.221.
9. Support provided the Program for Formal Extracurricular Secondary Education. (July 1973 through May 1974) – Activity II.N.222.
10. Visits to the Agricultural Technology Schools of Yucatan, by the Directors of Secondary Agricultural Schools of Central America. (November 1973, Yucatán) – Activity II.N.233.
11. Advisory Services provided on the Creation of Teaching Support Units. (1 July 1973 through 30 June 1974, Saltillo & Ciudad Juárez) – Activity II.N.113.

Line IV. Promotion of Agricultural Production

1. Technical Meeting on the Integral Development of Arid Zones. (June 1974, Saltillo, Coah.) – Activity IV.N.112.
2. Support Provided Specific Research Programs in Physical, Biological, Economic and Social Sciences. (December 1973, Saltillo, Coah.) – Activity IV.N.113.
3. Collaboration provided on the Programming and Supervision of the Demonstration Project of Animal Production for Arid Zones. (June – July 1974, Saltillo, Coah.) – Activity IV.N.115.
4. The Analysis and Diagnosis of the Marketing Institutions Sub-systems of Mexico. (June 1974) – Activity IV.N.321.
5. In-service Training on the Marketing of Products from Irrigation Districts. (June through August 1973) – Activity IV.S.132.3.

Line VI. Promotion and Implementation of Structural Changes

1. Advisory Services provided the 'Campesino' Productivity Program. (June 1974) – Activity VI.N.111.

2. Working Session on the Coordination of Efforts in 'Campesino' Organization. (June 1974, Atlahuetzia) – Activity VI.N.112.
3. In-service Training provided delegates from the Countries of Central America on 'Campesino' Organization. (July – September 1973) – Activity VI.N.181.
4. In-service Training in Research for 'Campesino' Training. (July – September 1973) – Activity VI.N.

Line VII. Administration of Agricultural Policy

1. A Study for the Analysis of Sectorial Management Practices. (April 1973 through June 1974, Mexico City) – Activity VII.N.271.

NICARAGUA

Line I. Analysis of and Information on Rural Development

1. Collaboration provided on Documentary Work for the Sectorial Analysis Unit. (September 1973, Managua) – Activity I.N.231.
2. National Agricultural Bibliography for Nicaragua. (1 July 1973 through 30 June 1974, Managua) – Activity I.N.271.
3. A Basic Information Study for the Rural and Institutional Analysis of Nicaragua. (October 1973, Managua) – Activity I.N.161.

Line II. Agricultural Education

1. Regional Seminar on Insecticides, Fungicides and Herbicides. (May 1974, Managua) – Activity II.N.125.
2. Technical Cooperation provided on the Establishment and Implementation of Courses in Rural Administration at the Faculty of Veterinary Medicine and Animal Husbandry, of the Central American University. (July – October 1973, Managua) – Activity II.N.
3. In-service Training provided Professors of Rural Administration of the Faculty of Veterinary Medicine and Animal Husbandry of the Central American University. (July – October 1973, Managua) – Activity II.N.

Line III. Agricultural Research

1. Advisory Services provided the Nicaraguan Institutions on Pulses Production. (1 July 1973 through 30 June 1974) – Activity III.N.171.

Line IV. Promotion of Agricultural Production

1. Strengthening the Rural Credit Program of the National Bank of Nicaragua. (June through August 1973, Managua) – Activity IV.N.161.
2. Advisory Services provided on the Diagnostic Study of Marketing Problem in the Agricultural Sector of Nicaragua. (July through December 1973, Managua) – Activity IV.N.351.
3. Cooperation provided on the Programming of a Study to Design an Urban Food Distribution System for Managua. (1 November 1973 through 30 June 1974, Managua) – Activity IV.N.352.
4. The Analysis and Diagnosis of the Marketing Institutional Sub-system of Nicaragua. (August 1973 through February 1974, Managua) – Activity IV.N.354.

Line VII. Administration of Agricultural Policy

1. Advisory Services Provided on the National Teaching, Research and Extension Plan. (1 July 1973 through 30 June 1974, Managua) – Activity VII.N.161.
2. Advisory Services provided the Planning Office of the Ministry of Agriculture on the Diagnostic Study and Plan for the Sector. (1 July 1973 through 30 June 1974, Managua) – Activity VII.N.162.
3. Advisory Services provided UNASEC on the compiling of Basic Data on current Management Practice in the Agricultural Sector. (1 July 1973 through 30 June 1974, Managua) – Activity VII.N.241.
4. Advisory Services provided UNASEC on the Analysis of Management Practices in the Agricultural Sector. (1 July 1973 through 30 June 1974, Managua) – Activity VII.N.242.
5. Advisory Services provided on the Elaboration of a Management Program for the Development Plan.

(1 July 1973 through 30 June 1974, Managua) – Activity VII.N.243.

6. Consulting Services provided on the Design and Implementation of Institutional Changes. (1 July 1973 through 30 June 1974, Managua) – Activity VII.N.
7. Assistance provided UNASEC on the Recollection and Analysis of Information concerning the Public Agricultural Sector for the Formulation of an Institutional Study. (July – August 1973, Managua) – Activity VII.P.131.

PANAMA

Line I. Analysis of and Information on Rural Development

1. Participation at and Presentation of a Paper at the IX Meeting of the Latin American Association of Plant Sciences –ALAF. (March 1974, Panama) – Activity I.D.212.
2. Services provided on National Agricultural Documentation and Bibliographies of Panama. (July – December 1973) – Activity I.N.281.
3. The Search for Authors and the Promotion of Original Texts; IX Meeting of the Latin American Association of Plant Sciences – ALAF. (February 1974, Panama) – Activity V.D.331.2.
4. Exposition of IICA Publications at the IX Meeting of the Latin American Association of Plant Sciences – ALAF. (March 1974, Panama) – Activity I.D.366.
5. A Basic Information Study for the Rural and Institutional Analysis of Panama. (July 1973 through February 1974) – Activity I.N.171.

Line III. Agricultural Research

1. Participation at the IX Meeting of ALAF. (March 1974, Panama) – Activity III.N.110.5.
2. Advisory Services provided the Panamanian Research Institutions on Pulses Production. (1 July 1973 through 30 June 1974) – Activity III.N.181.
3. Advisory Services provided the Pastures and Forages Project of MIDA. (July – December 1973) – Activity III.N.141.2.

4. The Training of Panamanian Technicians in Pulse Production Techniques.
(March through May 1974) – Activity III.N.182.

Line IV. Promotion of Agricultural Production

1. The Analysis and Diagnosis of the Marketing Institutional Sub-system of Panama.
(April – June 1974) – Activity IV.N.371.
2. Advisory Services provided on the Coordination of the National Program for the Promotion of Animal Husbandry.
(1 October 1973 through 30 June 1974) – Activity IV.N.231.

Line VI. Promotion and Implementation of Structural Changes

1. Advisory Services provided on the Programming of 'Campesino' Settlements.
(September 1973) – Activity VI.N.121.
2. Attended the Technical Meeting on 'Campesino' Participation and Agrarian Reform.
(June 1974, Panama) – Activity VI.N.

Line VII. Administration of Agricultural Policy

1. Advisory Services provided on the diagnostic study of the Agricultural Sector.
(1 July 1973 through 30 June 1974) – Activity VII.N.131.
2. Consulting services provided on the Organization of the Planning Office in the Ministry of Agricultural Development – MIDA.
(November 1973 through March 1974, Panama) – Activity VII.N.132.
3. Advisory Services on Training in Planning.
(1 July 1973 through 3 June 1974) – Activity VII.N.133.
4. A Study for the Analysis of the Management Practices in the Agricultural Sector.
(January – June 1974) – Activity VII.N.261.

PARAGUAY

Line I. Analysis of and Information on Rural Development

1. Complement to the Study concerning the Situation and Tendencies within the Agricultural Sector of Paraguay.

(July – December 1973, Asunción) – Activity I.S.151.

2. Directory of Institutions Working in Development.
(1 July 1973 through 30 June 1974, Asunción) – Activity I.S.152.
3. Advisory Services provided on the Organization of an Agricultural Information and Documentation Service.
(April – June 1974, Caacupé) – Activity I.S.261.
4. Scientific Communications Course.
(June 1974, Caacupé) – Activity I.S.262.

Line II. Agricultural Education

1. International Technical Meeting of Economics and Social Science Professors in Agriculture Career Programs.
(April 1974, San Lorenzo) – Activity II.S.213.
2. Training on the Organization and Functioning of a Teaching Support Unit.
(April 1974, Asunción) – Activity II.S.251.
3. Advisory Services provided the Faculty of Agronomy and Veterinary Sciences for the Development and Consolidation of a Rural Economics Center.
(1 July 1973 through 30 June 1974, Asunción and San Lorenzo) – Activity II.S.252.
4. Collaboration provided on the strengthening of the Animal Physiology Course at the Faculty of Agronomy and Veterinary Sciences.
(May – June 1974, San Lorenzo) – Activity II.S.254.
5. Advisory Services provided the Directive Personnel and Supervisors of the Extension Service on the Elaboration of a Working Program at National, Regional and Local levels.
(July – December 1973, San Lorenzo) – Activity II.S.321.

Line III. Agricultural Research

1. Advisory Services provided on the Elaboration of a National Research Program at Soja.
(April 1974, Asunción) – Activity III.S.223.
2. Revision and Up-dating of the National Research Program in Wheat.
(September 1973, Caacupé) – Activity III.S.224.

3. Advisory Services provided on the Formulation of a National Research Program in Animal Husbandry. (September 1973, Asunción) – Activity III.S.225.

Line IV. Promotion of Agricultural Production

1. Advisory Services provided the Directors of Technical and Credit Assistance Organisms on the Structuring of an Inter-institutional Coordination Scheme. (August – December 1973 and May – June 1974, Asunción) – Activity IV.S.152.
2. Advisory Services provided the Technical Personnel of Agricultural Habilitation Credit Service for the Conducting of Socio-Economic and Rural Administration Studies in the Zones of Operation. (1 July 1973 through 30 June 1974, Asunción) – Activity IV.S.153.
3. Training Technicians from the Agricultural Habilitation Center on Aspects concerning Socio-economic Research and Evaluation. (1 July 1973 through 30 June 1974, Asunción) – Activity IV.S.154.
4. Technical Assistance, Rural Administration Credit and 'Campesino' Organization Course. (March – April 1974, Caacupé) – Activity IV.S.155.
5. The Identification of Problems and Advisory Services Provided the Agricultural Marketing Institutions. (September 1973 through March 1974, Asunción) – Activity IV.S.251.
6. National Seminar on Agricultural Marketing. (July – September 1973) – Activity IV.S.252.
7. In-service Training in Agricultural Marketing. (July – December 1973, Asunción) – Activity IV.S.253.
8. Advisory Services provided on the Formulation of Marketing Programs in Animal Industry. (August – December 1973, Asunción) – Activity IV.S.254.
9. Seminar on the Marketing of Perishable Agricultural Products. (January – March 1974, Asunción) – Activity IV.S.255.
10. Coordination and Holding of a Regional Seminar on the Project concerning the Production and

Utilization of Food.
(October 1973) – Activity IV.P.133.

Line VI. Promotion and Implementation of Structural Changes

1. Advisory Services provided on the Project for the Integral Rural Development of the Eje Colonies. (1 July 1973 through 30 June 1974, Asunción) – Activity VI.S.141.
2. Training in 'Campesino' Organization in the Eje Este Colonies Development Project. (September 1973 through June 1974) – Activity VI.S.142.

Line VII. Administration of Agricultural Policy

1. Advisory Services provided on the Structuring and Organization of Agricultural Planning Sectors. (August 1973 through April 1974, Asunción) – Activity VII.S.131.
2. Advisory Services provided the Coordination Committee of the Integrated Agricultural Development Project, on its Implementation. (August 1973 through April 1974) – Activity VII.S.132.

PERU

Line I. Analysis of and Information on Rural Development

1. Up-dating and Analysis of the Information on the Evolution of Agriculture and the Institutions of the Sector. (22 working days in the 1973/74 fiscal period, Lima) – Activity I.A.141.
2. Publication of the Trimestral Bulletin of the Andean Zone. (1 July 1973 through 30 June 1974, Lima) – Activity I.A.211.
3. Publication of the Series "Service to the Countries", for the Andean Zone – 1973. (1 July 1973 through 30 June 1974, Lima) – Activity I.A.212.
4. Support provided the National Course on Library Science. (March – June 1974, Lima) – Activity I.A.231.
5. Collaboration provided on the First Course on Social Communication for ESAP. (September 1973, Lima) – Activity I.A.234.

6. In-service Training in Communication of a Venezuelan Technician.
(June - July 1974) - Activity I.A.245.
7. The Reprinting of the Manual "Agricultural Tractors and Motor Repairs".
(March 1974, Lima) - Activity I.D.331.0.

Line II. Agricultural Education

1. Advisory Services provided the National Agrarian University, as a Regional Center.
(1 July 1973 through 30 June 1974, Lima) - Activity II.A.131.
2. Support provided on the Organization and Administration of Agricultural Research at the National University of the Peruvian Amazon.
(20 July 1973 through 6 May 1974, Iquitos) - Activity II.A.133.
3. Collaboration and Support provided APIES on the Association's Annual Meeting.
(November 1974, Lima) - Activity II.A.241.
4. Work Week for Professors of Rural Development.
(June 1974, Lima) - Activity II.A.243.
5. National Seminar of Professors of Animal Production, in the Peruvian Tropics.
(May 1974, Tingo María) - Activity II.A.244.
6. Up-dating Information Studies on the Organization of Higher Agricultural Education.
(1 July 1973 through 30 June 1974) - Activity II.A.245.
7. Meeting concerning the Role of Extension in an Integral Rural Development Process.
(June 1974, Lima) - Activity II.A.341.

Line III. Agricultural Research

1. Support provided on the Organization of the II National Meeting of Agricultural Researchers.
(1 July 1973 through 30 June 1974, Lima) - Activity III.A.131.
2. Technical Advisory Services provided on the Recognition of Virus Diseases in the more important Edible Legumes.
(May - June 1974) - Activity III.A.132.
3. Analysis of the Agricultural Research of Peru.
(1 July 1973 through 30 June 1974) - Activity II.A.134.

