

1997 ANNUAL REPORT

BIODIVERSITY, GENETIC RESOURCES AND AGRICULTURE IN THE AMERICAS: IICA'S ACTION

AND AGRICULTURE IN THE AMERICAS: IICA'S ACTION

IICA'S TECHNICAL COOPERATION ■ BEYOND PROJECTS ■ STRATEGIC



ALLIANCES ■ FINANCIAL RESOURCES ■ HUMAN RESOURCES ■ BIODIVERSITY, GENETIC RESOURCES



W H A T I S I I C A ?

The Inter-American Institute for Cooperation on Agriculture (IICA) is the specialized agency for agriculture of the inter-American system. As a hemispheric technical cooperation agency, IICA can be flexible and creative in responding to needs for technical cooperation in its member countries, through its 34 Technical Cooperation Agencies (TCAs), its five Regional Centers and Headquarters, which coordinate the implementation of strategies tailored to the needs of each region. More than an institution, IICA is an inter-American network of cooperation for the development of agriculture and rural areas.

The 1994-1998 Medium Term Plan (MTP) provides the strategic framework that has oriented IICA's actions during that four-year period. Its general objective is to support the efforts of the Member States in achieving sustainable agricultural development, within the framework of hemispheric integration and as a contribution to human development in rural areas. The Institute's work is aimed at bringing about changes in agricultural production, trade and institutions and in the people who work in the sector, using an integrated and systemic approach to development which is based on the search for competitiveness, equity and solidarity as the key to achieving the sustainable development of agriculture and rural areas.

The Member States of IICA are: Antigua and Barbuda, Argentina, The Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, the United States of America, Uruguay and Venezuela. Its Permanent Observers are: Arab Republic of Egypt, Austria, Belgium, Czech Republic, European Communities, France, Germany, Hungary, Israel, Italy, Japan, Kingdom of the Netherlands, Portugal, Republic of Korea, Republic of Poland, Romania, Russian Federation and Spain.

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1997 Annual Report

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MESSAGE FROM THE DIRECTOR GENERAL

The IICA Annual Report on the activities of IICA, which I have the privilege of presenting herewith, reflects the collective efforts of the Institute's professionals, specialists and other employees who worked with enthusiasm and dedication in partnership with their counterparts in the countries of the hemisphere to promote the sustainable development of agriculture and rural areas.

Their efforts were oriented by the mandates of IICA's member countries, as embodied in its 1994-1998 Medium Term Plan, which defines as the general objective for the period: "to support the efforts of its Member States in achieving sustainable agricultural development, within the framework of hemispheric integration and as a contribution to human development in rural areas." To this end, IICA applies a systemic approach to agriculture, cognizant that it is a multifaceted and complex world that embraces a broad range of activities, from the strictly agronomic to the very complex, including economic and social policy, international trade, biotechnology and integration. The Institute also recognizes that agriculture is part of a much broader system that is being created by globalization and hemispheric integration, and that human beings are the reason for, the means to and the target of development. Following this approach, we have continued to pursue a great variety of undertakings in the countries to foster sustainable development.

Each of the elements making up systemic agriculture is important to the sector. This year, we have selected biodiversity, genetic resources and their relationship to agriculture as the theme of this report. In addition to its innate importance, the

topic allows us to demonstrate another vital theme of the Institute's: the added value that is achieved when national, regional and international organizations work together to achieve a common goal. Thus, in addition to reporting on IICA's actions in 1997, we highlight and support some of the organizations with which IICA has strategic alliances, as well as their efforts to recover, protect and conserve the genetic resources that will ensure for our children, grandchildren and succeeding generations food security and better environmental, health and living conditions.

This executive report on IICA's work in 1997, as well as the information contained in its Appendices, describes the results of the Institute's cooperation efforts at the national, regional and hemispheric levels, as well as of joint undertakings with its strategic alliances and its support to other institutions, mechanisms and networks engaged in important work in the areas of cooperation, teaching, research and technical assistance that enable the Institute to multiply the impact of its cooperation in its Member States.

We hope that this reports faithfully reflects the benefits of cooperation made possible by the great moral, economic and political support of the Institute's Member States as well as of its alliances with other organizations within and beyond the Americas.



Carlos E. Aquino G.

Director General

I N T R O D U C T I O N

IICA has been serving agriculture in the Americas for 55 years. Its mission is to “provide cooperation services in order to stimulate and promote agricultural development and rural well-being, and to strengthen and facilitate inter-American dialogue. The first task aims to support its Member States in bringing about sustainable development in agriculture and rural areas; the second situates this development within the context of hemispheric integration.” IICA’s action is enriched by the extensive relations it maintains with a myriad of organizations, agencies and public and private institutions in its member countries, and with other international agencies.

In addition to the technical cooperation it provides directly to its Member States through a wide range of programs, projects and other cooperation instruments, IICA contributes to upgrading the capabilities of other institutions and networks in the hemisphere that carry out important tasks in agriculture, through human, technical, financial, administrative and material contributions. More and more, it is working closer with national and regional institutions of the hemisphere to create a synergy of technical and human resources that reinforces both its own capabilities and those of the associated institutions. Working side by side with a wide range of allies having similar goals, IICA is steadily moving forward to fulfill its mission.

As an institution belonging to the countries, IICA is increasingly called upon to facilitate and articulate technical cooperation with their own efforts, given the opportunities provided by its physical and human infrastructure in 34 Member States and the hemispheric perspective it has developed through its work in all the countries and the countries’ movement toward integration. In addition, the Institute’s prestige makes it a very effective forum for bringing together agricultural leaders and others of importance to the sector, stimulating discussion of new ideas at the national, regional and hemispheric levels, and opening new pathways for agricultural activity.

Accordingly, the crowning event of 1997 for IICA was the Ninth Regular Meeting of the Inter-American Board of Agriculture (IABA), its highest



governing organ, which was held in Santiago, Chile. The theme of the meeting “United for Agriculture in the Americas” fostered an exchange of experiences among the 34 delegations representing the ministries of agriculture of the five regions of the hemisphere: the Andean, Caribbean, Central, Northern and Southern. The meeting was also attended by officials from 30 international organizations, representatives from 80 private-sector agribusiness institutions, as well as agricultural professionals and specialists from the Americas, academics, diplomats and Chilean government officials.

Meeting participants stressed that agriculture must adapt to the new times, satisfy domestic demand and implement strategic actions to supply regional markets, strengthen trade integration, foster technology development, and contribute to the resolution of social problems, particularly for rural inhabitants. Moreover, the ministers of agriculture acknowledged that the technical cooperation provided by IICA is helping the countries make the transition toward the new millennium and that, based on its enormous experience accumulated during 55 years active work in agriculture, the Institute should continue to build its future with the participation and support of its 34 Member States.

The Second Ministerial Forum “Agriculture in the Americas on the Eve of the Twenty-first Century: Challenges and Opportunities,” was held concurrently with the IABA meeting, during which three workshops took place to analyze the current status of agriculture in the hemisphere and to discuss ideas that will have an impact in the future from the points of view of the ministers of agriculture, private enterprise and international organizations.

The workshop of ministers of agriculture produced ten recommendations for the principal items of an “Inter-American Agenda for Cooperation” that would support the formulation of national strategies for agricultural and rural development. These include: repositioning agriculture within the new institutional framework defined at the presidential summit meetings; fostering training for analyzing the impact of liberalization and trade opening within the framework of WTO* and FTAA; providing training on rules of origin, quality and plant health

*There is a glossary of acronyms at the end of this report.



issues; developing agricultural technology innovation and extension systems; designing policy proposals that take account of equity, gender, the rural family, food security, natural resource management and sustainable development, with special emphasis on water and soil resources.

Discussions in the workshop for international organizations addressed the institutional transformation processes under way to adapt to economic and social changes and to the challenges stemming from the new demands from their users; participation of the beneficiaries of cooperation in the preparation and execution of technical cooperation projects; facilitating inter-agency cooperation in specific thematic areas; and the importance of experience acquired in cooperating with the private sector, NGOs and regional and local governments. It was concluded that international organizations must strengthen inter-institutional mechanisms and channels for cooperation, and that to this end, working groups be established to promote dialogue and exchanges on important topics in order to enhance efficiency of action.

The most important recommendations produced by the agribusiness workshop were: to request that IICA adopt as a strategic and program guideline of its new 1998-2002 Medium Term Plan the fostering of technical cooperation with private sector agricultural organizations; to create an Agribusiness Advisory Board to advise the Institute's governing bodies regarding its support to agribusiness organizations; to instruct IICA to support private sector efforts to establish an inter-American agribusiness network as an instrument to promote horizontal cooperation in the sector; to facilitate better relations between the state and civil society; and to facilitate the efforts of the task force set up to draft a proposal for the network of agribusiness organizations.