4. Collaboration provided on the I National Seminar on Ecological Systems.
(June 1974, Lima) - Activity III.A.135
5. Basic Course on Technical Writing for Researchers at the Regional Center for Agricultural Research.
(July 1973, Lima) - Activity III.A.141.
6. Basic Course on Technical Writing for Researchers at the Regional Center for Agricultural Research of the North (CRIAN)
(August 1973, Chiclayo) - Activity III.A.142.
7. Basic Course on Technical Writing for Personnel from the Technical University of Piura.
(March 1974, Piura) - Activity III.A.145.
8. In-service Training in Production Systems.
(January - April 1974, La Raya) - Activity III.A.323.
9. National Working Meeting on the Socio-economic Aspects of Agricultural Research.
(December 1973, Lima) - Activity III.A.441.
10. Basic Course on Technical Writing.
(September 1973, Tarapoto) - Activity III.A.143.
11. Basic Course on Technical Writing.
(November 1973, Arequipa) - Activity III.A.144.

Line IV. Promotion of Agricultural Production

1. In-service Training in Marketing for Four Bolivian Technicians.
(December 1973, Lima) - Activity IV.A.114.
2. Collaboration provided on the Formulation of Marketing Plans for the Ministry of Agriculture, OSPA and the Department of Economic Studies of the General Directorate of Marketing.
(1 July 1973 through 30 June 1974) - Activity IV.A.141.
3. Cooperation provided on the Formulation and Execution of a Technical Assistance Marketing Program, for the General Directorate of Marketing, Ministry of Agriculture of Peru.
(1 July 1973 through 30 June 1974) - Activity IV.A.142.
4. Advisory Services provided the Economics Department of CENCIRA on Aspects related to Agricultural Marketing.

(1 July 1973 through 30 June 1974) – Activity IV.A.144.

5. Support provided on Marketing Research for the Ministry of Agriculture of Peru.
(February – June 1974, Lima) – Activity IV.A.145.
6. Workshop on Basic Marketing Aspects.
(January – February 1974, Lima) – Activity IV.A.146.
7. Reciprocal Training for Colonization Technicians.
(November 1973, Lima, Tingo María and Pucallpa) – Activity IV.A.223.
8. II National Course on the Operation, Conservation and Development of Irrigation Districts in Peru.
(October – November 1973) – Activity IV.S.414.
9. Support provided to the IV Meeting of Forage Specialists and Researchers of Peru.
(March 1974, San Cristobal de Huamanga, Ayacucho) – Activity IV.A.441.
10. Support provided on the Organization of Regional Groups.
(1 July 1973 through 30 June 1974, Lima, Ayacucho) – Activity IV.A.442.
11. Symposium on the Production of Seed from Forage Species.
(June 1974, Lima) – Activity IV.A.443.
12. The Analysis, Evaluation and Study of Existing Elements and Data, Selecting Patterns for Operational Purposes.
(January through June 1974, Lima) – Activity IV.A.511.
13. Study of the Rules, Norms and Patterns related to the Operation, Maintenance and Setting of Basic Methodology.
(January through June 1974, Lima) – Activity IV.A.512.
14. A Study of the Calculated Needs for Irrigation, at Different Levels Demand Curve.
(February through June 1974, Lima) – Activity IV.A.513.
15. The Establishment and Diagramming of Lines of Applied Research.
(February through June 1974, Lima) – Activity IV.A.514.
16. Support Provided on the Elaboration of the Necessary Instructions to attain a Coherent and

United Methodology for Problems related to Operation and Maintenance.
(March through June 1974, Lima) – Activity IV.A.515.

Line V. Multinational Integration

1. Analysis of the Relationships of the Cartagena Agreement with the Institutional System of the Agricultural Sector.
(1 July 1973 through 30 June 1974, Lima) – Activity V.A.121.

Line VI. Promotion and Implementation of Structural Changes

1. The Participation of two Argentinian Technicians at the Multinational Technical Meeting on Education of Associative 'Campesino' Enterprises.
(December 1973, Ica) – Activity VI.S.113.
2. Consulting Services provided CENCIRA on Research Methodology.
(September, October and December 1973, and January 1974, Lima) – Activity VI.C.122.
3. Consulting Services provided CENCIRA on Research Methodology in the field of 'Campesino' Training.
(March 1974, Lima) – Activity VI.A.141.
4. Collaboration provided the Technical Assistance Program of the Professors and Students of Peruvian Universities to the Agrarian Enterprises of Peru.
(1 July 1973 through 30 June 1974, Piura) – Activity VI.A.144.
5. Support provided the Agrarian Tribune of Peru on the holding of the Inter-American Symposium on Agrarian Law
(April – June 1974, Lima) – Activity VI.A.145.
6. Participation in the Inter-American Symposium on Agrarian Law.
(June 1974, Lima) – Activity VI.N.154.
7. A Revision of the Theory and the Analysis of Experience in the field of Adult Education in the Rural Sector of Peru.
(August 1973, Lima) – Activity VI.A.231.
8. Intermediary Stage of the National \ Workshop on Adult Education in Rural Areas.
(March 1974, Piura) – Activity VI.A.235.

9. Reciprocal Training in 'Campesino' Organization. (June - July 1974) - Activity VI.A.241.
10. Multinational Technical Meeting on Education of Associative 'Campesino' Enterprises. (December 1973, Ica) - Activity VI.C.311.

Line VII. Administration of Agricultural Policy

1. Support provided the Program for the Preparation and Evaluation of Agricultural Projects: OSPA-UNA. (1 July 1973 through 30 June 1974, Lima) - Activity VII.A.131.
2. Collaboration provided OSPA on the National Seminar for Agricultural Planning. (1 July 1973 through 30 June 1974, Lima) - Activity VII.A.133.
3. Advisory Services provided OSPA, Ministry of Agriculture of Peru. (June 1974, Lima) - Activity VII.A.135.
4. International Seminar on Production Systems for the American Tropics. (Land Utilization Systems). (June 1974, Lima) - Activity VII.S.233.
5. National Course on the Management of Higher Agricultural Education Organizations. (January 1974, Lima) - Activity VII.A.241.
6. A Study of the Movement of Populations in the Colonization areas of the Amazon Region. (1 July 1973 through 30 June 1974) - Activity VII.S.241.
7. Technical Meeting on Development Programming for Perennial Agriculture in the Wet American Tropics. (May 1974, Tingo María) - Activity VII.S.

UNITED STATES

Line IV. Promotion of Agricultural Production

1. Participation in the Symposium "AID's Role in On-Farm Water Management Research and Implementation". (October 1973, Utah) - Activity IV.S.415.

URUGUAY

Line I. Analysis of and Information on Rural Development

1. Analysis Methodology on Rural Development. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.111.

2. Consolidation of Current Situation and Tendencies in the Agricultural Sector of the Southern Zone. (June 1974, Montevideo) - Activity I.S.112.
3. Methodology for Institutional Analyses. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.113.
4. Situation and Tendencies of the Agricultural Sector in Uruguay. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.161.
5. Directory of Institutions with Rural Development Responsibilities, in Uruguay. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.162.
6. Analysis of the Rural Institutional System in Uruguay, and the Identification of the Sub-systems. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.163.
7. Advisory Services provided the IICA Offices in the Countries of the Southern Zone on Activities to Strengthen IICA's Image. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.211.
8. Trimestral Publication of the Information Bulletin. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.212.
9. The Preparation and Publication of a National Agricultural Bibliography. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.281.
10. Up-Dating of the Collective Catalog of Periodic Agricultural Journals. (July - December 1973, Montevideo) - Activity I.S.282.
11. Promotion of Interest for the Development of an Agricultural Documentation Center. (1 July 1973 through 30 June 1974, Montevideo) - Activity I.S.283.

Line II. Agricultural Education

1. The Academic Up-dating of Professors. (1 July 1973 through 30 June 1974, Montevideo) - Activity II.S.262.
2. Advisory Services provided the Faculties of Agronomy and Veterinary Sciences. (1 July 1973 through 30 June 1974, Montevideo) - Activity II.S.263.

Line III. Agricultural Research

1. Elaboration of a Document on Agricultural Production Costs.
(1 July 1973 through 30 June 1974, Montevideo) – Activity III.S.114.
2. Editing of Publications on Cattle Production Systems.
(1 July 1973 through 30 June 1974, Montevideo) – Activity III.S.116.

Line IV. Promotion of Agricultural Production

1. Advisory Services and Training for Agro-economic Studies of Agricultural Productivity.
(May – June 1974, Montevideo) – Activity IV.S.161.
2. Advisory Services provided the Department of Agricultural Economics on Professional Training.
(June 1974, Montevideo) – Activity IV.S.162.
3. Institutional Diagnostic Study of Agricultural Marketing in Uruguay.
(August 1973 through July 1974, Montevideo) – Activity IV.S.261.
4. Technical Meeting on the Agricultural Marketing Institutional System.
(June 1974, Montevideo) – Activity IV.S.262.
5. Advisory Services and Professional Training in Agricultural Marketing.
(1 July 1973 through 30 June 1974, Montevideo) – Activity IV.S.263.
6. Advisory Services and Training in Agro-economic Studies, Colombia.
(1 July 1973 through 30 June 1974) – Activity IV.S.311.
7. Participation in the Institutional Analysis of the National Colonization Institute.
(October 1973 through June 1974, Montevideo) – Activity IV.S.312.
8. Advisory Services provided on the Establishment of an Institutional Irrigation Sub-system for Uruguay, including Legislative and Regulatory Aspects.
(1 July 1973 through 30 June 1974) – Activity IV.S.441.
9. Establishment of a Demonstration Pilot Project on Irrigation Methods and for Cost/Benefit Studies of the Irrigation System of the Thomas Berreta Colony, Rio Negro, Uruguay.

(1 July 1973 through 30 June 1974) - Activity IV.S.442.

10. Second National Course on the Systematization of Irrigation Lands.
(October 1973) – Activity IV.S.443.
11. Technical Advisory Services provided the Ministry of Public Work on Matters Related to Progress Achieved by the Hydrographies Directorate.
(1 July 1973 through 30 June 1974) – Activity IV.S.444.
12. Joint Study of Potential Irrigation Areas with the Ministry of Public Works and the National Institute of Colonization.
(1 July 1973 through 30 June 1974) – Activity IV.S.445.
13. Agro-economic Studies of Animal Husbandry in the Regionalized Areas of Uruguay.
(1 July 1973 through 30 June 1974, Colonia, Montevideo) – Activity IV.S.514.

Line V. Multinational Integration

1. Promotional and Advisory Services on the Studies for Opportunities to Export Agricultural Products from Uruguay.
(1 July 1973 through 30 June 1974, Montevideo) – Activity V.S.112.

Line VII. Administration of Agricultural Policy

1. Advisory Services provided the OPYPAs Team on the Definition and Use of Simulation Models for Sectorial Programming.
(November 1973 through 30 June 1974, Montevideo) – Activity VII.S.121.
2. In-service Training on the Preparation and Evaluation of Agricultural Projects.
(1 July 1973 through 30 June 1974, Montevideo) – Activity VII.S.341.
3. Advisory Services provided on a Study at the Production Unit Level of Agricultural Projects.
(November 1973 through June 1974, Montevideo) – Activity VII.S.342.
4. Advisory Services provided on the Establishment and Evaluation of Projects.
(1 July 1973 through 30 June 1974, Montevideo) – Activity VII.S.343.

VENEZUELA

Line I. Analysis of and Information on Rural Development

1. Participation in the I National Meeting of Agricultural Librarians and Documentalists on the Creation of a National Information Sub-system. (April 1974, Caracas) – Activity I.D.121.1.
2. Presentation of the AGRINTER System to National Authorities, Librarians and Specialists. (1 July 1973 through 30 June 1974, Maracay) – Activity I.D.124.
3. Technical Meeting on Graduate Education. (April 1974, Maracay) – Activity I.A.143.
4. Up-Dating and Analysis of Information on the Evaluation of Agriculture and the Institutions in the Agricultural Sector of Venezuela. (July 1973 through March 1974, Caracas) – Activity I.A.151.
5. Advisory Services provided MAC on the Establishment of a Documentation Center. (November 1973 through June 1974, Maracay and Caracas) – Activity I.A.242.
6. Advisory Services in Library Sciences provided IAN, CIARA and UDO. (March – April 1974, Caracas and Jusepín) – Activity I.A.243.
7. Advisory Services provided MAC on Agricultural Communications. (June 1974, Maracay and Caracas) – Activity I.A.244.

Line II. Agricultural Education

1. Advisory Services provided the Research Office and the National Universities on the Coordination of Graduate Activities in Agricultural Sciences. (1 July 1973 through 30 June 1974, Caracas) – Activity II.A.141.
2. Up-dating of Information concerning the Graduate Program in Agricultural Sciences. (1 July 1973 through 30 June 1974) – Activity II.A.142.
3. IV Meeting of the Venezuelan Association of Higher Agricultural Education Institutions. (June 1974, Barquisimeto) – Activity II.A.251.

4. Work Session of Higher Agricultural Education Professors of Statistics. (December 1973, Maracaibo) – Activity II.A.251.1.
5. Work Session of Higher Agricultural Education Professors in Nutrition. (June 1974, Barquisimeto) – Activity II.A.251.2.
6. Work Session of Higher Agricultural Education Professors in Soil Sciences. (March 1974, Maracay) – Activity II.A.251.3.
7. Participation in the Meeting of the Board of Directors of the Venezuelan Association of Higher Agricultural Education. (December 1973, Barquisimeto) – Activity II.A.251.A.
8. Up-dating of Information on the Diagnosis and Evaluation of the Study Programs of the Faculties of Agronomy, Animal Husbandry and Veterinary Sciences. (1 July 1973 through 30 June 1974, Caracas) – Activity II.A.252.
9. Advisory Services provided the Faculty of Veterinary Medicine (LUZ) and the School of Animal Husbandry (UDO). (1 July 1973 through 30 June 1974) – Activity II.A.253.
10. Seminar on Research and Theses. (April 1974, Maracaibo) – Activity II.A.254.
11. National Seminar for Professors of Higher Agricultural Education in the Area of Food Technology and Agricultural Products. (June 1974, Maracay) – Activity II.A.255.
12. Working Session on the Planning and Utilization of Audio-visual Material. (June 1974, Jusepín) – Activity II.A.256.
13. Course on University Teaching Methodology in Forestry. (January 1974, Merida) – Activity II.A.258.
14. Advisory Services provided on the Amplification of Knowledge in the Social Sciences and Rural Development, at the Central University of Venezuela. (1 July 1973 through 30 June 1974, Maracay) – Activity II.A.257.
15. Up-dating the Study Programs and the Organization of Higher Agricultural Education. (1 July 1973 through 30 June 1974, Maracay) – Activity II.A.259.

16. Regional Seminar on Economics for Animal Husbandry Professors.
(May 1974, Maracaibo) – Activity II.A.263.
17. In-service Training for Two Professionals working on Rural Youth Programs.
(February – March 1974) – Activity II.A.322.
18. Advisory Services provided the Extension Service on the Supervision of Field Work.
(1 July 1973 through 30 June 1974, Caucagua) – Activity II.A.331.
19. Support provided the Extension Service on the Improvement of their Organization and Management Processes.
(1 July 1973 through 30 June 1974, Caracas) – Activity II.A.333.
20. Technical Meeting of Graduate Education.
(April 1974, Maracay) – Activity II.A.143.

Line III. Agricultural Research

1. Natural Resources Inventory and Rural Cadastral Survey.
(1 July 1973 through 30 June 1974, Caracas) – Activity III.A.153.
2. Advisory Services provided the Research Office of MAC.
(May 1974, Caracas) – Activity III.A.452.

Line IV. Promotion of Agricultural Production

1. Advisory Services provided the MAC Office of Economics and Statistics.
(September 1973 through 30 June 1974, Caracas) – Activity IV.A.154.
2. Advisory Services provided the Agricultural Marketing Corporation.
(September 1973 through June 1974, Caracas) – Activity IV.A.155.
3. I National Meeting on Marketing Instruments: Collecting Centers.
(May 1974, Merida) – Activity IV.A.156.
4. Advisory Services provided the Agricultural Development Department of the National Agrarian Institute.
(December 1973 through April 1974, Merida) – Activity IV.A.157.
5. Short Course Agrarian Policies Instruments.
(May 1974, Caracas) – Activity IV.A.158.

6. II Regional Animal Husbandry and Pastures Meeting.
(October 1973, Maracaibo) – Activity IV.A.413.

Line VI. Promotion and Implementation of Structural Changes

1. Course on Cartography, Planning and Photo-interpretation.
(February 1974, Caracas) – Activity VI.A.155.
2. Advisory Services provided IAN on Training for Farm Evaluations.
(1 July 1973 through 30 June 1974, Caracas) – Activity VI.A.152.
3. Advisory Services provided the INA Cadastral Unit.
(1 July 1973 through 30 June 1974, Caracas) – Activity VI.A.153.
4. IICA/OAS Consultation Meeting for the Establishment of a Technical Advisory Council on 'Campesino' Organization.
(August 1973, Caracas) – Activity VI.C.212.
5. Working Meeting on the Organization and Training of 'Campesinos'.
(June 1974, Caracas) – Activity VI.A.242.
6. Meeting of Agrarian Law Specialists.
(May 1974, Merida) – Activity VI.C.121.

Line VII. Administration of Agricultural Policy

1. Cycle on the Formulation and Evaluation of Agricultural Projects in Venezuela (FEPAGRI).
(July 1974, Caracas) – Activity VII.A.141.
2. Advisory Services provided IAN on Agricultural Planning.
(August – November 1973, Caracas) – Activity VII.A.143.
3. Analysis of the Regional Planning Organisms.
(July – November 1973 and February – March 1974, Caracas) – Activity VII.A.144.
4. Course on Institution Administration and Management, for the Public Agricultural Sector.
(April – May 1974, Caracas) – Activity VII.A.251.
5. Participation in the II Regional Meeting of Animal Husbandry and Pastures.
(October 1974, Maracaibo) – Activity VII.S.263.

6. Participation in the International Meeting on the Utilization of Economic Guidelines for the Development of the Humid American Tropics. (February 1974, Caracas) – Activity VII.A.264.1.

MULTINATIONAL ACTIVITIES

Line I. Analysis of and Information on Rural Development

1. The Training of Technical Personnel of the State Secretariat of Agriculture in Other Countries. (May 1974, Puerto Rico, Venezuela and Costa Rica) – Activity I.L.
2. Advisory Services provided on Diagnostic Studies, as per the request of a Regional Office. (March – June 1974, Guatemala, Peru and Uruguay) – Activity I.P.112.
3. The Study and Report on the Priorities of Technical Cooperation in Jamaica and Guyana. (October 1973) – Activity I.P.113.
4. Advisory Services provided the Regional Offices on the Social Implications of programs, projects and activities being conducted in Rural Development. (May – June 1974, Guatemala, Peru and Uruguay) – Activity I.P.134.
5. Programming Trips of the Associate Deputy Director General for Planning. (February – June 1974, Guatemala, Lima, Peru, and Montevideo, Uruguay) – Activity I.P.152.
6. Study of the Evaluation and Methods of Dissemination of Information in the Countries of the Central American Isthmus. (May 1974, Central America) – Activity I.N.210.3.

Line II. Agricultural Education

1. Analysis of the Graduate Education Institutions, with the purpose of establishing Regional Co-operative Programs. (1 July 1973 through 30 June 1974, Andean Zone countries) – Activity II.A.111.
2. Planning and Support of Graduate Education. (1 July 1973 through 30 June 1974, Argentina, Brazil and Chile) – Activity II.S.111.
3. Reciprocal Training in the Administration of Graduate Programs.

(May – June 1974, Argentina, Brazil, Colombia, Chile and Peru) – Activity II.A.144.

4. Planning and Support on the Coordination of University-level Education. (1 July 1973 through 30 June 1974, Argentina, Brazil, Chile, Paraguay and Uruguay) – Activity II.S.211.
5. Visits to Schools and Programs. (November 1973 through April 1974, Mexico, the Caribbean and South America) – Activity II.P.111.
6. Evaluation and Consulting Services to Graduate Education Institutions. (1 July 1973 through 30 June 1974, Latin America) – Activity II.P.112.

Line III. Agricultural Research

1. Collaboration provided on the Implementation of Legume Trials throughout Central America. (1 July 1973 through 30 June 1974, Central America and Panama) – Activity III.N.110.2.
2. Collaboration provided on the Study concerning the Production and Marketing of Basic Grains Seed throughout Central America. (August – November 1974, Central America) – Activity III.N.110.4.
3. In-service Training on Research in Pulses Production. (January – April 1974, Mayaquez, Puerto Rico) – Activity III.N.172.
4. In-service Training for two Paraguayans in another country; and for two MAG Technicians in Research on Wheat. (November 1973, Argentina, Brazil and Uruguay) – Activity II.S.226.
5. Regional Phenological Evaluation of Introduced Pastures, and of the Ecosystems of the High Andes. (1 July 1973 through 30 June 1974, Andean Zone countries) – Activity III.A.312.

Line IV. Promotion of Agricultural Production

1. Support to the Actions of the Tropical Forages Germplasm Bank. (1 July 1973 through 30 June 1974, Quito, Ecuador and Bogota, Colombia) – Activity IV.A.411.

2. Support provided on Pastures Publications. (1 July 1973 through 30 June 1974, Quito, Ecuador and Bogota, Colombia) – Activity IV.A.412.
3. International Exchange of Technicians and Information. (1 July 1973 through 30 June 1974, Argentina and Peru) – Activity IV.S.412.
4. Comparative Study of Charges for Irrigation System Services in the Temperate Region of South America. (1 July 1973 through 30 June 1974, Argentina, Brazil, Chile, Peru, Uruguay) – Activity IV.S.413.
5. Brief Analysis on the Current Situation of Agricultural Marketing of the Caribbean Countries which are not Members of IICA. (July 1974, Martinique and Puerto Rico) – Activity IV.L.242.
6. Direct Participation on the Elaboration of IICA Marketing Projects and Activities, to ensure the Application of IICA's Action Strategy for Marketing in each Country. (1 July 1973 through 30 June 1974) – Activity IV.N.386.
7. Analysis and Diagnosis of the Marketing Institutional Sub-system of Mexico. (June 1974, Mexico and Costa Rica) – Activity IV.N.321.
8. Participation in the Meeting of the Consultation of Research Experts on Agrarian Structural Changes. (November – December 1973, Berlin, Germany) – Activity VI.C.114.
9. Advisory Services provided the Extension Services, on the Elaboration, Execution and Evaluation of this Project. (1 July 1973 through 30 June 1974, Costa Rica, Guatemala, Paraguay and Venezuela) – Activity IV.P.131.
10. Supervision of the Work of 16 YDP Youth, in their Respective Countries. (September 1973 through August 1974, Costa Rica, Guatemala, Paraguay and Venezuela) – Activity IV.P.135.
11. Contribution to the Exchange of Knowledge and Technical Experience in the Field of Agricultural Marketing, between Ecuador and Colombia. (1 July 1973 through 30 June 1974) – Activity IV.A.125.

Line V. Multinational Integration

1. Institutional Analysis of the Possibilities for Reciprocal Cooperation in the Agricultural Sector, between the Member Countries of the Cartagena Agreement. (September 1973 through June 1974, Andean Zone Countries) – Activity V.A.122.

Line VI. Promotion and Implementation of Structural Changes

1. Collaboration provided the IICA Representative in Honduras, Panama and Costa Rica on IICA-FAO Research Studies concerning Associative Forms of Production. (July – September 1973, Costa Rica, Colombia, Honduras and Panama) – Activity VI.C.112.
2. Administration of the Training and Studies Program of Agrarian Reform and Rural Development of the Central America Isthmus – PRACA. (1 July 1973 through 30 June 1974, Central America) – Activity VI.N.191.
3. Reciprocal Training in Agrarian Reform. (October – November 1973 through April 1974, Bulgaria, Italy, Spain and Yugoslavia) – Activity VI.N.193.
4. Case Studies of 'Campesino' Community Enterprises. (1 July 1973 through 30 June 1974, Honduras, Costa Rica and Panama) – Activity VI.N.198.

Line VII. Administration of Agricultural Policy

1. Study of the Social Variables in Agricultural Sectorial Planning. (1 July 1973 through 30 June 1974, Central America) – Activity VII.N.122.

IICA ACTIVITIES IN COUNTRIES OUTSIDE OF THE AREA

1. Participation in the Planning and Development of the International System for Agricultural Sciences and Technology – AGRIS. (September – October 1973, Italy) – Activity I.D.131.
2. Presentation of the Regional Information Nucleus for AGRIS, from Latin America and the Caribbean, at the Meeting for Developing Countries. (September 1973, Italy) – Activity I.D.133.

ACTIVITIES AND SERVICES

BOLIVIA:

1. Advisory Services provided the Agronomy Department of the University of San Simon, on the Improvement of Library and Documentation Services.
(1 July 1973 through 30 June 1974, Cochabamba).

BRAZIL:

1. Advisory and Coordination Services on the Library Development Program of the Viçosa/IICA Agreement.
(1 July 1973 through 30 June 1974, Viçosa).
2. Advisory Services on the Creation and Development of a Documentation Center for the Amazon Region.
(1 July 1973 through 30 June 1974, Belem).
3. Support provided on the Development of a Regional Agricultural Documentation Center (Southern Region).
(1 July 1973 through 30 June 1974, Pelotas).
4. Collaboration provided with the Southern Zone, on the Study for the Establishment of a Data Bank for EMBRAPA.
(1 July 1973 through 30 June 1974).

COLOMBIA:

1. Counselling Graduate Students (Directing Thesis Work).
(1 July 1973 through 30 June 1974, Bogota).
2. Support provided on the Seminar on Communications for the Foot and Mouth Disease Campaign (BID).
(July 1973, Bogota).
3. Participation in the Meeting of Field Specialists from the Rural Development Division of the Social and Institutional Development Department of the OAS.
(August 1973, Bogota).

COSTA RICA:

1. Support provided on the Development of the Documentation Unit of the Cooperative Program of the American Tropics.
(1 July 1973 through 30 June 1974, Turrialba).

2. Participation in the Coordination of Documentation Activities of the Program.
(1 July 1973 through 30 June 1974, Turrialba).
3. The Planning and Development of Documentation and Information Activities on Agricultural Marketing.
(1 July 1973 through 30 June 1974, Turrialba).
4. Course on the Utilization of Agricultural Literature for the Graduate School of the University of Costa Rica.
(January - March 1974, Turrialba).
5. Collaboration on the Training in the Utilization of Agricultural Literature at the Faculty of Agronomy of the University of Costa Rica.
(1 July 1973 through 30 June 1974, Turrialba).
6. Collaboration on the Training and the Utilization of Agricultural Literature for CATIE Courses and Seminars.
(1 July 1973 through 30 June 1974, Turrialba).
7. Advisory Services on the Preparation of Bibliographic Citations for Theses of the University of Costa Rica Graduate School.
(1 July 1973 through 30 June 1974, Turrialba).
8. Technical Writing Course for the Graduate School of the University of Costa Rica.
(July - September 1974, Turrialba).
9. Training Services in Scientific Communications for CATIE.
(1 July 1973 through 30 June 1974, Turrialba).
10. Advisory Services in Scientific Communication in Theses, for the University of Costa Rica Graduate School.
(1 July 1973 through 30 June 1974, Turrialba).
11. Collaboration provided the Faculty of Agronomy of the University of Costa Rica on the Elaboration of a Thesis and Practices Manual.
(July - December 1973, San Jose).
12. Library Services to the Graduate School of the University of Costa Rica.
(1 July 1973 through 30 June 1974, Turrialba).
13. Inter-Library Loans of Publications, to Agricultural Libraries of the Country.
(1 July 1973 through 30 June 1974, Turrialba).
14. Collaboration provided on the Distribution of AIBDA Publications.
(1 July 1973 through 30 June 1974, Turrialba).