With the results of the three workshops, the Ninth IABA proved to be an excellent opportunity for consolidating a cherished ideal: to articulate and institutionalize a strategic inter-American alliance for promoting a transformation and vitalization of agriculture, firmly grounded on the true conditions of these new times, and within this context, to work together to give new value to agriculture and to position it as the foundation of our societies and a vital component of national, regional and world economies.





M A I Z E

BIODIVERSITY, GENETIC RESOURCES AND AGRICULTURE IN THE AMERICAS

Since its inception, IICA has considered biodiversity and genetic resources of great relevance for agriculture. As early as the 1940s it created important germ plasm collections that have contributed substantially to agricultural development in the hemisphere. More recently, and in response to a resolution by the Inter-American Board of Agriculture in 1995 concerning the preservation of genetic material in the Americas, the Institute has promoted the coordination of efforts among a variety of organizations aiming to conserve and make rational use of genetic resources. In addition, it has worked to raise awareness as to the value of the enormous biological-genetic capital of the Americas for agricultural development and for food security.

The strategic importance of biodiversity and genetic resources for sustainable agricultural development can be viewed from different perspectives. For example, the proper or improper management of biodiversity has an impact on many aspects of agriculture, such as the volume, availability and quality of water; soil conservation; the action of beneficial insects (pollinators, predators and others); carbon dioxide fixation; and climatic stability. In addition, depending on the approach used, agricultural activities have either a positive or negative impact on biological diversity and, consequently, on the ecological balance.

Biodiversity, and the genetic resources derived therefrom, are the building blocks of agriculture, the raw material of agricultural activity and, consequently, the basis for agricultural research. Plant breeding and agricultural diversification programs have made use of plant and animal germ plasm, both native and exotic, to: reduce the food deficit by increasing yields; augment the variety of agricultural products through diversification; adapt agriculture to different environmental conditions and biotic and abiotic limitations; and improve product quality in response to consumer demand. At present, with the new biotechnologies, genetic resources are no longer used only to exchange genes within a single species; genetic exchanges have now been made between species from different kingdoms. For example, the gene sequence responsible for a natural anti-freeze in fish has been incorporated into some plant species. As demonstrated by the following examples, the economic value of biodiversity and plant genetic resources has been underestimated.





Recently, an offer to “sequester” carbon dioxide was placed on international stock markets. A 1% increase in agricultural productivity produces an estimated economic gain of US\$1 billion in the United States of America, a country in which genetic diversity was responsible for half of the increases in agricultural output reported between 1930 and 1980. Studies by the International Rice Research Institute (IRRI) indicate that the cost/benefit ratio of the collection, conservation and use of rice genetic resources is 25:1. The pharmaceutical industry has also benefited from biodiversity: in the United States of America alone, sales of medications derived from plants totaled some US\$15.5 billion in 1990. IICA has estimated that an appropriate use of genetic resources has played a part in almost 20% of all the changes taking place in production, which resulted in an almost doubling of the volume of agricultural products exported from the Americas between 1985 and 1995. Domestic sales of five crops native to the Americas (corn, potatoes, tobacco, tomatoes and cotton) were in the millions and the value of exports of those five products by the countries of this hemisphere exceeded US\$23 million in 1995. The economic importance of exotic germ plasm introduced in the American hemisphere can be seen in the value of exports in 1995 of just three crops originating in other parts of the world (rice, coffee and bananas), which exceeded US\$12 million.

The enormous biological-genetic capital of the Americas is universally recognized because of the environmental services it provides and because it is a source of raw materials for genetic breeding, agricultural diversification and industrial activities. While occupying only 7% of the Earth’s surface, dense tropical forests contain close to 90% of its biodiversity. Such forests cover about 56% of the Latin American territory. The biodiversity of the world is concentrated primarily in 18 countries, nine of which are in the Americas. In fact, the Latin America and Caribbean (LAC) countries are home to about 40% of the plant and animal species found in the tropical forests of the world.

Five of the twelve centers of origin and diversity of crops of major socioeconomic importance are in the American hemisphere, with Mesoamerica and the Andean region being two of the principal centers of plant domestication worldwide. Some of the most important crops native to the Americas and which are now grown throughout the world are corn, beans, potatoes, tomatoes, avocados, cocoa, pineapple, tobacco and cotton.

The Americas’ contribution to regional and world economies does not stop with the agricultural sector. It is also a source of numerous forage, ornamental and forest (timber and non-timber) species, wildlife and



Early farmers around the world domesticated many wild species of crops, each containing its own genetic identity. Today, some growers continue to raise old local traditional varieties of crops in the regions where they originated; their genetic diversity is crucial for the production of new “improved” varieties and for ensuring the survival of diverse qualities. Collectors seek out these (landraces) for evaluation, distribution, research and preservation.



other animal resources, as well as microorganisms. The biological wealth of the hemisphere can be gauged by the holdings of germ plasm banks located in the region, which contain more than 700,000 accessions of cultivated plants and their wild relatives. *In situ* biodiversity conservation efforts have resulted in the designation of 81 million hectares as protected areas in the region.

Paradoxically, the abundant genetic and biological diversity of the Americas is under serious threat of erosion; worse still, many species are menaced by extinction due to the accelerated rate of deforestation, production practices that overlook the importance of local landraces and non-traditional crops, population growth and the accompanying urbanization, and the expansion of the agricultural frontier.

Many of the crops cultivated in the Americas have a narrow genetic base, which makes them vulnerable to adverse biotic and abiotic factors. Also, despite the wide variety of food species in the hemisphere, just seven crops account for more than 50% of the food consumed in the region. Genetic erosion is not only occurring in the natural setting but also in germ plasm banks because of financial and operating constraints on national programs engaged in *ex situ* conservation.

The institutions in the Americas that work with biodiversity and genetic resources face a tremendous challenge because investments for needed activities exceed institutional and national capabilities. All national and international actors involved in the conservation and use of plant genetic resources must engage in dynamic, complementary and coordinated institutional action and strive to harmonize and reach consensus on these if they are to successfully meet the challenges posed by the new paradigms.

Although activities related to plant genetic resources have been under way in the region since the early part of this century, it was not until the mid-1970s that there was a serious effort at institutional development in this field. By the mid-1990s, the prospects were more promising as many activities related to genetic resources were under way in the countries. Today, the scenario is very dynamic because the trend toward globalization is giving rise to many important international agreements that have an impact on national and international actions related to biodiversity, in general, and to genetic resources in particular. For example, all the countries of the region signed the GATT and most signed the Convention on Biological Diversity. In addition, the countries of the Americas participated in formulating a Global Action Plan for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture, which was approved at the Fourth International Conference on Plant Genetic



Techniques have been developed for storage of *in vitro* germplasm by different means, including slow growth and cryopreservation. In the latter, seeds are stored in the frigid vapor (-196°C) of liquid nitrogen, in stainless steel cryovats, pictured above. While periodic planting of seeds helps maintain their viability, cryogenic storage may preserve some seeds for centuries.



Resources, held in Leipzig, Germany, in 1966, at the initiative of FAO.

Work related to the conservation, use and management of plant genetic resources in the LAC countries has been primarily the responsibility of government organizations and institutions of higher learning, including CENARGEN (Brazil), the University of Chapingo (Mexico), the USDA, and INIA (Chile). Today, the historical role played in this area by small-farm and indigenous communities, as well as their importance for the future, has been recognized at the institutional level. In addition, private enterprise and numerous nongovernmental organizations, noteworthy among which for its study of biodiversity is INBio of Costa Rica, have taken on an important role in this field. In order to effectively combine the actions of the different actors and sectors, some countries have established or are presently setting up, national commissions on plant genetic resources (or similar mechanisms). A number of subregional (such as CATIE), regional (such as SELA) and international (such as FAO and IPGRI) institutions provide the countries with support in technical-scientific aspects of the work, as well as with institutional, legal and policy development pertaining to plant genetic resources. Specific mechanisms for reciprocal horizontal cooperation on plant genetic resources have been established in the Andean Region, Mesoamerica, the Southern Cone, the Amazon Basin and the Caribbean, as have networks or programs that address the use of such resources. Many technical and financial cooperation agencies have supported and continue to support the execution of actions related to plant genetic resources in LAC.

The fact that progress has been made and a certain degree of success achieved does not mean that important problems related to the management of biodiversity and genetic resources in LAC have been overcome. Some of the most pressing are: substantial erosion of genetic diversity, as in the case of numerous landraces of maize that disappeared when they were replaced by new varieties and hybrids; the fact that proper economic value is not ascribed to genetic resources; absence of strategic guidelines for negotiations on genetic resources; insufficient investment and funding for genetic resource conservation and utilization; limited application of state-of-the-art technology, especially biotechnology, to genetic resources in the region, thus limiting their use; inequitable distribution of the bene-

Regional markets provide a glimpse of the diversity of crops grown locally and are frequently sources of valuable germplasm.





COCOA



TOMATO



PEPPER



COTTON



PEANUT



POTATO



CASSAVA



PINEAPPLE



MAIZE



The enormous biological-genetic capital of the Americas, site of five of the 12 centers of origin and diversity of crops of great economic significance, is universally recognized.

Mesoamerica and the Andean region are two of the principal centers of plant domestication worldwide. Some of the most important crops native to the Americas and which are now grown around the world are corn, sunflowers, beans, potatoes, tomatoes, avocados, cocoa, pineapple, tobacco, cotton, squashes and melons.



fits derived from the use of genetic resources; insufficient trained human resources; inadequate and weak articulation among institutions within and among countries; failure to establish linkages between the agri-food chain and genetic resources; paucity of national policies and lack of harmonization of policies and regulations among countries; limited capacity for institutional organization and for the management of genetic resources; lack of information systems and systems for disseminating research findings; and limited participation of the private sector, farmers and communities in the conservation of genetic resources.

In order to overcome these problems, we must create opportunities for action, the principal of which would include: designing policies; conducting negotiations at the international level; articulating international actors and organizing national plant genetic resource networks in close coordination with the natural resources and environment sectors; linking them to the agricultural and industrial sectors; increasing the number of human resources involved in and the amount of time dedicated to plant genetic resources and providing training in the technical and scientific aspects of the management, negotiation and economic valuation of plant genetic resources; facilitating international inter-institutional technical cooperation through articulation, consensus building and the development of complementary actions; strengthening existing capabilities and supporting and linking national systems and subregional plant genetic resource networks through training and strategic information systems; bringing key players together for reaching agreement, defining common positions and augmenting technical capabilities in the region; establishing a regional technical support mechanism for the conservation and sustainable use of plant genetic resources that links institutions and complements their resources; designing and harmonizing policies and legislation on plant genetic resources, biological diversity, biosafety and intellectual property rights; internalizing the Global Action Plan in LAC, executing its priority lines of action; decentralizing the Plan and managing funding on the basis of cost/benefit analyses; formulating fundable projects; and creating a Regional Genetic Resource Management Fund.

IICA first became involved with genetic resources when it was founded as the Inter-American Institute of Agricultural Sciences. At that time, it established germ plasm collections that contributed substantially to agricultural development in the hemisphere; these conservation efforts are still carried out today by CATIE. In 1989, through the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean, the IABA entrusted IICA with promoting a hemispheric program on





genetic resources. In its 1994-1998 Medium Term Plan, also approved by the IABA, high priority was attached to actions to address biodiversity and genetic resources. In addition, in 1995 the IABA approved a resolution in support of the preservation of genetic material in the Americas. As a technical cooperation agency, IICA's principal function in this field is to upgrade member countries' institutional capabilities (policy design, legal issues, institutional models, strategic information, mobilization of resources, etc.) by contributing to the coordination of efforts among different actors working to conserve and foster a rational use of genetic resources for sustainable agricultural development in the Americas.



Given the magnitude of the issues associated with genetic resources, IICA has established strategic technical cooperation alliances with prestigious national, regional and international institutions recognized as authorities in this field, including: FAO, the international centers belonging to the CGIAR system (especially IPGRI, which supported the creation of several of the existing networks), CATIE, GTZ, SELA, USDA, IDB, CIRAD, INBio, the University of Amsterdam, CIDA, the Government of Sweden, various national institutions, universities and NGOs. The Institute also supports actions in the area of genetic resources through its sponsorship of reciprocal cooperation programs and networks, including PROCLANDINO, PROCITROPICOS, PROCISUR and PROMECAFE, to mention a few. The accomplishments and results of these joint efforts include the establishment of several networks, among them REMERFI, REDARFIT, TROPIGEN, REDCAHOR (with AVRDC, IDB and CABEI support), CCMPCR and PROCISUR's Genetic Resources Subprogram. It was also involved in determining priorities for joint action and policy frameworks for animal genetic resources conservation and use; the workshop "Toward an Inter-American System of Animal Genetic Resources"; and the First Meeting of the Advisory Group on Animal Genetic Resources Management in the Americas. It helped gather information on the status of genetic resources in the LAC countries; produced, during the early 1990s, conceptual and analytical elements for the formulation of policies on biotechnology and biosafety, and their harmonization; and published directories of biotechnology institutions in LAC. It provided support for the Fourth International Technical Conference on Plant Genetic Resources, held by FAO in Germany; the subregional preparatory meetings; the Regional Workshop on Germplasm



Bank Management in the Americas; and the initiative to create a regional mechanism for providing technical support to genetic resource activities. **In 1997, IICA, FAO and IPGRI worked together to organize a regional technical consultation for September 1998, the purpose of which will be to analyze the implementation of the Global Action Plan in LAC. In addition, together with FAO, SELA, IPGRI, CATIE, CIAT, GTZ and several national institutions, IICA fostered the establishment of a technical support system for the conservation and sustainable use of plant genetic resources in the Americas, within the framework of the FAO Global System. The proposal will be submitted to the consideration of the countries of the region at the aforementioned regional technical consultation. The potential of agriculture and natural resources in the Americas, through conservation and the proper use and management of biodiversity and genetic resources, is incalculable, and the task before us is enormous and urgent. The challenges are there, priorities have been set and the actors have been identified; all that remains is to double our efforts. To this end, IICA can contribute substantially to bringing about sustainable development in the Americas with an agenda that will enable it, individually and with the countries and other institutions, to ensure continuity of the efforts already under way and, hopefully, to expand them in the immediate future.**

The Global Action Plan, the commitments assumed under the WTO, the Convention on Biological Diversity, the International Undertaking on Plant Genetic Resources, and the work under way to create the FTAA, among other actions of global, regional and subregional scope, provide a framework for action and for tackling the challenges ahead. Some areas of critical importance for bringing about a sustainable development of agriculture in the Americas include: *in situ* and *ex situ* conservation of genetic resources and biodiversity; institutional strengthening; harmonization of legal and policy frameworks; valuation of genetic resources; articulation of actors at the national, subregional, regional and world levels; consensus-building, coordination and complementarity of actions; swift and timely funding; and the use of genetic resources in agricultural diversification programs. In this connection, IICA can make fundamental contributions in various fields, which it will put at the disposal of initiatives addressing biodiversity and genetic resources. Also to this end, it will facilitate the articulation of national, regional and international actors.



IICA very kindly thanks the following organizations for providing photographs of their work in the area of biodiversity and genetic resources: CATIE, CIMMYT, CIP, IBPGR and IPGRI. A special thanks to Dr. Jorge León for the historical map and drawings of plants.



IICA'S TECHNICAL COOPERATION

In 1997, IICA continued to offer a broad range of technical cooperation to its 34 member countries through formal projects implemented at the hemispheric, regional and national levels, and activities executed outside the framework of these projects, but of great importance for enabling the Institute to fulfill its mission as an international agency. This section describes some of the most important results of these initiatives. Detailed information on the Institute's hemispheric, regional and national technical cooperation can be found in Chapters IV, V and VI of the Appendices.

HEMISPHERIC ACTION

In the framework of Area of Concentration I, "Socioeconomic Policy, Trade and Investment," a hemispheric project contributed to strengthening policy analysis skills in public sector institutions of the countries, and the ministries of agriculture, producer organizations and other public institutions received advisory assistance in the area of socioeconomic policies for the sustainable modernization of agriculture. In addition, a report was published and presented at the Ninth IABA on the modernization of the institutional structure of agriculture and the rural milieu; the SIAPA information system was disseminated as a tool for analyzing policies developed for the agricultural sector; and several agri-food chains were studied in various countries, including Mexico, Honduras, Costa Rica and Nicaragua.

CIDAE promoted linkages among agribusiness sector organizations of the Americas. Together with CIDA, it fostered the development of domestic markets and the promotion and/or creation of agricultural commodity exchanges in Guatemala, Honduras, Panama, Peru, Venezuela, Bolivia, among other countries. A project was executed with AECI and FIAB to upgrade the institutional capabilities of agribusiness organizations of the agrifood sector. CIDAE represented the Institute at important international events including: the Business Forum of the Americas (Belo Horizonte, Brazil), the International Congress of Agricultural Businesses (Mexico) and the International Congress on the Experiences of Commodity Exchanges in Latin America.

In Area of Concentration II, "Science and Technology, Natural Resources and Agricultural Production," attention focused on the project Strengthening Priority-Setting Skills and Applications for Agricultural Research in Latin America and the Caribbean, which completed forward-looking assessments of research priorities in the Andean Region, the Caribbean and Mesoamerica, described different agri-food chains in the Southern Cone, developed computer programs for evaluating research, and trained 43 professionals in methodologies for the ex ante and ex post evaluation of research. Two other important actions were: a) the support provided to the Association of Caribbean States for formulating a profile for a technology generation and transfer project to promote the use of environmentally friendly agricultural production techniques, and b) joint



CUCURBITACEA



preparation, with interested countries and counterparts, of a project to develop coconut production in LAC through horizontal cooperation.