15. Collaboration provided on the Distribution of IICA-TROPICOS Publications.
(1 July 1973 through 30 June 1974, Turrialba).
16. Collaboration on the Distribution of ROCAP/IICA-Northern Zone Publications edited at Turrialba.
(1 July 1973 through 30 June 1974).
17. Systems Analysis and Programming.
(1 July 1973 through 30 June 1974, Turrialba).
18. Coding, Perforating, Verifying and Classifying Data.
(1 July 1973 through 30 June 1974, Turrialba).
19. Electronic Processing of Information.
(1 July 1973 through 30 June 1974, Turrialba).
20. Data Processing Course (UCR-CATIE).
(April - June 1974, Turrialba).
21. Course on the Introduction of Statistics (UCR-CATIE).
(April - June 1974, Turrialba).
22. Development of a Method for the Analysis and Interpretation of 'Optimization' for Multiple Alternative at the Exploitation Unit Level.
(1 July 1973 through 30 June 1974, Turrialba).
23. Evolutionary Study of Central America Agriculture, a five year projection.
(1 July 1973 through 30 June 1974, Turrialba).
24. Institutional Analysis.
(1 July 1973 through 30 June 1974, Turrialba).
25. Analysis of Technical Budgets.
(1 July 1973 through 30 June 1974, Turrialba).
26. A Study of the Need for Texts in Latin America.
(1 July 1973 through 30 June 1974, Turrialba).

DOMINICAN REPUBLIC:

1. Support provided on the Establishment of a Coffee Department Library, in the Secretariat of Agriculture.
(1 July 1973 through 30 June 1974, Santo Domingo).

EL SALVADOR:

1. Training Course in Offset Graphic Arts.
(1 July 1973 through 30 June 1974, Santa Tecla).

MEXICO:

1. Advisory Services and Support provided on the Planning and Organization of a National Agricultural Libraries Course.
(February - April 1974, Mexico, D.F.).

PERU:

1. Collaboration provided with the Andean Zone on the Program concerning the Socio-economic Aspects of Research.
(1 July 1973 through 30 June 1974, Lima).

MULTINATIONAL ACTIVITIES

1. Assistance provided the technical personnel of the IICA units on the conceptual visualization of models, data collecting designs, etc.
(1 July through 30 June 1974, Member States).
2. Collaboration provided with the Northern Zone to the Sub-sectorial ROCAP-IICA-BCIE-SIECA Program, and Assistance to several of the Central American Countries.
(1 July 1973 through 30 June 1974, Countries of the Northern Zone).



Appendix II.

INSTITUTIONS WITH WHICH IICA
COOPERATED
IN THE 1973~74 PERIOD



INSTITUTIONS WITH WHICH IICA COOPERATED

IN THE 1973 - 74 PERIOD

ARGENTINA

Secretaría de Estado de Agricultura y Ganadería de la Nación	Consejo Federal de Inversiones (CFI)
Dirección Nacional de Desarrollo Agropecuario	Gerencia de Riego - Agua y Energía Eléctrica (A y E)
Dirección Nacional de Estadística y Censos	CORFO - Río Colorado
Consejo Agrario Nacional	Fuerza Aérea Argentina
Instituto Nacional de Tecnología Agropecuaria	Dirección General de Irrigación - Prov. de Mendoza
Escuela para Graduados en Ciencias Agropecuarias	CIMALCO S.A.
Facultad de Agronomía de la UBA	Banco de la Ciudad de Buenos Aires
Facultad de Ciencias Veterinarias de la UBA	Corporación del Río Dulce
Facultad de Ciencias Agrarias, U.N. de Cuyo	Instituto de Desarrollo del Valle Inferior del Río Negro (IDEVI)
Facultad de Agronomía U.N. del N.E.	Depto. de Hidráulica - Prov. de San Juan
Facultad de Agronomía y Zootecnia U.N. de Tucumán	Depto. de Hidráulica - Prov. de Córdoba
Facultad de Agronomía - U.N. de Jujuy	Depto. Gral. de Irrigación - Prov. de Tucumán
Biblioteca Central - Fac. de Agronomía de la UBA	Subsecretaría de Asuntos Agrarios - Prov. de Entre Ríos
Facultad de Agronomía - U.N. de La Plata	Administración General de Agua y Energía - Prov. de Jujuy
Facultad de Ciencias Veterinarias de U.N. de La Plata	Subsecretaría de Obras Públicas - Prov. de Jujuy
Instituto Nacional de la Actividad Hípica	Ingenio La Esperanza - Prov. de Jujuy
Asociación Universitaria de Enseñanza Agrícola Superior (AUDEAS)	Banco de la Nación Argentina
Confederación Intercooperativa Agraria (CONINAGRO)	Gobierno Provincial de La Rioja
Junta Nacional de Carnes	Dirección de Hidráulica - Prov. de Río Negro
Instituto de Colonización del Chaco	Ministerio de Agricultura y Ganadería - Provincia de Santa Fe
Subsecretaría de Recursos Hídricos de la Nación	Depto. de Irrigación Prov. de Sgo. del Estero
	Estación Experimental Agrícola - Prov. de Tucumán

Consejo Profesional de Agrimensores, Arquitectos e Ingenieros Prov. de Jujuy

Ministerio de Agricultura y Ganadería - Prov. del Chaco

Secretaría de Estado de la Producción - Prov. de Salto

Asesoría de desarrollo de la Prov. de Jujuy

Ministerio de Agricultura y Ganadería de la Prov. de Sgo. del Estero

Instituto Nacional de Ciencias y Técnica Hídrica (INCYTH)

BOLIVIA

Ministerio de Asuntos Campesinos y Agropecuarios (MACA)

Ministerio de Finanzas

Consejo Nacional de Economía y Planificación

Universidad Boliviana Mayor de San Simón, Cochabamba

Consejo Nacional de Educación Superior CNES

Asociación Boliviana de Producción Animal

Sociedad de Ingenieros Agrónomos

Universidad Mayor y Autónoma Gabriel René Moreno, Sta. Cruz

Universidad Boliviana "Juan Misael Saracho", Tarija

Universidad Técnica de Oruro

Misión Técnica de la Universidad de Utah-USAID/Bolivia

Corporación de Desarrollo de Oruro

Universidad Boliviana Técnica de Oruro (UBTO)

Banco Agrícola de Bolivia

CORDEOR

Empresa Nacional de Arroz

Comité Boliviano de Fomento Lanero (CONBOFLA)

Empresa Constructora de Silos de Colombia y Bolivia

Proyecto Abapóizizog

Cámara Agropecuaria de Oriente

Cámara Nacional Forestal de Bolivia

Cámara Departamental de Comercio e Industria de Santa Cruz

Prefectura del Departamento de Santa Cruz

Instituto Nacional de Colonización

Universidad Mayor de San Andrés

BRAZIL

Sistema Nacional de Documentação e Informação

Programa de Trópicos Úmidos do CNPq

Superintendência do Desenvolvimento da Amazônia – SUDAM

Associação de Crédito e Assistência Rural do Pará – ACAR-PARA

Faculdade de Ciências Agrárias do Pará

Instituto de Pesquisa e Experimentação Agropecuária do Norte – IPEAN

Instituto de Pesquisa e Experimentação Agropecuária da Amazônia Oriental – IPEAOc

Coordenadoria de Informação Rural

Universidade Federal Rural do Rio Grande do Sul

Universidade de Santa Maria – Rio Grande do Sul

Instituto de Pesquisa e Experimentação Agropecuária do Sul – IPEAS

Universidade Federal de Pelotas – Rio Grande do Sul

Universidade Federal de Viçosa – Minas Gerais

Escola Superior de Agricultura "Luiz de Queiróz"

Museu Paraense "Emílio Goeldi"

Comissão Executiva do Plano da Lavoura Cacaueira – CEPLAC

Grupo de Erradicação da Febre Aftosa

Superintendência do Desenvolvimento do Nordeste – SUDENE

Governo do Estado da Bahia

Universidade Federal da Bahia

Universidade Católica de Salvador

Pontifícia Universidade Católica do Rio Grande do Sul

Secretaria de Agricultura do Estado do Rio Grande do Sul

Departamento de Assuntos Universitários do Ministério da Educação e Cultura

Consortio de Universidades do Rio Grande do Sul

Programa de Apoio Interuniversitário em Ciências Agrícolas – PAICA

Curso de Pós-graduação de Universidades (PAICA)

Associação Brasileira de Educação Agrícola Superior – ABEAS

Departamento de Ensino Médio do Ministério da Educação e Cultura

Programa de Desenvolvimento do Ensino Médio – PRODEM

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – CAPES

Comissão Especial para Execução do Plano de Melhoria e Expansão do Ensino Superior – CEPES

Empresa Brasileira de Pesquisa Agropecuária – EMBRAPA

Associação Brasileira de Crédito e Assistência Rural – ABCAR

Fundação de Ciências e Tecnologia do Rio Grande do Sul

Grupo Executivo de Irrigação para o Desenvolvimento Agrícola – GEIDA

Superintendência do Vale do São Francisco – SUVALE

Departamento Nacional de Obras Contra as Secas – DNOCS

Departamento Nacional de Obras de Saneamento – DNOS

Associação Nordestina de Crédito e Assistência Rural de Pernambuco – ANCAR-PE

Associação Nordestina de Crédito e Assistência Rural de Alagoas – ANCAR-Alagoas

Secretaria de Agricultura da Bahia

Secretaria de Agricultura de Pernambuco

Universidade Federal do Ceará

Universidade Federal da Paraíba

Universidade Rural de Pernambuco

Universidade Federal da Bahia

Faculdade de Agronomia do Médio São Francisco – Bahia

Universidade Federal Rural do Rio de Janeiro

Escola Superior de Agricultura de Lavras – Minas Gerais

Secretaria de Coordenação e Planejamento do Rio Grande do Sul

Banco Regional de Desenvolvimento do Extremo Sul

Instituto Nacional de Colonização e Reforma Agrária – INCRA

Associação Sulina de Crédito e Assistência Rural – ASCAR

Fundação de Economia e Estatística do Rio Grande do Sul

Superintendência da Borracha – SUDHEVEA

Conselho Nacional de Pesquisa – CNPq

Departamento de Meteorologia e Chuvas Artificiais

Instituto de Atividades Espaciais

Instituto de Pesquisas Espaciais

Centro de Pesquisas e Desenvolvimento

Carteira de Crédito Agrícola do Banco do Brasil (CREAI)

Banco Central (BCB)

Banco Nacional de Desenvolvimento Econômico (BNDE)

Escritório Técnico de Estudos do Nordeste (ETENE)

Banco da Amazônia (BASA)

Instituto de Pesquisas de Estudos Florestais (IPEF)

Secretarias de Agricultura

Instituto de Soja

Fecotrigo (Federação das Cooperativas do Trigo) – Rio Grande do Sul

Cooperativa Agrícola de Cotia

Instituto Riograndense do Arroz

Instituto da Carne

Instituto de Pesquisas da Amazônia

Financiadora de Projetos (FINEP)

Instituto do Açúcar e do Alcool (IAA)

Instituto Brasileiro do Café (IBC)

Instituto Brasileiro de Desenvolvimento Florestal (IBDF)

Instituto Estadual de Florestas (IEF) – Sao Paulo

Instituto Estadual de Florestas (IEF) – Minas Gerais

Grupo Executivo de Racionalização da Cafeicultura (GERCA)

Superintendência da Zona Franca de Manaus (SUFRAMA)

Superintendência do Desenvolvimento do Centro Oeste (SUDECO)

Superintendência do Desenvolvimento do Sul (SUDESUL)

Superintendência Nacional de Abastecimento (SUNAB)

Companhia Brasileira de Alimentação (COBAL)

Companhia Brasileira de Armazenagem (CIBRAZEM)

Comissão de Financiamento da Produção (CFD)

Companhia Agrícola de Minas Gerais (CAMIG)

Instituto de Solos – Sao Paulo

Fundação Rural de Minas Gerais

Centrais de Abastecimento

Universidades Rurais

COLOMBIA

Almacenes Generales de Depósito

Banco Ganadero

Banco de la República

Biblioteca Agropecuaria de Colombia (BAC)

Caja de Crédito Agrario, Industrial y Minero

Centro de Estudios e Investigación sobre Mercadeo Agropecuario (CEIMA)

Centro de Información Económica de la Cámara de Comercio de Bogotá

Central de Cooperativas de Reforma Agraria

Centro de Investigaciones para el Desarrollo (CID)

Corporación Autónoma Regional del Cauca (CVC)

Corporación de Abastos de Bogotá (CORABASTOS)

Corporación Financiera Agraria (COFIAGRO)

Departamento Administrativo Nacional de Estadística (DANE)

Departamento Nacional de Planeación

Empresa Colombiana de Productos Veterinarios

Empresa de Comercialización de Productos Perecederos

Fundación Alemana para el Desarrollo

Federación Nacional de Ganaderos (FEDEGAN)

Federación Nacional de Cafeteros (FEDERACAFE)

Fondo Colombiano de Investigaciones Científicas (COLCIENCIAS)

Fondo Nacional de Caminos Vecinales

Fondo Nacional para Promoción de Exportaciones (PROEXPO)

Instituto Colombiano de Fomento de la Educación Superior (ICFES)

Instituto Colombiano de la Reforma Agraria (INCORA)

Instituto de Mercadeo Agropecuario (IDEMA)

Instituto Colombiano Agropecuario (ICA)
Instituto de Desarrollo de los Recursos Naturales Renovables (INDERENA)
Instituto Geográfico "Agustín Codazzi"
Instituto Técnico Universitario de Cundinamarca
Instituto Colombiano de Bienestar Familiar
Ministerio de Agricultura
Ministerio de Defensa Nacional
Ministerio de Gobierno
Ministerio de Salud
Oficina de Planeamiento del Sector Agropecuario (OPSA)
Programa Nacional de Capacitación Agropecuaria (PNCA)
Servicio Nacional de Aprendizaje (SENA)
Secretaría de Agricultura de Antioquia
Universidad de Bogotá, Jorge Tadeo Lozano
Universidad Nacional, Facultad de Agronomía, Palmira
Universidad del Valle
Universidad Nacional, Bogotá
Universidad de Los Andes
Universidad del Tolima
Universidad Distrital 'Francisco José de Caldas'
Universidad de Córdoba
Universidad Nacional, Seccional Medellín
Universidad Tecnológica del Magdalena

COSTA RICA

Ministerio de Agricultura y Ganadería (MAG)
Instituto de Tierras y Colonización (ITCO)
Instituto Mixto de Ayuda Social (IMAS)

Consejo Nacional de Producción (CNP)
Dirección Nacional de Desarrollo de la Comunidad (DINADECO)
Consejo Agropecuario Nacional (CAN)
Banco Central
Banco Nacional de Costa Rica
Banco de Costa Rica
Programa Integral de Mercadeo Agrícola
Instituto de Fomento y Asesoría Municipal (IFAM)
Instituto Técnico Agrícola de Santa Clara
Instituto de Fomento de Cooperativas (INFOCOP)
Universidad de Costa Rica
Universidad Nacional Autónoma

CHILE

Ministerio de Relaciones Exteriores
Ministerio de Agricultura
Ministerio de Obras Públicas
Ministerio de Educación
Subsecretaría de Agricultura
Dirección General de Obras Públicas
Dirección General de Aguas
Dirección de Riego
Dirección Oficina de Planificación Agrícola (ODEPA)
Servicio Agrícola y Ganadero (SAG)
División de Conservación de Recursos Naturales (DICOEN)
División de Producción Agropecuaria (DIPA)
Corporación de Reforma Agraria (CORA)
Instituto de Desarrollo Agropecuario (INDAP)
Instituto de Investigaciones Agropecuarias (INIA)

Instituto de Recursos Naturales (IREN)
Oficina de Planificación Nacional (ODEPLAN)
Banco del Estado de Chile
Corporación de Fomento de la Producción (CORPO)
Comisión Nacional de Investigación Científica y Tecnológica (CONICYT)
Empresa de Comercio Agrícola (ECA)
Industria Azucarera Nacional S.A. (IANSA)
Compradora de Maravilla (COMARSA)
Instituto de Capacitación e Investigación en Reforma Agraria (ICIRA)
Instituto Forestal de Chile
Empresa Nacional de Semillas (ENDS)
Consejo de Rectores de las Universidades Chilenas
Comisión Permanente de las Ciencias Agropecuarias y Forestales
Universidad de Chile
Universidad Católica de Chile
Universidad Católica de Valparaíso
Universidad de Concepción
Universidad Austral de Chile
Facultad de Agronomía Universidad de Chile
Facultad de Agronomía Universidad Católica de Chile
Escuela de Agronomía Universidad Católica de Valparaíso
Escuela de Agronomía Universidad de Concepción
Facultad de Ciencias Agrarias Universidad Austral de Chile
Facultad de Medicina Veterinaria Universidad de Chile
Facultad de Medicina Veterinaria Universidad Austral de Chile
Escuela de Medicina Veterinaria Universidad de Concepción
Facultad de Ciencias Forestales Universidad de Chile

Facultad de Ingeniería Forestal Universidad Austral de Chile
Colegio de Ingenieros Agrónomos
Colegio de Médicos Veterinarios
Asociación de Ingenieros Agrónomos
Sociedad Agronómica de Chile
Sociedad de Medicina Veterinaria de Chile
Colegio de Técnicos y Prácticos Agrícolas de Chile
Centros Bibliotecarios Agropecuarios y Forestales de Chile
Sociedad Nacional de Agricultura (SNA)
Centro de Estudios Agrarios (CEA)
Centro de Estudios de la Realidad Nacional (CEREN)
Centro de Estudios Socio-Económicos (CESO)
Instituto de Administración (INSORA)
Instituto de Educación Rural (IER)

DOMINICAN REPUBLIC

Secretaría de Estado de Agricultura (SEA)
Instituto Dominicano de Estudios Aplicados
Oficina Nacional de Administración de Personal
Universidad Nacional Pedro Henríquez Ureña (UNPHU)
Banco Agrícola de la República Dominicana (BAGRICOLA)
Universidad Autónoma de Santo Domingo (UASD)
Universidad Católica Madre y Maestra (UCMM)
Instituto Nacional de Recursos Hidráulicos (INDRHI)
Banco Agrícola
Centro Dominicano de Promoción de Exportaciones (CEDOPEX)
Instituto de Desarrollo y Crédito Cooperativo (INDECOOP)

Instituto Agrario Dominicano (IAD)

Instituto de Estabilización de Precios (INESPRE)

Oficina de Desarrollo de la Comunidad

Centro Nacional de Investigación, Extensión y Capacitación Agropecuaria (CNIECA)

ECUADOR

Ministerio de Agricultura y Ganadería

Dirección General de Planificación

Dirección de Desarrollo Rural

Dirección de Desarrollo Ganadero

Dirección de Desarrollo Agrícola

Dirección de Desarrollo Forestal

Dirección de Comercialización y Empresas

Programas y Organismos adscritos al mismo Ministerio

Junta Nacional de Planificación y Coordinación

Banco Central del Ecuador

Banco Nacional de Fomento

Instituto Nacional de Recursos Hidráulicos (INERHI)

Instituto Nacional de Investigaciones Agropecuarias (INIAP)

Instituto Nacional de Estadística

Instituto Ecuatoriano de Reforma Agraria y Colonización (IERAC)

Central Ecuatoriana de Servicios Agrícolas (CESA)

Universidad Central del Ecuador (Facultad de Ingeniería Agronómica y Medicina Veterinaria)

Universidad de Guayaquil (Facultad de Agronomía y Medicina Veterinaria)

Universidad Técnica de Manabí (Facultad de Ingeniería Agronómica, Ingeniería Agrícola y Medicina Veterinaria)

Universidad de Machala (Facultad de Ingeniería Agronómica y Medicina Veterinaria)

Universidad Técnica de Esmeraldas "Luis Vargas Torres" (Facultad de Forestal y Zootecnia)

Escuela Superior Politécnica de Chimborazo

Oficina Nacional de Avalúos y Catastros (ONAC)

Comisión de Estudios para el Desarrollo de la Cuenca del Río Guayas (CEDEGE)

Ministerio de Previsión Social y Trabajo

Dirección de Cooperativas

Dirección de Promoción Social y Campesinado

Dirección General de Trabajo

Federación de Campesinos Libres del Ecuador

Federación Nacional de Indios

Federación de Organizaciones Campesinas

Federación de Trabajadores Agrícolas del Ecuador

Instituto de Mercadeo Agrario de Colombia

Federación Nacional de Arroceros de Colombia

Corporación de Abastos de Colombia

Programa Nacional de Capacitación PNCA Colombia

Cuerpo de Paz

Conscripción Agraria Militar Ecuatoriana (CAME)

EL SALVADOR

Ministerio de Agricultura y Ganadería

Dirección General de Sanidad y Reproducción Animal

Dirección General de Recursos Naturales Renovables

Dirección Nacional de Tecnología Agropecuaria

CENTA

Dirección General de Economía y Planificación Agropecuaria

Departamento de Administración Financiera

Departamento de Información Agropecuaria

Instituto Salvadoreño de Investigaciones de Café

Consejo Nacional de Planificación y Coordinación Económica (CONAPLAN)

Instituto de Colonización Rural (ICR)

Banco de Fomento Agropecuario

Instituto Salvadoreño de Fomento Cooperativo (INSAFOCOOP)

Dirección General de Estadísticas y Censos

Facultad de Ciencias Agronómicas

Instituto Regulador de Abastecimientos (IRA)

Escuela Nacional de Agricultura (ENA)

GUATEMALA

Instituto de Ciencias y Tecnología Agrícolas (ICTA)

Universidad de San Carlos

Universidad del Valle de Guatemala

Ministerio de Educación Pública

Instituto de Ciencias de la Conducta

Ministerio de Agricultura

DIGESA

Instituto Técnico de Agricultura de Bárcena (ITA)

Programa de Desarrollo Ganadero (PRODEGA)

Instituto de Comercialización Agropecuaria (INDECA)

Consejo de Planificación Económica

Dirección de Comercio Interior y Exterior

Instituto Nacional de Transformación Agraria (INTA)

Dirección General de Servicios Agropecuarios

Departamento de Capacitación Agropecuaria (DECA)

HAITI

Consejo Nacional de Desarrollo y Planificación (CONADEP)

Instituto Haitiano del Café y de otros Productos de Exportación (IHPCADE)

Instituto Haitiano de Estadísticas (IHE)

Instituto de Desarrollo Agrícola e Industrial (IDAI)

Antillean Research Program

Commission Nationale d'Aménagement du Territoire (CONAT)

Administration Générale des Contributions

Département de l'Industrie et du Commerce

Municipalidad de Puerto Príncipe

Universidad del Estado de Haití (UEH)

Forces Armées d'Haiti (FAD'H)

Organisme de Développement de la Vallée de l'Artibonite (ODVA)

Departament de l'Industrie et en Commerce

Centre Haitien d'Investigation en Sciences Sociales (CHISS)

Agencia Canadiense de Desarrollo Internacional (ACDI)

Service de Conservation de Sols des Forêts et de la Protection de la Faune

Département de l'Agriculture, des Ressources Naturelles et du Développement Rural (DARNDR)

Mennonite Central Committee (MCC)

Service Chrétien d'Haiti (SCH)

Haitian American Community Help Organisation (HACHO)

HONDURAS

Ministerio de Recursos Naturales

Consejo Superior de Planificación Económica

Instituto Nacional Agrario (INA)
Federación de Cooperativas Agropecuarias
Asociación Nacional de Campesinos de Honduras (ANACH)
Federación Nacional de Agricultores y Ganaderos de Honduras (FENAGH)
Banco Nacional de Fomento
Banco Central de Honduras
Dirección General de Estadística y Censos
Centro Cooperativo Técnico Industrial
Dirección de Fomento Cooperativo
Universidad Nacional Autónoma de Honduras
Escuela Agrícola Panamericana
Estado Mayor de las Fuerzas Armadas
Dirección General de Desarrollo Agropecuario
Programa de Capacitación de Reforma Agraria (PROCARA)
Bancos Privados
Dirección de Educación Vocacional
Servicios Técnicos del Caribe

JAMAICA

Ministerio de Agricultura
Agricultural Marketing Corporation
Antillean Research Program

MEXICO

Gobierno de México
Centro Regional de Ayuda Técnica de México (RTAC)
Instituto Latinoamericano de Cinematografía Educativa (ILCE)

Comisión Coordinadora del Sector Agropecuario
Escuela Nacional de Agricultura de Chapingo
Consejo Nacional de Ciencias y Tecnología
Instituto Nacional de Investigadores Agrícolas (INIA)
Escuela Superior de Agricultura "Hermanos Escobar"
Universidad de Tamaulipas
Asociación Mexicana de Educación Agrícola Superior (AMEAS)
Instituto Tecnológico y de Estudios Superiores de Monterrey
Escuela Superior de Agricultura "Antonio Narro"
Secretaría de Educación Pública (SEP)
Dirección General de Educación Extraescolar en el Medio Rural
Escuelas Técnicas Agropecuarias (ETA)
Centro de Estudios Tecnológicos y Agropecuarios (CETA)
Instituto Tecnológico Regional de Mérida
Centro de Información de Zonas Áridas
Secretaría de Agricultura y Ganadería
Centro Nacional de Información para Zonas Áridas
Secretaría de Agricultura y Ganadería de Coahuila
Centro Nacional de Investigación para el Desarrollo de Zonas Áridas
Comisión del Grijalva
Compañía Nacional de Subsistencias Populares (CONASUPO)
Instituto Mexicano de Comercio Exterior (IMCE)
Departamento de Asuntos Agrarios y Colonización (DAAC)
Comisión Coordinadora del Sector Agropecuario (COCOSA)
Centro Nacional de Productividad de México
Instituto Politécnico Nacional

NICARAGUA

Ministerio de Agricultura y Ganadería (MAG)

Unidad de Análisis Sectorial (UNASEC)

Escuela Nacional de Agricultura y Ganadería

Universidad Centroamericana

Banco Nacional de Nicaragua

Banco Central

PANAMA

Universidad de Panamá

Ministerio de Desarrollo Agropecuario (MIDA)

Dirección General de Desarrollo Social

Dirección Nacional de Reforma Agraria

PARAGUAY

Secretaría Técnica de Planificación (STP)

Ministerio de Agricultura y Ganadería (MAG)

Dirección de Investigación y Extensión Agropecuaria y Forestal

Servicio de Extensión Agrícola Ganadera

Dirección de Comercialización y Economía Agropecuaria

Coordinación del Proyecto Integrado de Desarrollo Agropecuario (PIDAP)

Banco Nacional de Fomento (BNF)

Crédito Agrícola de Habilitación (CAH)

Instituto de Bienestar Rural (IBR)

Facultad de Agronomía y Veterinaria de la Universidad Nacional de Asunción (FAV)

Oficina Nacional de Progreso Social (ONPS)

Oficina Nacional de Proyectos (ONP)

PERU

Ministerio de Agricultura

Tribunal Agrario

Central de Cooperativas Agrarias de Producción Azucarrera del Perú, Ltda.