Representatives of IICA's Area of Concentration III, "Agricultural Health," participated in various international events on WTO sanitary and phytosanitary measures, and at a meeting of the working group on pest registration requirements of the International Plant Protection Convention. Important achievements were also made in pest and disease prevention and control, for example: actions were taken to prevent the introduction of pink mealybug on the American mainland, a program was implemented to control and eradicate the carambola fruit fly in South America, and actions were taken to prevent and control hog cholera in the Caribbean.

In Area of Concentration IV, "Sustainable Rural Development," IICA and the ACI promoted the Hemispheric Meeting of Youths in Cooperatives, held in Mexico. IICA also coordinated the drafting of a proposal for a hemispheric project to integrate rural women more fully into production and business chains. Through the project supporting PRODAR, training courses were offered in Costa Rica, activities continued as planned in Guatemala, Nicaragua and Panama, and a proposal was drawn up for establishing a post-graduate program in agroindustrial management. In addition, the IICA/SIDA regional project on Communications, Gender and Sustainable Development for the countries of Central America promoted the creation of national horizontal cooperation networks in each of the participating countries and conducted training

events for staff from the ministries of agriculture and the environment, the Offices of the First Ladies and governmental agencies responsible women's affairs.

The headquarters of SIHCA was set up in Venezuela, and various courses, workshops and other events were held on business management, training methods, agricultural extension management, and policy design for agriculture. Another important technical cooperation initiative was (PREVAL), which is funded by IFAD, and whose most important actions in 1997 included the design and implementation of an electronic network and a data base on project evaluation, the organization of two workshops on monitoring and evaluation, and the publication of four documents on the same topic.



G U A V A

REGIONAL AND NATIONAL ACTIONS

NORTHERN REGIONAL CENTER



One of the most noteworthy actions of the Directorate of IICA's Northern Regional Center (NRC) was the support it provided in organizing and coordinating an IICA mission to Texas A&M University which led to the signing of a cooperation agreement between the two organiza-



tions. The work program of the agreement calls for training events on agricultural health and agricultural trade, and the establishment of distance training centers in Costa Rica, Venezuela and Barbados, the aim of which will be to facilitate training activities and research programs that will improve the lives of rural women and young people. Also, the NRC continued strengthening relations with C/LAA, especially as regards the development of AgroInfo Americas, an electronic information system providing data on market analysis, international trade, transportation of agricultural products, trade treaties, daily consumer food prices, etc. The Center held a seminar for graduate students from the University of Wisconsin on the future of agriculture in the Americas, the role of research and agricultural product protection mechanisms.

AgriFuture Foundation. In Haiti, this Foundation continued to support the execution of the Kredifanm and PRO-TOKOL projects. In Belize, together with the University of Vermont, the government of that country and IICA, it fostered development of the production and marketing of dairy products. New project profiles were drawn up for establishing a milk bank in the needier rural areas of the Dominican Republic and for strengthening rural women's participation in production-business chains in Latin America and the Caribbean.

Canada. The CLASAS and CLAFE projects were executed in collaboration with several Canadian institutions. Though the CLASAS project, which was set up to facilitate the development

of strategic alliances between IICA and educational and research institutions in Canada, Latin America and the Caribbean, eleven Canadian students attended universities and agricultural research centers in Argentina, Brazil, Chile, Mexico, Nicaragua, Peru and Uruguay, to study agricultural health, biotechnology, trade analysis and sustainable rural development. Under the CLAFE project, executed in collaboration with the Canadian Federation of Agriculture, the National Farmers' Union (headquartered in Saskatchewan), the Quebec Agricultural Producers' Union, the Ministry of International Relations of Quebec, and Canadian Partners for Rural Development, 16 Canadian farmers and students took part in exchange programs in Bolivia, Chile, Costa Rica, El Salvador, Mexico and Uruguay. Other important actions were the development and dissemination of a data base on the agricultural sectors of Canada and the countries of LAC; support for three studies on trade, socioeconomic policy and investment in LAC countries; the distribution to all the TCAs of information from Bovitech and the Canadian Institute of Biotechnology on animal production; and support to the CCAC, involving the translation into Spanish of a manual on inter-American standards for the care and use of laboratory animals in science and technology, which will be distributed throughout LAC.

United States of America. The TCA in this country played an important role in coordinating the planning, programming and monitoring of activi-



ties surrounding the Institute's participation in the Twenty-first Annual Miami Conference on the Caribbean and Latin America, which afforded IICA an opportunity to enhance its institutional image, promote strategic alliances and foster regional integration in the private sector. The TCA provided logistic and administrative support for a ministerial round table at which participants discussed information strategies for agriculture to promote competitiveness and growth. It also exhibited IICA's information systems (AgriForo and AgroInfo) and organized several meetings as part of the conference. Meetings were also held with representatives of USAID, CARICOM, NCFAP, USDA/APHIS and USDA/ERS to discuss IICA's participation in two projects to be implemented in the Caribbean for fostering understanding of the WTO's Sanitary /Phytosanitary Agreement and contributing to the evaluation and formulation of agricultural policy in the Caribbean. Other important actions included: a) support in organizing a meeting between the Director General of IICA and the OAS Executive Secretary for Cooperative Development, in which they discussed joint actions related to sustainable development; b) various meetings with NCFAP authorities to study IICA's participation in an assistance program for the Caribbean related to changes in trade policies under NAFTA; c) efforts to secure AID funding for agricultural health and trade projects in the Caribbean; and d) meetings with authorities of the Animal Health Institute and the World Wide Director

of Regulatory Affairs to discuss joint efforts in the area of animal health and plant protection.

Mexico. Sixty SAGAR professionals received training in participatory approaches for upgrading the competitiveness of agri-food systems, and in adopting and using the SIAPA system. IICA collaborated with SAGAR to improve phytosanitary diagnostic services, in the fruit fly eradication campaign in Chihuahua, Sonora and southern Baja California, and in providing training to 1,753 officials and producers on the planning and execution of zoosanitary campaigns against classic swine fever,

Aujeszky's disease, brucellosis, bovine tuberculosis and poultry influenza. Technical, logistic and financial support was also provided to the office of the Chairman of the FTAA Working Group on Sanitary and Phytosanitary Measures for organizing three international meetings. In addition, IICA collaborated with the Undersecretariat of Rural Development in implementing the Program "Training Regional Leaders of Technological Development in the Agricultural Sector of Mexico and Latin America." Three inter-institutional agreements were signed (with the Autonomous University of Chapingo, the Mexican Association for Higher Agricultural Education and the Antonio Narro Agricultural University) for implementing

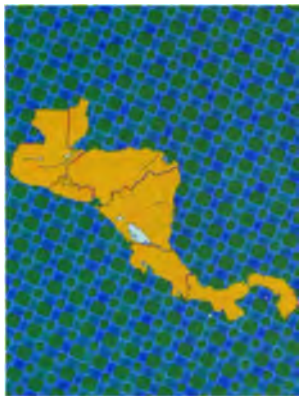


Interdependence in genetic resources can be illustrated with the case of wheat, an important crop in the Americas that was first domesticated in the Near East. Today, modern wheat varieties are rich in genetic diversity. Some 49 landraces from 21 countries were used to produce Kauz, a high-yield, disease resistant variety cultivated extensively throughout the developing world.



actions in support of technical and scientific cooperation, teacher training and institutional development.

CENTRAL REGIONAL CENTER



Through the project "Technical Support to Enhance the Effectiveness of the Decision-making Process of CORECA," the Central

American ministries of agriculture received support for implementing the Plan of Action for Agriculture in Central America and preparing national plans for transforming agricultural production. Institutional mechanisms for coordinating SICA's actions were strengthened, and support was provided for establishing OSPESCA, FECALAC and the Central American Federation of Chambers of Agriculture and Agroindustry. PROMECAFE's results include a regional seminar on international coffee agreements; the maintenance and, in some cases, regeneration of coffee germ plasm in the CATIE collection; maximum use of in vitro tissue culture technologies for mass production of coffee plants; and several studies to identify species of coffee nematodes, as well as the damage they cause. The project "Institutional Development for Sustainable Agricultural Production on Hillsides in Central America" produced important results, including workshops on microregional development and methods for measuring the adoption of new technologies and the impact of agricultural policies on hillsides; training

on extension methods and sustainable agriculture for 322 technical personnel and farmers in El Salvador and Honduras; and information dissemination through 93 documents. Other regional actions included: collaboration with the UPEB in developing documentation and information services on bananas and plantains; the upgrading of agricultural research on basic grains; actions to improve the position of women in the rural development process; increasing efforts to convert small- and medium-scale production units into true agribusinesses; and support for the Central American Science and Technology System for Agriculture, Forestry and Natural Resources.

Belize. Two project proposals were designed, one to promote and diversify fruit and root crop production and the other to develop sustainable agricultural systems. IICA cooperated with the IDB and the Ministry of Agriculture and Fisheries in analyzing a proposal to modernize the country's agricultural health services. It also worked with two IFAD missions to design agricultural and rural development projects. The TCA and the Ministry of Agriculture and Fisheries cosponsored the First Joint SCMA/CORECA Meeting, during which a memorandum of understanding was signed for cooperation in the areas of trade negotiations, technical assistance and information exchange. A technical task force was set up, coordinated by IICA and involving representatives of SCMA, CORECA and CARICOM, to draft a cooperation program in line with the memorandum. The TCA also worked with the Ministry of Agriculture and Fisheries and the Ministry of Trade



and Industry to conduct a workshop on the implications of the trade agreements for exports and agriculture in Belize; it was attended by 75 public and private sector officials.

Costa Rica. In response to agricultural sector requests, channeled through the MAG, IICA collaborated in executing the Agricultural Production Conversion Plan by developing an important agricultural information network entitled INFOAGRO, which provides producer organizations and sectoral institutions with agricultural information of great value for decision making. Through the project "Technical Support for Upgrading the Competitiveness of Agri-production Systems and Trade," IICA worked on studies of the agri-food chains of heart of palm, milk, pork, mango, plantain and oranges, among others. Two courses were held, one on participatory analysis of agri-food chains, and the other on the transformation of production in agri-food systems, and rural agroindustry was promoted using the gender approach. Support was provided to the Rural Development Program, through a document drawn up with the National Indigenous Board to

identify production projects to stimulate the indigenous family economy. Cooperation was provided to several indigenous communities; for example, a project was reactivated to build a storage center as part of a bean marketing initiative by the Cabecar community. With National University and University of Costa Rica students, efforts got under way to design a project for the Guatuso, Quitirrisi and Terraba communities to breed a number of wild species in danger of extinction. Also, the government received support in preparing a plan of action for dealing with the effects of El Niño, which included training for a large number of technical personnel and farmers.

El Salvador. IICA cooperated in designing the Agricultural Health Information System for Agricultural Trade, as well as in defining actions to improve the management capabilities of agricultural health services in the country. Through the Training and Information Program on International Trade and Agriculture, some 328 public and private officials received training. Support was provided for creating CAM-AGRO, which held the forum "Looking



Much work is done in the area of *in vitro* conservation and regeneration, including the development of techniques for *in vitro* collection and/or storage of germplasm, as well as the study of the stability of *in vitro* cultures. In the photo, students from 11 Central and South American countries learn *in vitro* collecting techniques at a joint IBPGR (now IPGRI)-CATIE training course in Costa Rica.



at Agriculture in the Year 2010.”

Progress was also made in preparing a directory of agricultural and agroindustrial organizations in the country. The regional project on sustainable hillside farming in Central America, which receives funding from the Netherlands, worked in the municipalities of Nueva Concepcion and Jocoro using participatory methods to detect problems and formulate possible solutions. IICA also cooperated with OAPA in analyzing and formulating sectoral and trade policy proposals, support was given for establishing the Agricultural Foundation of El Salvador (FUNDAGRO), and IICA provided assistance to modernization efforts at the Ministry of Agriculture, CENTA and ENA.

Guatemala. IICA cooperated in reactivating the National Commodity Exchange, holding two seminars to address important aspects of the operations of commodity exchanges; in addition, the Central American Association of Commodity Exchanges was established. Technical and administrative support was given to the MAG for executing the Forestry Action Plan, the Plan of Action for Modernizing and Promoting Agriculture in Irrigation and Drainage Areas, a project on community lands and a project on forest conservation in the Peten area. Also, the TCA cooperated with task forces of the dairy and meat subsectors

regarding the organization of trade associations and the formulation of technological recommendations; with the USPADA, in processing data gathered in the 1996 agricultural census; with the

PROMUJER Program, in analyzing problems related to product marketing; and with the Association of Livestock Breeders of Southeast Guatemala, in organizing and holding the Livestock Forum.

Honduras. Together with USAID, SAG and PRODEPAH, IICA participated on the steering committee of the project “Coordination and Execution of Agricultural Policy,” the objective of which was to contribute to defining the government’s agricultural policies. In conjunction with the Federation of Agricultural Exporters, the necessary documentation was prepared for participating in an international public bidding process on the project “Modernization of Agricultural Technology Services,” to be funded by the IDB. Its aim is to provide services for the evaluation, monitoring and supervision of training projects as well as projects on agricultural technology generation and transfer. In the area of rural development, efforts got under way to validate training modules on business management. Some 60 training events were held on topics such as gender, communications and sustainable development; business management; small community banks and small farms. Also, support was provided in setting up the national agricultural science and technology system; the Secretariat of Agriculture and Livestock received support in executing a project on price information and the supply of and demand for agricultural products; and a strategy was designed for improving the access of Honduran agricultural products to the Mexican market, as an input for trade negotiations between these two countries.





Nicaragua. Within the framework of the MAG/IDB/FOSEMAG technical assistance and training project, 39 people received scholarships to study abroad: areas of specialization were agricultural health, plant protection, seed improvement and geographic information systems. Some 105 employees of public and private companies received training in the conceptualization and application of risk analysis for critical areas of the fisheries and poultry industries. The TCA collaborated in drafting an economic development strategy for the Department of Jinotega, which included formulation of socioeconomic project profiles, a proposal for land-use and environmental management, and an annual budget plan. In addition, technical assistance was provided to INTA for executing the Nicaraguan Rural Youth Project through training of 42 outreach workers in the planning, organization and execution of rural youth programs, the establishment of 4-H Clubs, the preparation of strategic work plans, project formulation and evaluation, and credit management. Moreover, studies were conducted on the chains of 13 products; progress was made in geo-spatial activities within the framework of a project aimed at the biophysical zonification of the country.

Panama. The final version of the Strategic Plan of Action for the Agricultural Sector was submitted to MIDA. A cooperation agreement was signed with IMA to support the establishment of the Trade and Market Information System; support was provided to the Office of the First Lady in developing a project for rural women, which resulted in the approval of a

hemispheric project by the Summit of First Ladies of the hemisphere that was later endorsed by the IABA. The TCA began to administer the resources of the Agricultural Sector Modernization Program (funded by the IDB) and of the Poverty and Natural Resources Project (funded by the World Bank). Within the framework of the former, IICA signed a cooperation agreement in which it will collaborate in the development of agricultural export programs. Technical and operating support was provided to the rural agroindustry networks, REDCA, the Foreign Trade Institute and the Chamber of Commerce, Industry and Agriculture for establishing an agroindustrial product storage, processing and distribution center. Also, advisory services were provided to the Agricultural Commodities Exchange and APEMEP on exchange mechanisms; a cooperation agreement was signed with the Foundation of the City of Knowledge for a hemispheric system of higher agricultural education, and a program was developed to modernize agricultural curricula at the Santa Maria la Antigua University.

CARIBBEAN REGIONAL CENTER



The Caribbean Regional Center worked to develop a plan of action for increasing the effectiveness of the OECS Agricultural Diversification Programme.

The project to support the development of tropical fruits in the Caribbean set up National Fruit Boards in Guyana,



Suriname, Trinidad and Tobago, Grenada, Jamaica and St. Kitts and Nevis and launched study groups on citrus fruits in Suriname and Trinidad and Tobago. The project "Supporting Agricultural Health Services in the Caribbean to Facilitate Production and Trade" conducted diagnostic studies and produced reports on the quarantine, animal health and plant protection systems of Antigua and Barbuda, Bahamas, Barbados, Guyana and Suriname. Other regional initiatives included work to frame policies for upgrading the competitiveness of the Caribbean agri-food system, eradicate the *Amblyomma variegatum* tick and the carambola fruit fly in the Caribbean, develop the dairy sector, and provide training in agricultural technology, at ISA in the Dominican Republic, to 13 professionals from English-speaking Caribbean countries.

The Bahamas. In 1997, the Commonwealth of the Bahamas became the Institute's thirty-fourth Member State. IICA's actions in the country got under way with an evaluation of its animal and plant health services, technical assistance to the Ministry of Agriculture for updating its informatics capabilities, training of key officials at the Ministry in Spanish language skills, and organization of a technical mission of private sector representatives from Costa Rica to evaluate the possibilities of the banana industry in the Bahamas. Representatives of the Ministry of Agriculture also took part in three IICA workshops, the themes of which were: strengthening leadership and teamwork; reviewing and reforming IICA's lines of action in science and technology, natural resources and agricultur-

al production; and promoting sustainable agricultural development.