Ministerio de Educación

Ministerio de Salud

Ministerio de Transportes y Comunicaciones

Ministerio del Interior

Ministerio de Trabajo

Ministerio de Economía y Finanzas

Ministerio de Comercio

Ministerio de Relaciones Exteriores

Ministerio de Energía y Minas

Ministerio de Guerra

Universidad Nacional Agraria

Universidad Nacional San Antonio Abad del Cuzco

Universidad Nacional San Luis Gonzaga

Universidad Nacional Pedro Ruiz Gallo

Universidad Nacional Hermilio Valdizán

Universidad Nacional San Cristóbal de Huamanga

Universidad Nacional Agraria de la Selva

Universidad Nacional del Centro del Perú

Universidad Nacional de la Amazonía Peruana

Universidad Nacional Técnica de Cajamarca

Universidad Nacional Técnica del Altiplano

Universidad Nacional Técnica de Piura

Universidad Nacional José Faustino Sánchez Carrión

Universidad de Lima

Universidad Nacional Federico Villarreal

Universidad Nacional de Ingeniería
Universidad San Martín de Porres
Universidad Nacional Mayor de San Marcos
Pontificia Universidad Católica del Perú
Consejo Nacional de la Universidad Peruana (CONUP)
Banco de Fomento Agropecuario
Banco Central Hipotecario
Banco de la Nación
Concejo Distrital de San Bartolo
Concejo Distrital de San Martín de Porres
Concejo Nacional de Investigaciones
Concejo Distrital de Lince
Concejo Distrital de la Victoria
Encuesta Nacional de Consumo de Alimentos
Especialistas e Investigadores Forrajeros del Perú
Escuela Superior de Administración Pública
Asociación Nacional de Productores de Arroz
Asociación Peruana de Instituciones Agropecuarias (APIAU)
Asociación de Investigadores Agrícolas y Pecuarios del Perú
Organismo Regional para el Desarrollo de la Zona Afectada (ORDEZA)
Sistema Nacional de Apoyo a la Movilización Social (SINAMOS)
Oficina Nacional de Evaluación de los Recursos Naturales (ONERN)
HORTUS S.A.
Petróleos del Perú (PETROPERU)
Instituto Nacional de Planificación
Procuraduría General de la República

Centro de Estudios y Promoción del Desarrollo
Fundación para el Desarrollo Nacional
Junta del Acuerdo de Cartagena

UNITED STATES

Northrup King Co
Misión de la Universidad de Utah
Universidad de Florida
United Fruit Co.
Departamento de Agricultura de Estados Unidos de América
Fundación Friedrich Ebert
Universidad de California
Universidad de Yale
Fundación Ford
National Agricultural Library
Fundación Kellogg
Iowa State University
North Carolina State University
Universidad de Puerto Rico
Caribbean Studies Association (Puerto Rico)
Servicio de Extensión Agrícola (Puerto Rico)
Colegio de Mayagüez (Puerto Rico)

URUGUAY

Oficinas Nacionales de Planeamiento Agrícola
Oficina Nacional de Programación y Política Agropecuaria
Ministerio de Ganadería y Agricultura
Oficina de Programación y Política Agropecuaria (OPYPA)
Instituto Agronómico Nacional (IAN)

Instituto Nacional de Colonización (INC)
Centro de Investigaciones Agrícolas del Este
Ministerio de Obras Públicas
Cooperativa Agrícola Limitada Uruguaya
Centro de Investigaciones Agrícolas Alberto Boerger
Comisión Honoraria del Plan Agropecuario
Dirección General de Estadística y Censo

VENEZUELA

Ministerio de Agricultura y Cría (MAC)
Universidad Central de Venezuela
Dirección de Investigación
Consejo Nacional de Investigaciones Agropecuarias
Consejo Nacional de Investigaciones Científicas y Tecnológicas (CONICIT)
Fondo Nacional de Investigaciones Agropecuarias
Asociación Venezolana de Instituciones de Educación Agrícola Superior (AVIEAS)
Universidad Centro Occidental (UCO)
Centro Nacional de Investigaciones Agropecuarias (CENIAP)
Instituto de Edafología
Ministerio de Obras Públicas (MOP)
CODAPLANARH
FUSAGRI
Universidad de Oriente (UDO)
Universidad de Los Andes (ULA)
Dirección Nacional de Extensión Agrícola
Oficina Nacional de Catastro de Tierras y Aguas
Corporación de Mercadeo Agrícola
Corporación de los Andes (CORPOANDES)

Banco Agrícola y Pecuario
Fondo de Desarrollo Frutícola
Cooperativa La Andina
SUNACOP
Corporación del Zulia (CORPOZULIA)
Fundación para el Desarrollo de la Región Centro Occidental de Venezuela. (FUDECO)
Fundación Instituto Venezolano de Productividad (INPRO)
CEDECOM
Programa Integral de Desarrollo Agropecuario (PRIDA)
Instituto Agrario Nacional (IAN)
Fundación para la Capacitación e Investigación Aplicada a la Reforma Agraria (CIARA)
Federación Campesina de Venezuela
Oficina Central de Coordinación y Planificación (CORDIPLAN)
Banco Agrícola y Pecuario (BAP)
CORMEAGRI
Corporación Venezolana de Guayana (CVG)
CODESUR
CORPOOCCIDENTAL
Universidad Nacional
Universidad del Zulia (LUZ)
Instituto Venezolano de Investigaciones Científicas (IVIC)

OTHERS COUNTRIES

ALEMANIA
Misión Alemana en Perú
BULGARIA
Ministerio de Agricultura
Ministerio de Industria Alimenticia

CANADA

Universidad de Laval

Agencia Canadiense de Desarrollo Internacional (ACDI)

ESPAÑA

IRYDA

HOLANDA

Gobierno de Holanda

ITALIA

Cassa per il Mezzogiorno

MARTINICA

Fonda Saint Jacques

PORTUGAL

Missao do Estudos Agronômicos do Ultramar (MEAU)

YUGOESLAVIA

Instituto Federal para la Cooperación Internacional Técnica, Científica, Educativa y Cultural

SUIZA

Cooperación Técnica Suiza en Perú

INTERNATIONAL ORGANISMS AND CENTERS

Instituto de Nutrición para Centroamérica y Panamá

Escuela Agrícola Panamericana

International Development Research Center (IDRC)

Instituto Centroamericano de Investigación y Tecnología Industrial (ICAITI)

Association Scientifique Internationale du Cafe (ASIC)

Banco Centroamericano de Integración Económica

Banco Interamericano de Desarrollo (BID)

Banco Mundial

Organización de las Naciones Unidas para la Alimentación y la Agricultura (FAO)

Organización de los Estados Americanos (OEA)

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO)

Asociación Latinoamericana de Educación Agrícola de Posgrado (ALEAP)

Organización Internacional del Trabajo (OIT)

Programa de Adiestramiento y Estudios sobre Reforma Agraria del Istmo Centroamericano (PRACA)

Agencia Internacional para el Desarrollo (AID)

Organización Panamericana de Salud (OPS)

Instituto de Nutrición para Centroamérica y Panamá (INCAP)

Región Tropical de la Sociedad Americana de Ciencias Hortícolas (ASHS)

Centro Internacional de Agricultura Tropical (CIAT)

Fertilizantes del Istmo Centroamericano (FERTICA)

Centro Interamericano de Desarrollo Integral de Aguas y Tierras (CIDIAT)

Asociación Interamericana de Bibliotecarios y Documentalistas Agrícolas (AIBDA)

Centro Panamericano para Perfeccionamiento y Estudios en Recursos Naturales de la OEA. (CEPERNO)

Comité Interinstitucional de Mercadeo de Carnes (CIMCAR)

Regional Office of the Alliance for Progress for Central America and Panama (ROCAP)

International Information System for the Agricultural Sciences and Technology (AGRIS)

Secretaría Permanente del Tratado General de Integración Económica Centroamericana (SIECA)

Comisión Económica para América Latina (CEPAL)

Sistema Interamericano de Información para las Ciencias Agrícolas (AGRINTER)

LATINOCONSULT

Instituto Forestal Latinoamericano de Investigación y Capacitación (IFLAIC)

Unión Internacional para la Conservación de la Naturaleza y sus Recursos (UICN)

Programa Interamericano de Formulación y Ejecución de Proyectos de Desarrollo (CETREDE)

Instituto de Reforma Agraria y Colonización del Istmo Centroamericano

Centro de Estudios Democráticos de América Latina (CEDAL)



Appendix III.

**PARTICIPANTS
IN IICA
ACTIVITIES**

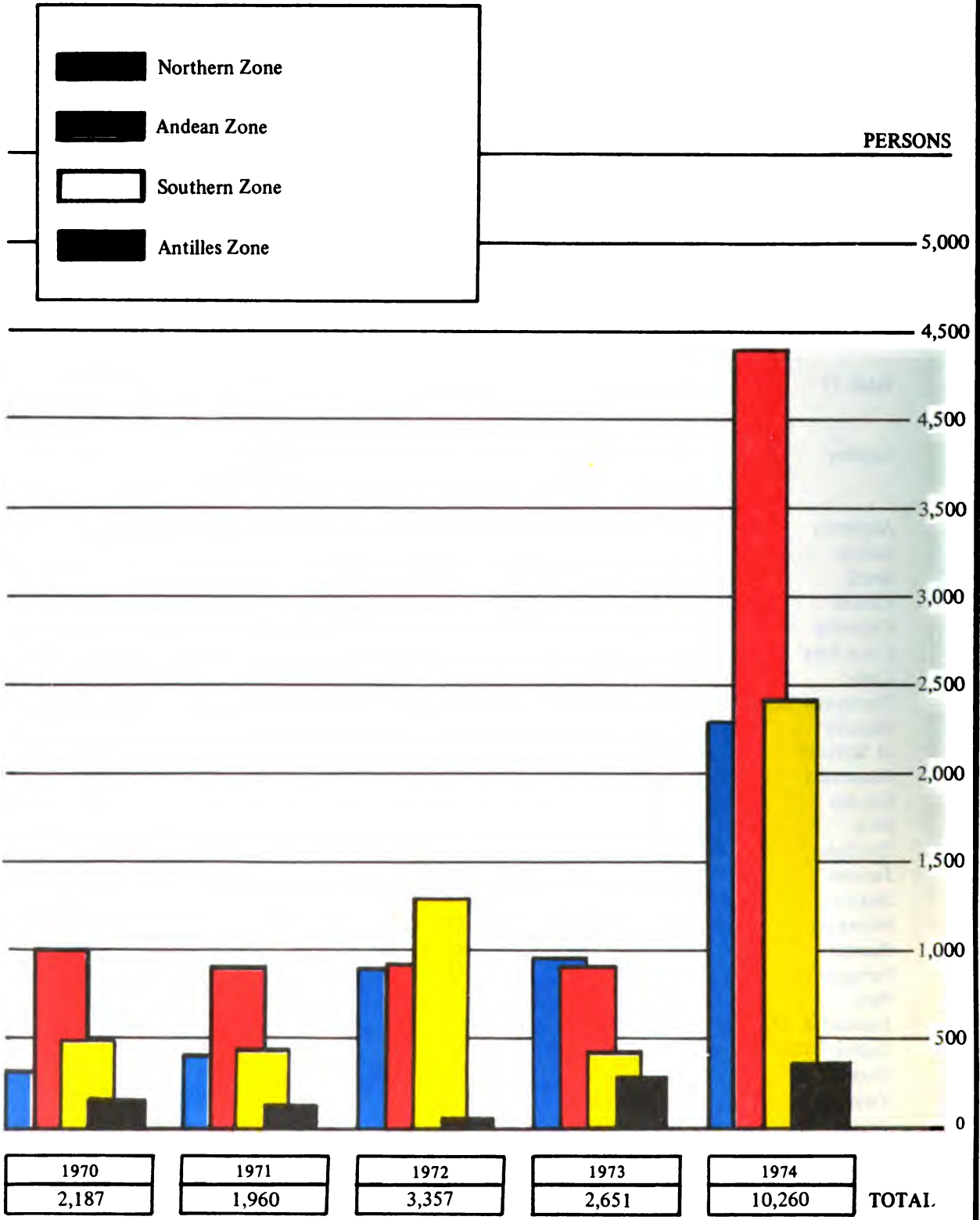
PARTICIPANTS IN IICA ACTIVITIES

Table 17

Country	1970	1971	1972	1973	1974
Argentina	87	80	217	20	541
Bolivia	43	89	102	74	427
Brazil	299	206	432	254	999
Canada	-	-	-	-	-
Colombia	315	324	523	482	1,385
Costa Rica	35	27	261	226	745
Chile	139	118	471	68	572
Dominican Republic	102	73	34	178	325
Ecuador	351	290	82	17	610
El Salvador	62	54	32	-	351
Guatemala	68	102	295	258	236
Guyana	-	-	-	-	-
Haiti	4	2	-	82	157
Honduras	13	40	-	77	268
Jamaica	-	-	-	-	-
Mexico	95	135	237	281	622
Nicaragua	69	34	36	70	61
Panama	43	45	126	59	50
Paraguay	54	71	74	53	238
Peru	218	33	119	175	1,480
Trinidad & Tobago	-	-	-	-	-
United States	4	14	-	-	-
Uruguay	29	16	147	56	134
Venezuela	157	207	169	221	1,059
TOTAL	2,187	1,960	3,357	2,651	10,260

FIGURE 6

PARTICIPANTS IN IICA ACTIVITIES, BY ZONE



INFORME ANUAL

IICA



Appendix IV.

PUBLICATIONS



PUBLICATIONS

Following is the list of publications by IICA technicians and of publications results from the cooperative action of IICA with certain national institutions. The publications are presented in alphabetical order: publications by technicians; proceedings and reports from conferences, meetings and seminars; and periodic publications. The latter include the journals which IICA published regularly.

1. ABAD G., H. La reforma agraria de Mon Velarde en Antioquia. Bogotá, IICA-CIRA, 1973. 4 p.
2. ALARCON, E. Producción de semilla de los pastos angletón. Bogotá, IICA-CIRA, 1974. 13 p.
3. ALVAREZ, A. Anexo a la bibliografía selectiva sobre dinámica de grupo. Bogotá, IICA-CIRA, 1973. 1 p.
4. ————. Conferencia sobre redacción técnica. Bogotá, IICA-CIRA, 1973. 10 p.
5. ————. Cuáles son los obstáculos que a usted se le presentan en el proceso enseñanza-aprendizaje. Bogotá, IICA-CIRA, 1973. 4 p.
6. ————. Laboratorio vivencial de la conducta humana - O.P.Q.R. Bogotá, IICA-CIRA, 1973. 6 p.
7. ————. Qué logros ha percibido usted en el proceso enseñanza-aprendizaje. Bogotá, IICA-CIRA, 1973. 3 p.
8. ————. Consideraciones psicológicas en el manejo del alumbramiento. Bogotá, IICA-CIRA, 1974. 3 p.
9. ————. Desarrollo prenatal. Bogotá, IICA-CIRA, 1974. 14 p.
10. ————. Los elementos del alumbramiento. Bogotá, IICA-CIRA, 1974. 3 p.
11. ————. Entomología. Bogotá, IICA-CIRA, 1974. 21 p.
12. ————. El nacimiento del bebé. Bogotá, IICA-CIRA, 1974. 9 p.
13. ————. Tres dibujos. Bogotá, IICA-CIRA, 1974. 3 p.
14. ALVEAR, A. El AGRINTER: Sistema Interamericano de Información para las Ciencias Agrícolas. Turrialba, Costa Rica, IICA-CIDIA, 1973. 23 p. Trabajo presentado al IV Congreso Regional de Documentación y XIII Reunión de la FID/CLA, Bogotá, Octubre 15-19, 1973.