Barbados. Support was provided for developing farmers' organizations as a means of reducing poverty and unemployment, and boosting agricultural production. A training program was completed on farm management and agro-processing, attended by 40 young people from 4-H clubs and the FDC; an intensive program on farm management was also given with the BAS, attended by 14 farmers. IICA collaborated with the MARD and the BAS in carrying out a study in Scotland District on economic activities, especially those related to agro-processing; it also cooperated with the MADR in efforts to control the CAE virus. Support was provided for the visit of three representatives of producers', marketing and services' organizations to the Dominican Republic, in order to share experiences with counterpart organizations.

Dominican Republic. In the area of policy, trade and integration, technical support was provided to the SEA for strengthening the Center for Documentation and Electronic Information on Systems and Services, and for drafting several project profiles for presentation at the CARIFORUM, to be considered for funding under the Second Protocol to LOME IV. Cooperation was provided to BAGRICOLA in evaluating informatics needs; in conjunction with the JAD, a seminar was held on agricultural commodity exchanges; and an annual report was prepared on the situation in and outlook for the Dominican agricultural sector. In the field of technology



innovation, IICA cooperated with SEA on methods for the integrated management of coffee berry borer; it also contributed to the implementation of a number of agricultural development projects in the southern and southwestern regions, and to the design of mechanisms for self-management in irrigation districts. Assistance was also provided to INDHRI for formulating a strategy to optimize water use in the country. In the area of agricultural health, IICA collaborated with USAID/APHIS in eradicating hog cholera and with the SEA in reviewing the veterinary laboratory administration system; it also drafted a project proposal aimed at strengthening the country's animal health and plant protection system. It worked with CIMPA on training for agricultural development; assisted in an assessment of NGOs operating in five provinces bordering with Haiti; and conducted an evaluation of the national network of the Regional Training Program for Rural Development.

Guyana. Within the framework of the project "Strengthening Rural Development in Guyana," support was provided to the WCPA in rehabilitating 2,500 acres planted with coffee, completing two processing and drying plants, implementing an integrated pest management program, and marketing 2062 pounds of roasted coffee. Under the project "Dairy Sector Development in the Southern Caribbean," the Institute helped set up the coordinating committee of Cattle Ranchers' Associations, provide training to 50 producers on improved technologies for processing dairy products, and organize 20 meet-

ings with producers' associations. IICA also collaborated with the Ministry of Agriculture in establishing a specialized unit for the control of the pink mealybug, formulating a plan of action for the biological control of this pest, designing a proposal for modernizing the National Agricultural Health Program, organizing a series of meetings to draw up a plan for pineapple production and marketing, and preparing studies on the production costs of several nontraditional crops.

Haiti. The project "Technology, Organization and Credit for Small Farmers in Haiti" provided support to ten farmers' groups in an effort to find



solutions to local problems of agricultural production. Under the project on technology transfer for coffee-based cropping systems, financed by USAID, the FACN was strengthened and IICA assisted in converting it into a private enterprise. In addition, 29 rotating credit funds were established for rural women. Through the PROTOKOL project (Proje Teknologji Organizasyon Kombit Lakay), which receives Kellogg Foundation funds, a group of 40 high-



level veterinary agents was established to provide services in rural areas and to identify groups and places for establishing breeding centers for monkeys, goats and chickens to be administered by local groups. Through a short-term action, technical assistance was also provided to the Federation of Native Coffee-Growers.

Jamaica. Within the framework of the Rio Grande Valley Dasheen Technology Development Project, the Rio Grande Valley Growers' Cooperative was strengthened through training activities and the establishment of a revolving fund. The output and quality of dasheen produced in the valley was improved, resulting in an 11% production increase of this tuber in Jamaica. Support was also provided to the inhabitants of the Morant and Yallahs watersheds through a project to evaluate technology generation and soil conservation, and a short-term action on agricultural development. Through a project on windows of sustainability in the Cobre River watershed, policies were formulated to promote integrated watershed management; training was provided on environmental, technical and social issues; and an environmental management plan was developed.

Organization of Eastern Caribbean States (OECS). Support was provided to the OECS Agricultural Diversification Programme for upgrading the production and marketing of nontraditional crops. In Antigua and Barbuda, pineapple cultivation was promoted and support was provided to training on sustainable pineapple production techniques. The cultivation of herbs and spices was pro-

moted in Dominica; a project got under way in Grenada to promote the sustainable development of hot pepper production; in St. Lucia, emphasis was placed on strengthening capabilities for establishing and managing sustainable fruit and vegetable enterprises; and support was provided to grape production and marketing in St. Vincent and the Grenadines.

Under the project "Supporting Agricultural Health Services in the Caribbean to Facilitate Production and Trade," several meetings were held to promote pesticide management; a working group was set up to coordinate the provision of laboratory services for controlling pesticide quality and residue management; cooperation was provided for the implementation of measures to control the fruit fly in Dominica, St. Kitts and Nevis and St. Lucia; and, together with FAVA/CA, efforts were made to manage the tristeza disease of citrus and the citrus brown aphid. Studies were also carried out on the impact of free trade on the agricultural sector of Grenada, the situation in the agricultural sector of Antigua and Barbuda, the outlook for agriculture in the ECS, the status of plant protection in Antigua and Barbuda, citrus fruit production in Grenada, and agricultural trade in St. Lucia

Suriname. Within the framework of the project "Hinterland Integrated Rural Development - Upper Suriname Basin Subregion," 42 leaders from six villages received leadership training for community development; eleven groups were organized for community development (four made up of women), and a series of training events were held on farm management, production methods,



management of agroforestry systems, administration of nurseries, food preparation, family nutrition and the organization of small-scale enterprises. Support was also provided for upgrading tropical fruit crop cultivation, especially pineapple and citrus fruits. Under IICA's agricultural health program, an assessment was made of the country's plant and animal health services; technicians and farmers were trained in the safe use of pesticides; a project proposal was completed for modernizing the country's agricultural health services; and a number of actions were executed to control the carambola fruit fly.

Trinidad and Tobago. Two case studies were carried out on the production and marketing of dairy products and rice. In the former, it was found that dairy products make a major contribution to GDP (2%) through value added; in the case of rice, it was found that production costs are excessively high on account of the high cost of labor and the lack of technology. IICA collaborated with the MALMR in improving the Work Plan Management System (WPMS) that was also set up at the Ministry of Agriculture in St. Lucia and tested by those of Barbados and St. Kitts and Nevis. In conjunction with Caroni Ltd., IICA organized a national consultation attended by over 100 people to address the control of the froghopper (*Aenolamia varia saccharina*), the sugar cane pest that causes most damage in the country. Under a project to support the rural development process in Trinidad and Tobago, through institutional strengthening of selected farmers' groups and supporting agencies, the MALMR received IICA support for

developing an extension methodology that incorporates the gender approach, with the aim of improving the quality of life of rural families.

ANDEAN REGIONAL CENTER



With IICA support, PRO-CIANDINO promoted the sustainable management of micro-watersheds, carried out competitiveness studies of fruit and vegetable markets,

contributed to strengthening the sustainable management of plant genetic resources in the Americas, developed technology information systems, created opportunities for cooperation with international research centers and spurred the development of a critical mass for technology innovation. Through the project "Modernizing Agricultural Health Services in the Andean Area to Encourage Trade Opening and Integration," the Andean Regional Center set up the Andean Agricultural Health Information System. The Regional Program for South American Camelid Development worked to improve standards of living for small-scale breeders and people whose livelihood depends on the camelid production, including processing and marketing activities. Also, through other actions of regional scope, this Center supported the design of policies to promote competitive agricultural trade in the region; strengthened planning, follow-up and evaluation of agricultural research; and formulated a project



for providing advisory services to leading public rural development institutions in areas of Bolivia, Colombia and Peru where illegal crops are grown.

Bolivia. Under the project "Supporting Organizational Development for Competitiveness," progress was made in preparing a study of the organizational model of the country's institutions, and more than 150 management-level professionals received training to equip them to carry out organizational development and transformation processes in their respective institutions. The TCA's agricultural statistics information system was consolidated and placed at the service of the public and private agricultural sectors, and a workshop was held to analyze the systematization of the institutional experience of the Undersecretariat of Rural Development. Also, the Ministry of Agriculture, Livestock and Rural Development received support for drawing up a feasibility study on a decentralized agricultural health system. A project profile was drawn up for the National Coffee Producers' Association and a technical proposal was drafted on the conservation status of *vicuña* in the country.

Colombia. In the area of policy, trade and integration, IICA-designed programs on competitiveness were submitted to the Ministry of Agriculture, the Ministry of Foreign Trade and the presidents of the Farmers' Association and the National Association of Industrialists. It also held a series of courses on international negotiations and helped organize the National Congress on Cassava Technology, as well as workshops on biotechnology, the environment, technology transfer, a future

vision of agricultural extension, and training of leaders of small-farmers' groups. The TCA collaborated with the Ministry of Agriculture in disseminating sustainable agriculture technologies, including direct planting on leaf mold-zero tillage-using tractors or draught animals. CORPOICA found substantial improvements in the biological and physical conditions of the soils to which these technologies were applied. IICA also fostered the development of a machine shop for producing equipment for draught animals used on small- and medium-scale farms and ranches. Training in sustainable development was provided to several institutions and five videocassettes were produced on sustainable agriculture. A team of specialists was set up to design the agricultural and rural sector of the future. In periodic multidisciplinary meetings, the activities of the Rural Mission were evaluated, and preparation of the annual report and the proposal on future activities began, all of which will be submitted to the government.

Ecuador. The TCA arranged for 11 consultancies and 17 advisory missions for the Agricultural Sector Program (Ministry of Agriculture and Livestock), the objectives of which included: designing a funding system for marketing agricultural products, defining watershed management policies, drawing up a land titling program, and designing an agricultural information system. The TCA also collaborated with the Western Pichincha Regional Development Program in designing and implementing a monitoring and evaluation system for the production support component; organizing seminars on rural agroindustry, competitiveness and organi-



zation of trade associations; drafting a proposal on the comprehensive approach to agriculture; and implementing actions to strengthen microenterprises. Within the framework of PRONADER, direct and integrated technical assistance was provided to some 14,000 families. Regarding the Saraguro-Yacuambi, Upper Cañar River Basin and PENIPE rural development projects, the TCA worked with more than 40 second-tier organizations. Other important actions executed by IICA included: a) collaborating in the organization of a national forum on the current situation in, outlook for and opportunities in rural development from now to the year 2000, which was attended by more than 120 representatives of public and private institutions; b) cooperating in work to reformulate the national rural development strategy, adopting a modern, open approach and emphasizing the improvement of project management; c) within the framework of PRODAR, holding the First Meeting on Rural Agroindustry; and d) providing technical support to MAG/SESA in preparing a proposal to be presented by the government to the FTAA Working Group on Sanitary and Phytosanitary Measures.

Peru. Under the project "Supporting Execution of the Plan of Action between the Governments of Peru and Chile to Strengthen Efforts to Combat the Mediterranean Fruit Fly in Border Areas," efforts to eradicate the pest in the departments of Tacna and Moquegua continued, the IAEA was formally incorporated into activities of the bi-national plan of action, and, together with SENASA, a technical and administrative audit was conducted of the project. Under the project "Focusing Agricultural Research for



Alternative Development," IICA prepared technical documents, took part in a workshop on the National Operating Plan for Alternative Development, and held a workshop on the focusing of agricultural research for alternative development, and another on Andean policies and strategies for same. Support was provided to the Ministry of the Presidency and the Ministry for Women's Affairs and Human Development for reducing public expenditure, preparing and implementing projects on sustainable agricultural development and promoting development for rural women. In addition, the TCA helped prepare technical-economic bids to secure external funds and provide training on how to combat rural poverty. Twenty-four project profiles were formulated and several projects were implemented on sustainable agricultural development and women's development, benefiting approximately 44,000 families in areas characterized by extreme poverty. Training on the development of small-farmer organizations and the preparation

Training in the area of biodiversity and genetic resources ranges from equipping field technicians to convert research into action in the field (photo) to the highest level scientific work in cryopreservation; analysis of genetic variation using molecular markers; germplasm exploration, conservation, evaluation and information techniques; germplasm conservation and evaluation techniques; ecogeographic surveys, and many others.



of public and private investment projects was provided to some 190 technical personnel from ministries that deal with rural poverty.

Venezuela. An agreement was signed with MAC, MIC and FEDECAMARAS to articulate and modernize agri-food production chains. Establishment of the Agricultural Commodity Exchange Development Commission was promoted, involving representatives of the different economic sectors. Under the terms of an inter-institutional agreement, IICA agreed to provide technical support and administer resources for the reorganization of FONAIAP.

Together with MAC and IAN, inventories were made of small-farmer settlements and unsettled areas, and small-farmer organizations in the states of Portuguesa, Zulia and Monagas were evaluated. In support of border area development, a study was conducted for defining a strategic vision of the northern border subregion of the state of Tachira. Further training on the identification, formulation, evaluation and implementation of strategic planning in border projects was provided to officials of the bi-national border agencies.

Actions executed in connection with rural agroindustry included establishment of eight regional networks as well as two training workshops, one on the rural milieu in the new international context and the other on agroindustry development. In addition, the Second Rural Agroindustry Fair was held in the state of Sucre; support was given to the Directorate of Agroindustry and Trade in the state of Tachira for setting up an agricultural commodity exchange; and a project was launched to develop guide-

lines for technology development of rural agroindustries in the semi-arid regions of the country.

SOUTHERN REGIONAL CENTER



The Directorate of this Center conducted a series of studies on the progress, opportunities and challenges of MERCOSUR. It also worked to build partnerships with other

international and multinational organizations, including ALADI and ECLAC. With ECLAC, strategic planning for trade and integration was conducted, a document was prepared on sectoral indicators for the Southern Region and its relationship with the rest of the Americas, and another was written on the agrifood sector in Latin America and the Caribbean. With support from ALADI, a study was carried out on agricultural trade flows between MERCOSUR and the Andean Community. Under the aegis of PROCISUR, support was provided for the articulation of a technical and scientific cooperation network in the region, the development of methodologies for the evaluation of research centers and NARIs, and the organization of the First International Workshop on Plant Genetic Resources of Northwest Argentina and of the Third International Course on the Conservation of Plant Genetic Resources, held in La Platina, Chile. PROCITROPICOS prepared three regional projects on sustainable agricultural development, defined training



activities in the areas of biodiversity and the conservation and sustainable use of genetic resources, and evaluated the sustainability of forestry production systems in Manaus, Brazil. The offices of PROCODER were set up in Brasilia, 18 institutions in five countries formally joined the Program, a seminar was held on new mechanisms for overcoming rural poverty in the context of globalization and competition in regional agriculture, and the Sixth Meeting of PROCODER's Advisory Council took place in Asuncion, Paraguay. Other actions included efforts to improve capabilities for producing plants of high genetic and health quality, strengthen plant protection services to facilitate trade in agricultural products in the countries of the Southern Area, and draft a proposal for a project on rural women in the Southern Region.

Argentina. In 1997, this TCA upgraded its information and telecommunications capabilities for institutional management and agricultural programs; it also worked to gain IICA an important position in the technical cooperation market. The TCA collaborated with the SAGyP through the Program of Technical Support for Priority Projects; it supported SENASA in implementing the Agricultural Services Modernization Program; it also cooperated with the Undersecretariat of Foods and Markets through the project "Provision of Technical Cooperation Services in the Agri-food Area." IICA strengthened its ties with the Forum of Higher Agricultural Education and cooperated in efforts to integrate the curricula of agronomy courses. Work also contin-

ued to assess Argentina's agri-food sector; in the province of Mendoza, mechanisms for cooperation with private groups were negotiated; support was provided to the plan to transform the production structure of the tobacco



Field research also aims to evaluate genetic resources of neglected crops with good development potential, as well as to raise general awareness on underutilized crop species. An example of this is *Pachyrhizus ahipa* (ajipa), a crop cultivated by small communities in eastern Andean valleys of Bolivia and northern Argentina.

sector in the province of Salta; and a project was formulated to upgrade agricultural health services in the province of La Rioja.

Brazil. In the area of policy, trade and integration, support was provided to MAARA's Agricultural Policy Secretariat in formulating a project proposal on the agricultural market information system; in addition,



Brazilian agroindustrial enterprises were identified and selected to participate in the 1998 Barcelona Agrifood Fair. In the area of rural development, IICA assisted the planning secretariats of the northeastern states in executing projects to combat rural poverty, the principal objective of which was to identify new economic options for generating higher incomes for the rural poor. Support was also given to the Rural Development Secretariat for promoting irrigated fruit-growing and the Bank of Northeastern Brazil received technical cooperation for evaluating the economic and social impact and environmental policies of the Alternative Program for Financing the Provision of Technical Assistance Services. The TCA also provided institutional and operating support to the Secretariat of Water Resources of the Ministry of Environment, Water Resources and Legal Amazonia through planning and training missions to promote sustainable development and integrated water management. In the field of agricultural health, MAARA received support in drawing up the new national policy on agricultural protection; defining a conceptual model and a specific methodology for improving the country's present agricultural protection system; eradicating and controlling the carambola fruit fly; holding two seminars on the use of ultrasound technology in bovine and equine reproduction; and developing an online data base for the National Agricultural Protection, Safety and Defense System. Other important actions were the holding of the First Inter-American Forum on Water Resources Management ("Meeting of

the Waters") and formulation of the Technological Development Program for Brazilian Agriculture, to be implemented with EMBRAPA.