También en: Desarrollo Rural en las Américas 6(1):94-107. 1974.
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34. SEMINARIO REGIONAL SOBRE LA COORDINACION DE EXTENSION, INVESTIGACION Y CREDITO AGRICOLA, BOGOTA, 1974. Informe. Bogotá. Informes de Conferencias, Cursos y Reuniones no. 38. 1974. 142 p.
35. SEMINARIO SOBRE CRITERIOS PARA PROGRAMAS DE COLONIZACION, 1973. Memoria. s.1., IICA. 1973. 81 p.

36. SEMINARIO SOBRE INFORMACION DE MERCADO, MONTEVIDEO, 1974. Conclusiones y recomendaciones. Montevideo, 1974. 13 p.
37. ————. Sumario esquemático. Montevideo, IICA, 1974. 52 p.
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PERIODIC PUBLICATIONS

1. ACTIVIDADES DE LA ZONA SUR
Abril-Diciembre, 1973
Enero-Junio, 1974

Ed.: Alejandro MacLean

2. ALEAP INFORMA
Número 5, 1973
Números 6 y 7, 1974

Ed.: Carlos Schlottfeldt

3. BOLETIN DE LA ZONA ANDINA
Volumen 12, Nos. 34, 35 y 36, 1973
Volumen 13, no. 37, 1974

Ed.: Luis Salinas
Bertha Rojas

4. DESARROLLO DEL TROPICO AMERICANO
Números 5 y 6, 1973
Números 7 y 8, 1974

Ed.: Carmen Villegas

5. DESARROLLO RURAL EN LAS AMERICAS
Volumen 5, Nos. 2 y 3, 1973
Volumen 6, No. 1, 1974

Ed.: Jaime Cusicanqui

6. NOTICIAS DEL IICA-CIDIA
Volumen 1, Nos. 1 y 2, 1973
Volumen 2, No. 1, 1974

Ed.: Orlando Arboleda
Jaime Cusicanqui

7. TURRIALBA
Volumen 23, Nos. 3 y 4, 1973
Volumen 24, Nos. 1 y 2, 1974

Ed.: Adalberto Gorbitz

8. LA ZONA NORTE INFORMA
Volumen 8, No. 3, 1973

Ed.: Fernando Rulfo
Alicia Bocca



Appendix V.

INTERNATIONAL PROFESSIONAL PERSONNEL



Name	Nationality	Academic Degree or Profession	Position	Location
Acosta, Jaime	Colombia	Economist	Economist	San José, Costa Rica
Aguirre, Juan A. 1	Cuba	Ph.D.	Representative	Managua, Nicaragua
Albertín, Waldemar	Germany	Ph.D.	Forester	Turrialba, Costa Rica
Alvarez, Aníbal	Colombia	Lic. C.E.	Psychopedagogue	Bogota, Colombia
Alvarez, Hugo	Bolivia	M.A.	Forester	Lima, Peru
Alvear, Gualberto	Ecuador	Lic. Bibliot.	Librarian	Turrialba, Costa Rica
Alvim, Paulo de T. 2	Brazil	Ph.D.	Plant Physiologist	Itabuna, Brazil
Ansorena, Ignacio	Uruguay	Ph.D.	Extensionist	Buenos Aires, Argentina
Araujo, José Emilio	Brazil	Dr. Agr.	Director General	San Jose, Costa Rica
Araujo, Miguel A.	El Salvador	M.S.	Agricultural Projects Specialist	Guatemala, Guatemala
Arboleda, Orlando	Colombia	M.L.S.	Documentalist	Turrialba, Costa Rica
Arias, Carlos Luis	Costa Rica	M.A.	Communicator	Mexico, D.F., Mexico
Barreto, Ricardo 3	Brazil	Ing. Civ.	Advisor to the Representative	Rio de Janeiro, Brazil
Barrios, José	Chile	M.S.	Irrigation Specialist	Rio de Janeiro, Brazil
Barros, Mario Paes de 4	Brazil	M.S.	Representative	La Paz, Bolivia
Bazán, Rufo	Bolivia	Ph.D.	Soils Specialist	Turrialba, Costa Rica
Beltrán, Luis R. 5	Bolivia	Ph.D.	Director IICA-CIRA	Bogota, Colombia
Beraja, Isidoro	Honduras	Ing. Agr.	Irrigation Projects Specialist	Guatemala, Guatemala
Blair, Enrique	Colombia	Ing. Agr.	Director Project 206, Director Institutional Relations and IICA Representative to the US and Canada	Washington, D.C. Lima, Peru
Blasco, Mario	Spain	Ph.D.	Agricultural Research Specialist	
Bornemisza, Elemer	Costa Rica	Ph.D.	Solis Professor and Advisor, UCR/IICA Contract Coordinator	San Jose, Costa Rica
Buitrón, Víctor Hugo 6	Ecuador	M.A.	Representative	Asunción, Paraguay
Caballero, Hernán	Chile	Ph.D.	Agricultural Research Specialist	Montevideo, Uruguay
Cabral, José Irineu	Brazil	Economist	President of EMBRAPA	Brasilia, D.F.
Cáceres, Hugo	Colombia	M.L.S.	Documentalist	Turrialba, Costa Rica
Camacho, Edilberto 7	Costa Rica	M.A.	Horticulturist	Turrialba, Costa Rica
Cardozo, Armando	Bolivia	Ph.D.	Livestock and Pasture Specialist	Bogotá, Colombia
Carrera, Hernán	Ecuador	Economist	Economist, Agr. Plan.	Quito, Ecuador
Cáseres, Ernesto	Costa Rica	Ph.D.	Educator, Coordinator of the Graduate Program	Santiago, Chile
Castronovo, Alfonso	Argentina	M.S.	Educator	Buenos Aires, Argentina
Cevallos, Francisco	Ecuador	Ing. Agr.	Resources for Development Specialist	Quito, Ecuador
Clifford, Roy A.	United States	Ph.D.	Rural Sociologist	Guatemala, Guatemala
Cohan, Hugo	Argentina	Ph.D.	Agricultural Economist	Montevideo, Uruguay
Coto, Rogelio	Costa Rica	Communicator	Executive Secretary CAN	San Jose, Costa Rica
Cruz, Levy	Brazil	M.S.	Rural Sociologist	Itabuna, Brazil
Cubillos, Gustavo	Chile	Ph.D.	Agrostologist	Turrialba, Costa Rica
Cusicanqui, Jaime	Bolivia	Communicator	Communicator	Bogota, Colombia
Chavez, Oswaldo	Peru	Ing. Agr.	Irrigation Specialist	Santiago, Chile
Deaton, Oliver	United States	Ph.D.	Animal Husbandman	Turrialba, Costa Rica
De la Cruz, Matilde	Costa Rica	Editor	Editor (Textbooks)	Turrialba, Costa Rica
Díaz Bordenave, Juan	Paraguay	Ph.D.	Communicator	Rio de Janeiro, Brazil

1. Until February 15, 1974 in Guatemala, Guatemala
2. Address: Centro de Pesquisas do Cacau, Caixa Postal 7, Itabuna, Bahía, Brasil
3. Also, Acting Head of the National Office
4. Until February 14, 1974 in Asunción, Paraguay
5. Until October 27, 1973
6. Until April 1, 1974, in Buenos Aires, Argentina
7. Until December 31, 1974, in Quito, Ecuador

Name	Nationality	Academic Degree or Profession	Position	Location
Donoso, Augusto	Chile	Ing. Agr.	Regional Planning Specialist	Bogota, Colombia
Elgueta, Manuel ¹	Chile	Ing. Agr.	Director CATIE	Turrialba, Costa Rica
Elvir, Miguel A.	Honduras	B.S.A.	Extensionist	Santo Domingo, República Dominicana
Erickson, Ana María de	Guatemala	Librarian	Executive Secretary AIBDA	Turrialba, Costa Rica
Erickson, Arnold L ²	United States	M.S.	Secretary of Research	Turrialba, Costa Rica
Escoto, Claudio	Costa Rica	Lic. Leyes	Administration Specialist	San Jose, Costa Rica
Fargas, José	Ecuador	Ph.D.	Plant Physiologist	Turrialba, Costa Rica
Fernández, Angel ³	Argentina	Librarian	In charge of Documentation Center	Buenos Aires, Argentina
Fernández, Hortensia	Colombia	Lic. en Artes	Information Editor	San Jose, Costa Rica
Fernández, Hugo	Uruguay	M.S.	Rural Youth Specialist	San Jose, Costa Rica
Fernández, Carlos E. ⁴	Guatemala	Ph.D.	Head, Coffee Program	Mexico, D.F., Mexico
Ferreiro, Carlos A.	Uruguay	Accountant	Head, Accounting Div.	San Jose, Costa Rica
Fiori, Ernani María	Brazil	M.S.	Agricultural Programmer	San Jose, Costa Rica
Fletschner, Carlos	Paraguay	Ph.D.	Marketing Specialist	Buenos Aires, Argentina
Flores, Luis	Peru	Lic.C.P. y S.	Rural Sociologist	Bogota, Colombia
Forsythe, Warren	Jamaica	Ph.D.	Soils Specialist	Turrialba, Costa Rica
Franco, Alberto	Colombia	M.S.	Planning Specialist	San Jose, Costa Rica
Frigerio, Norberto	Argentina	Ph.D.	Marketing Specialist	San Jose, Costa Rica
Frías, Hernán	Chile	Ing. Agr.	Extensionist	Guatemala, Guatemala
Galrao, María José ⁵	Brazil	Librarian	Documentalist	Turrialba, Costa Rica
Garcés, Carlos	Colombia	Ph.D.	Dean, IICA Grad. School	Bogota, Colombia
García, Ubaldo	Argentina	Ing. Agr.	Head, Div. of Prospective Planning	San Jose, Costa Rica
García, Noel	Nicaragua	M.A.	Agrarian Reform Specialist	Tegucigalpa, Honduras
Gastal, Edmundo ⁶	Brazil	M.S.	Director of EMBRAPA	Brasilia, D.F., Brasil
Genis, Marigold	Reino Unido	B.A.	Registrar and Translator	Turrialba, Costa Rica
Gil Turnés, Benjamín	Uruguay	Ph.D.	Educator	Buenos Aires, Argentina
González, Guillermo	Costa Rica	Ing. Químico	Lumber Projects Specialist	Turrialba, Costa Rica
González, Thomas B.	Bolivia	M.S.	Agricultural Economist	Porto Alegre, Brazil
Gorbitz, Adalberto ⁷	Peru	Ing. Agr.	Communicator	Turrialba, Costa Rica
González, Sergio	Chile	Ing. Agr.	Cadastre Specialist	Caracas, Venezuela
Grajales, Guillermo	Colombia	Ing. Com.	Agricultural Projects Specialist	Lima, Peru
Granados, Hernán	Costa Rica	Lithologist	Head, Printing Shop	Turrialba, Costa Rica
Graeff, Allan H.	United States	M.A.	Rural Development Administration Specialist	San Jose, Costa Rica
Guerra, Guillermo	Colombia	M.S.	Agricultural Economist Specialist	Lima, Peru
Hepp, Ricardo	Chile	Ing. Agr.	Representative	Santiago, Chile
Herrera, J. Eugenio	Chile	M.P.I.A.	Administration Specialist	San Jose, Costa Rica
Herrero, Federico	Costa Rica	M.S.	Representative	Panama, Panama
Hernández, Aurelio ⁸	Cuba	C.P.	Head, Division of General Services	San Jose, Costa Rica
Hutchins, Lee M. ⁹	United States	Ph.D.	Plant Pathologist	Turrialba, Costa Rica
Jara, José Oriol ¹⁰	Paraguay	M.S.	Agricultural Economist	Buenos Aires, Argentina
La Grã, Jerry	United States	M.A.	Marketing Specialist	Port-au-Prince, Haiti
Lawrence, Jeremy ¹¹	Reino Unido	Ph.D.	Plant Pathologist	Turrialba, Costa Rica

1. Until August 1, 1973, in Guatemala, Guatemala
2. Until September 5, 1973
3. Associate Personnel
4. Also, Acting Head of the National Office
5. Agreement between the Regional Office for the Andean Zone and the Colombian Agricultural Institute (IICA)
6. IICA/EMBRAPA Agreement
7. Agreement between Instituto Agropecuario Nacional de Venezuela and IICA
8. Also, Acting Head Division of Personnel, effective September 1, 1973
9. Resident Scientist
10. Temporary Assignment
11. Resident Scientist assigned by the Government of Great Britain

Name	Nationality	Academic Degree or Profession	Position	Location
Lendvay, Olga ¹	United States	M.L.S.		Turrialba, Costa Rica
Lombardo, Heraclio ²	Panama	Ph.D.	Representative	Santo Domingo, República Dominicana
Luque, Jorge Alfredo ³	Argentina	Ing. Agr.	Irrigation Specialist	Lima, Peru
MacDonald, Malcolm H.	United States	Ph.D.	Associate Deputy Director General for Planning	San Jose, Costa Rica
Mac Lean, Alejandro	Peru	Ing. Agr.	Communicator	Montevideo, Uruguay
Madrid, Carlos	Colombia	M.S.	Deputy Director General	San Jose, Costa Rica
Maestre, Leonardo ⁴	Peru	Ing. Agr.	Agricultural Planning and Rural Development Specialist	Panama, Panama
Malugani, María D.	Uruguay	M.L.S.	Director of IICA-CIDIA	Turrialba, Costa Rica
Marull, José D.	Chile	Ph.D.	Associate Deputy Director General for External Coordination	San Jose, Costa Rica
Marzocca, Angel ⁵	Argentina	Ing. Agr.	Agricultural Research Specialist	Brasilia, D.F., Brazil
McKenzie, Thomas A. ⁶	United States	M.F.	Agricultural Programmer IICA-TROPICOS	Belém do Pará, Brazil
Mendoza, Luis A.	Bolivia	Ph.D.	Administration Specialist *	Lima, Peru
Merea, Agustín	Peru	Ing. Civil	Irrigation Specialist	Buenos Aires, Argentina
Minioni, Elisa C. ⁷	Brazil	M.S.	Home Economics and Nutrition Specialist	San Jose, Costa Rica
Millar, Agustín ⁸	Chile	Ph.D.	Irrigation Specialist	Petrolina, Brazil
Miranda, Heleodoro	Ecuador	M.A.	Agricultural Research Specialist	San Salvador, El Salvador
Miragem, Samuel ⁹	Brazil	Ing. Agr.	Agricultural Projects Specialist	Porto Alegre, Brazil
Moh, Carl C.	United States	Ph.D.	Cytogeneticist	Turrialba, Costa Rica
Molestina, Carlos	Peru	M.S.	Head, Division of Public Information	San Jose, Costa Rica
Montenegro, Isberto	Costa Rica	Journalist	Press Officer	San Jose, Costa Rica
Montero, José Fco.	Costa Rica	MS.	Professor and Agricultural Economics Advisor	San Jose, Costa Rica
Montero, Emilio	Chile	M.S.	Agricultural Economist	Montevideo, Uruguay
Montoya M., Jorge	Peru	Dr. Sc. B.	Representative	Port-au-Prince, Haiti
Montoya, Luis A.	Peru	Ph.D.	Executive Secretary of the Coop. Program for Development of American Tropics	Belém, Brazil
Morales, Efraín	Costa Rica	M.R.P.	Director, Operative Planning and Evaluation	San Jose, Costa Rica
Moran, Michael J.	Estados Unidos	M.S.	Coordinator of Marketing Program	San Jose, Costa Rica
Müller, Francisco	Germany	Dr.rer.nat	Coordinator, Coop. Prog. Río Grande do Sul	Porto Alegre, Brazil
Morillo, Francisco	Venezuela	Ph.D.	Regional Director	Lima, Peru
Muñoz, Víctor	United States	Business Adm.	Personnel Officer	San Jose, Costa Rica
Muñoz, Héctor	México	Ph.D.	Animal Husbandman	Turrialba, Costa Rica
Muñoz-Reyes, Jaime	Bolivia	Agr.	Rural Sociology Specialist	La Paz, Bolivia
Murcia, Héctor ¹⁰	Colombia	M.S.	Professor and Advisor on Agricultural Economics	San Jose, Costa Rica
Nadal, Francisco	Bolivia	Ph.D.	Economist	San Jose, Costa Rica
Naranjo, Gerardo	Ecuador	Ph.D.	Eucator	Bogota, Colombia

1. Resident Scientist
2. Until March 1, 1974, Coordinator of UCR/IICA Contract.
3. Effective January 15, 1974.
4. Effective August 1, 1973.
5. Effective March 10, 1974. Also, Coordinator of IICA/EMBRAPA Contract.
6. Until November 1, 1973 in Turrialba, Costa Rica.
7. Beginning June 23, 1974 – Kellogg Fund Contribution
8. Temporary assignment. Agreement between Ministry of Interior in Brazil and IICA
9. Temporary assignment – IICA/BID Agreement
10. Until March 1 1974 in Managua, Nicaragua

Name	Nationality	Academic Degree or Profession	Position	Location
Navas, Bolívar Gil	Ecuador	M.S.	Education and Social Sciences Specialist	Quito, Ecuador
Ogle, Richard	United States	Ph.D.	Management Specialist	Guatemala, Guatemala
Oliart, Francisco	Peru	Dr. Der.	Dispatch Officer of Director General	San Jose, Costa Rica
Orchard, Jorge ¹	Chile	Lawyer	Agrarian Law Specialist	Bogota, Colombia
Ortiz, Egas Jaime	Ecuador	MS.	Micro-economist	Bogotá, Colombia
Páez, Gilberto	Paraguay	Ph.D.	IICA-EMBRAPA Agreement Advisor	Brasilia, D.F., Brazil
Pando, José Luis	Canada	M.S.	Marketing Specialist	Caracas, Venezuela
Paulette, Miguel	Peru	M.S.	Coord. for Professional and Scientific Assoc.	Caracas, Venezuela
Pereira, Egon	Brazil		Systems Analyst	Itabuna, Estado de Bahía, Brazil
Pérez, Manuel ³	Chile	C.P.A.	Acting Head, Organization and Methods Unit	San Jose, Costa Rica
Peschiera, Marco A. ⁴	Peru	Ing. Agr.	Representative	Santo Domingo, República Dominicana
Pinto, Joao Bosco G.	Brazil	Ph.D.	Agrarian Reform Specialist	Lima, Peru
Pinchinat, Antonio ⁵	Haiti	Ph.D.	Geneticist	Turrialba, Costa Rica
Quesada, Alejandro ⁵	Costa Rica	Ing. Agr.	Professor and Agricultural Economics Advisor	San Jose, Costa Rica
Quiroga, Víctor ⁶	Bolivia	M.A.	Professor and Advisor on Statistics. Acting Head, Division of Statistics and Computer	San Jose, Costa Rica
Ramírez, William ⁷	Costa Rica	M.A.	Entomology Professor and Research Advisor	San Jose, Costa Rica
Ramsay, Jorge	Chile	Ing. Agr.	Representative	Caracas, Venezuela
Rangel, Jefferson	Brazil	M.S.	Special Advisor on Foreign Relations and Secretary of the Board of Directors	Washington D.C.
Ras, Norberto	Argentina	M.A.	Representative	Buenos Aires, Argentina
Ringuelet, Julio A.	Argentina	Ing. Agr.	Representative	San Salvador, El Salvador
Rodríguez, César	Colombia		Marketing Professor	Bogota, Colombia
Rodríguez, Manuel	Chile	Ing. Agr.	Regional Director	Montevideo, Uruguay
Rojas, Emilio	Peru	M.S.	Agrostologist	La Paz, Bolivia
Romanella, Carlos	Argentina	Ing. Agr.	Irrigation Specialist	Santiago, Chile
Rosado, Humberto	Mexico	Ph.D.	Regional Director	Guatemala, Guatemala
Rosero, Pablo	Ecuador	M.A.	Forester	Turrialba, Costa Rica
Ruiz, Manuel	Peru	Ph.D.	Nutritionist	Turrialba, Costa Rica
Rulfo, Fernando	México	M.Ed.	Communicator	Guatemala, Guatemala
Salinas, Luis	Peru	Ing. Agr.	Communicator	Lima, Peru
Salvadó, Eduardo	España	M.S.	Psychology of Social Change Specialist	San Jose, Costa Rica
Sandoval, Leopoldo	Guatemala	Ing. Agr.	Agrarian Reform Spec.	Guatemala, Guatemala
Schlottfeldt, Carlos	Brazil	Ph.D.	Dean of Grad. School	San Jose, Costa Rica
Shurtleff, Don L.	United States	B.A.	Advisor, Financial Affairs and Treasurer	San Jose, Costa Rica
Steiger, Carlos	Argentina	M.S.	Marketing Specialist	Buenos Aires, Argentina

1. Until January 31, 1974

2. Until February 28 1974 in Turrialba, Costa Rica

3. Head Division of Personnel, July 1st to August 31, 1973

4. Until January 18, 1974

5. Two-year temporary appointment, beginning December 6, 1973 – UCR/IICA Contract.

6. Temporary assignment

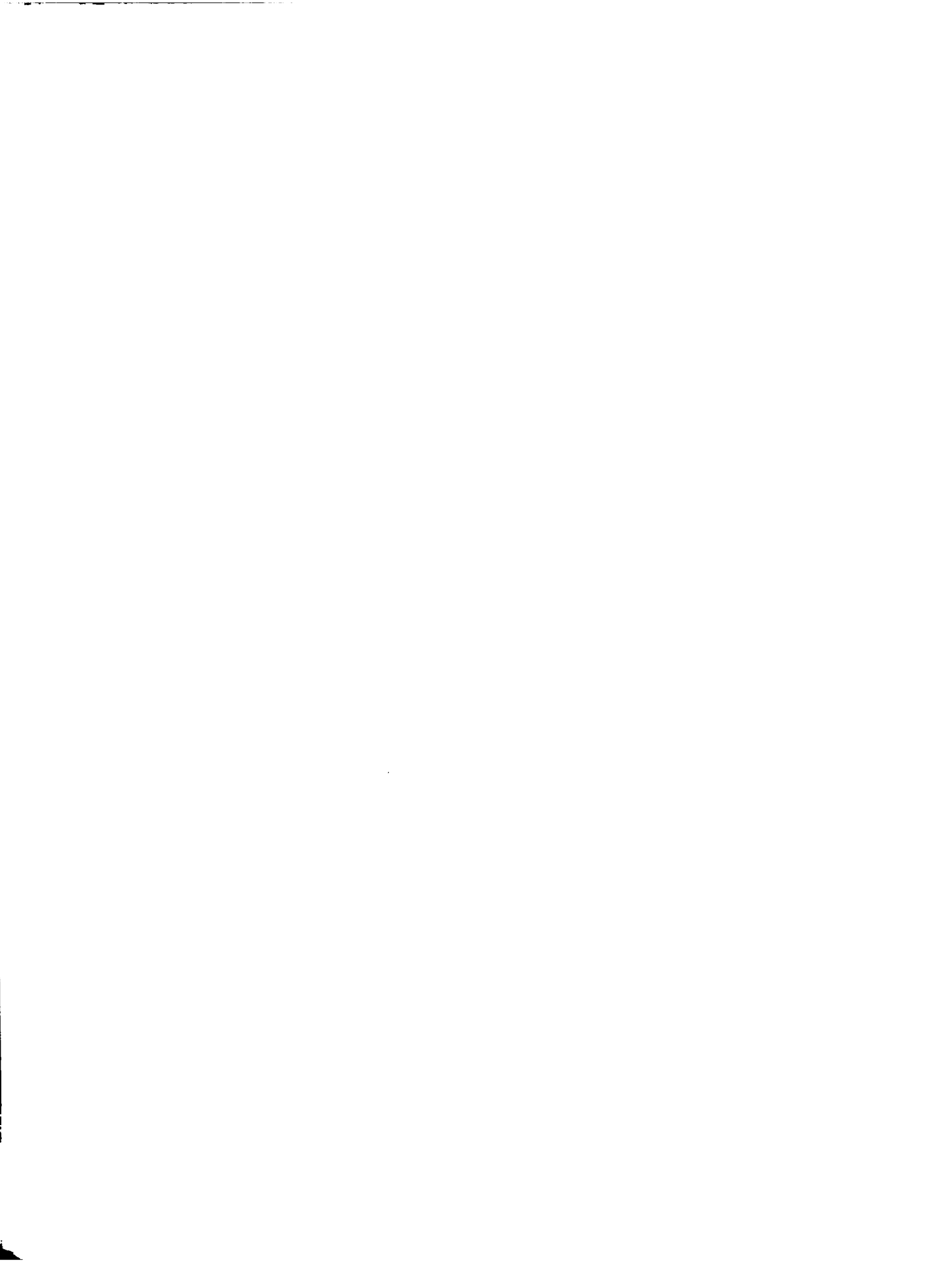
7. One-year temporary appointment, beginning March 1, 1974 – UCR/IICA Contract.

Name	Nationality	Academic Degree or Profession	Position	Location
Sterringa, Jacob ¹	Holland	Ing. Agr.	Silviculturist	Turrialba, Costa Rica
Soikes, Raúl	Peru	Ph.D.	Educator	Quito, Ecuador
Soria, Jorge	Ecuador	Ph.D.	Geneticist	Turrialba, Costa Rica
Suárez de Castro, Fernando	Colombia	M.A.	Director, Technical Assistance	San Jose, Costa Rica
Suárez, Nelson	Colombia	Ing. Agr.	Marketing Specialist	Quito, Ecuador
Sylvester, Francisco	Peru	Ing. Agr.	Educator	Caracas, Venezuela
Sylvain, Pierre G.	Haiti	Ph.D.	Horticulturist Emeritus	Turrialba, Costa Rica
Tonina, Teodoro Andrés	Argentina	Dr. Cien.A.	Agricultural Programmer	Santiago, Chile
Torrealba, J. Pablo	Chile	Ph.D.	Marketing Specialist	San Jose, Costa Rica
Torres, José A.	Costa Rica	Ing. Agr.	Coord. of Special Programs in Costa Rica	San Jose, Costa Rica
Torres, Hugo	Colombia	M.S.	Marketing Specialist	Lima, Peru
Uribe, Germán	Ecuador	Ing. Agr.	Representative	Tegucigalpa, Honduras
Urizar, Marco T.	Guatemala	Ing. Agr.	Education Specialist	Managua, Nicaragua
Valenzuela, Joaquín ²	Chile	Ing. Agr.	Agricultural Economist	Santiago, Chile
Valle, Waldo	Bolivia	Ing. Agr.	Executive Director, Extension and Rural Development	La Paz, Bolivia
Vallejo, Nelson ³	Ecuador	M.S.	Representative	La Paz, Bolivia
Vaz, Jorge Marques	Brazil	M.S.	Agricultural Programmer	Guatemala, Guatemala
Veras, Arnaldo	Brazil	B.C.E.	Agricultural Economist	Montevideo, Uruguay
Vergara, Nízar	Colombia	Economist	Marketing Professor	Bogotá, Colombia
Vieira, Pedro Merçon	Brazil	Ing. Agr.	Agricultural Credit Specialist	Rio de Janeiro, Brazil
Vigués, Enrique	Spain	Ph.D.	Planning Specialist	San Jose, Costa Rica
Villacís, Fabio	Venezuela	Ph.D.	Agricultural Planning Specialist	México, D.F., Mexico
Villavisencio, Mauro	Peru	Ing. Agr.	Representative	Bogota, Colombia
Villegas, Carmen	Uruguay	Lic. Bib.	Documentalist	Turrialba, Costa Rica
Vohnout, Karel	Ecuador	Ph.D.	Nutritionist	Turrialba, Costa Rica
Yopo, Boris	Chile	M.S.	Educator	Lima, Peru
Wissel, Carlos	Costa Rica	Ing. Químico	Lumber Processing Specialist	Turrialba, Costa Rica

1. Resident Scientific, Assigned by the Government of the Netherlands

2. Until March 31, 1974 in Caracas, Venezuela

3. Until March 19, 1974



Note:

This report has kept in line with the programs of IICA as concerns the information presented, in the same manner as in last year's report.

The readers are reminded that it is neither the purpose nor possible to present extremely detailed information on work accomplished in this type of publication. Those interested in further information on a specific project or activity, may obtain it from the IICA representative in each country.



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The following were chiefly responsible for this work:

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San Jose, Costa Rica December, 1974

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