Chile. Significant progress was made within the framework of a letter of understanding signed with MINAGRI for modernizing vocational forestry-agricultural and rural education, including: a) establishment, together with MINE-DUC and MINAGRI, of the technical coordinating unit for the Modernization Plan; b) promotion of private academic sector participation in the Plan's Standing Advisory Group, through the incorporation of representatives of trade associations and the directors of private secondary schools and academic centers; and c) preparation of a methodology for curriculum design and for identifying support materials needed for technical subjects. As part of the efforts to modernize the public agricultural sector, IICA provided support to a number of institutions, including ODEPA, the SAG and INDAP, working with ODEPA to strengthen technical capabilities for formulating sectoral policies. IICA worked with SAG to formulate an initiative for creating soil and water conservation districts, draw up the Modernization Program and organize a seminar-workshop on modernization and innovative development. With INDAP it collaborated in organizing a course on agribusiness, as well as an international management seminar on the modernization of small-scale agricultural enterprises; it also contributed to drafting proposals on competitiveness and innovation for small-scale agriculture, as well as the frame of reference for a strategy to con-

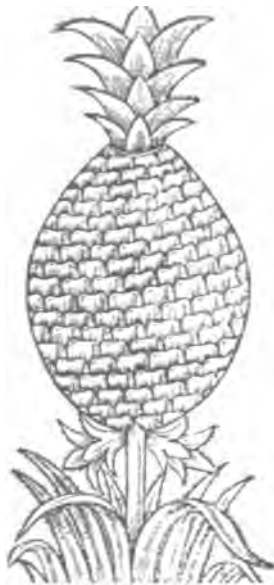


solidate small-scale family farming systems. IICA cooperated with MINAGRI in coordinating the INFOAGROSISTEMAS informatics system, supervising studies on cereal production systems and examining reports on the agrifood meat chain.

Paraguay. The TCA in Paraguay drew up a document on the future of agricultural development in that country, and 20 agroindustrial enterprises were identified for possible participation in the 1998 Barcelona Agrifood Fair. The Institute cooperated with the DIA in organizing and holding a workshop on supervision and monitoring; it also provided technical and logistic support to the Council of Deans and Directors of Schools of Agricultural Sciences in drawing up their 1997 Work Plan and holding a seminar on curriculum modernization. IICA provided logistic support to MAG in connection with an international seminar to exchange experiences on third party participation in agricultural technical assistance, the purpose of which was to improve information available in Paraguay on the experiences of selected Latin American countries with private technical assistance systems for the small-farm sector. More than 100 professionals from the public and private sectors attended the event. Another important activity was the course-seminar held on environmental impact evaluation and assessment, with emphasis on sustainable development. It was organized and executed with the IICA/GTZ Project, IICA's DIPRAT and MAG's Directorate of Environmental Planning and provided training for 25 technical

personnel from different government units of the Central Department. Under the aegis of PRODAR, technical support was provided to MAG's General Planning Directorate and to the Center for Business Support of the Ministry of Industry and Trade, for organizing and establishing the National Forum for Liaison with REDAR.

Uruguay. The TCA's activities focused on management, technical assistance and training activities with institutions responsible for modernizing the *granja* sector, including JUNAGRA and others affiliated with PREDEG. The TCA also collaborated with the School of Agronomy of the University of the Republic in adjusting its curriculum in light of the demand for a new profile for agricultural engineers. A workshop was held on strategic planning with representatives of the school of agronomy, the school of veterinary medicine, and the Agrarian Program at the Universidad del Trabajo del Uruguay, for which a proposal for institutional change was prepared. An agreement was signed with the Instituto Plan Agropecuario for collaboration in the area of management. Intensive work was carried out to develop management instruments for the different entities of the public agricultural sector and a letter of understanding was signed for providing support to the General Directorate of Renewable Natural Resources. Under the program to upgrade academic programs and modernize the Swiss Colony Dairy School, teaching systems were improved and school equipment was upgraded.



P I N E A P P L E

STRATEGIC ALLIANCES

IICA's relations with international and regional organizations strengthens its technical and financial capabilities and enables it to combine efforts and resources in order to contribute to improving agricultural conditions and rural well-being in LAC. Chapter II of the Appendices to this report contains more detailed information on the actions carried out with most of these organizations. The following, then, highlights the actions IICA carried out in 1997 within the framework of these alliances.

ORGANIZATIONS IN CANADA

With CIDA support, IICA carried out efforts to establish agricultural commodity exchanges in Central American and Andean countries; the establishment of farmers' and agribusiness organizations for marketing products through the exchanges was also promoted. Cooperation agreements were signed with CCAA and CCAC for developing mechanisms through which initiatives of priority to those organizations and IICA can be developed. The School of Veterinary Medicine of Montreal and IICA began joint activities in 1997, with the visit to Canada of professors from Argentina who gave courses for post-graduate students. IDRC continued providing support to the region-wide PRODAR program, which aims to strengthen rural agroindustry in LAC. Rural development activities were conducted with PRD, and projects were identified and executed with AIC.

ORGANIZATIONS IN THE UNITED STATES OF AMERICA

IICA continued to work with the USDA on important screw worm research and control activities in Panama, and on controlling the carambola fruit fly in the Caribbean. USAID cooperated with the Institute in analyzing sectoral investment policy in El Salvador and provided financial support to a coffee project in Haiti. IICA and Texas A&M University formed an alliance for establishing distance education centers in Costa Rica, Venezuela and Barbados. In addition, FAVA/CA continued to collaborate with the Institute in technical cooperation actions to control pests and diseases that have a negative impact on agricultural production in Guyana.



CARIBBEAN AGRICULTURAL RESEARCH AND DEVELOPMENT INSTITUTE (CARDI)

IICA and CARDI worked together to reduce the impact of plant pests in the Caribbean, through workshops on mango and pepper pest and disease management (36 and 31 participants, respectively). In St. Kitts and Nevis, they provided support for developing fresh fruit production; in Grenada, the Ministry of Agriculture received support for sustainable development of the pepper industry, through technology validation, the introduction of two new pepper varieties, and training in pest and disease control for 69 farmers, teachers and Ministry technicians; in Antigua and Barbuda, the livestock subsector received support.

INTER-AMERICAN DEVELOPMENT BANK (IDB)

Within the framework of a hemispheric project to strengthen capabilities and applications for prioritizing agricultural research in LAC, training on the methodology of evaluation was provided to 43 professionals. Software for evaluating research and a regional data base were developed, and documents analyzing the evaluation of research and related training were published. In Panama, progress was made with an IDB-funded project for administering the agricultural services modernization program. In Paraguay, the IDB funded a seminar on the process whereby agricultural technical assistance is provided by third parties. In addition, an agreement for implementing a national development plan in Nicaragua and an agreement for technical cooperation with the Provincial Council of Pichincha in Ecuador were signed. In the Andean Region, the IDB cooperated with IICA in several actions addressing irrigation, camelidae and rural development; it also provided financial support to PROCIANDINO.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (IBRD)

The World Bank continued providing financial support for a project with CENTA in El Salvador, and a poverty reduction and natural resource conservation project in Panama. With IICA, IDB, IFAD and FAO collaboration, the World Bank continued to support the RUTA III Program, which focused on agri-food chains for milk and meat, gender issues and sustainable development in Central America.

INTERNATIONAL CENTER FOR TROPICAL AGRICULTURE (CIAT)

Under the IICA/CIAT General Agreement, a project to improve agricultural sustainability and living conditions on Central American hillsides made significant progress with the creation of interactive geographic information systems and the definition of soil quality indicators. Joint actions also continued to promote bean cultivation in the Caribbean, Central and Andean regions. Moreover, within the framework of PROCITROPICOS, IICA and CIAT worked on a project to develop strategies for the regeneration and sustainable management of the savannahs of the South American tropics.

TROPICAL AGRICULTURE RESEARCH AND HIGHER EDUCATION CENTER (CATIE)

IICA and CATIE collaborated in the exchange of technical and scientific information, training at the post-graduate level, and natural resource conservation in the countries of the Central Region. Together, they also conducted joint efforts with other organizations through a project implemented with the government of Holland on sustainable agricultural production on Central American hillsides; they also participated with the Collaborative Vegetable Research and Development Network for Central America.

WORLD TRADE ORGANIZATION (WTO)

The World Trade Organization supported the participation of LAC professionals in a course held in Switzerland on risk analysis in animal health, and in a workshop on epidemiology, information and risk analysis organized with the OIE, New Zealand's Ministry of Agriculture, and Switzerland's Veterinary Service.

GOVERNMENTS AND INSTITUTIONS OF OBSERVER

COUNTRIES AND DONORS

France. CIRAD continued to support the activities of PROMECAFE, especially research on the biological control of coffee berry borer. ORSTOM seconded professionals for studying agri-food chains in El Salvador, and in the Caribbean, the French Commission for Cooperation and Cultural Affairs collaborated in a study on competitiveness of the



Germinplasm is preserved in a worldwide network of gene banks and protected natural areas. The resulting information is made available through international crop networks, in the form of databases, publications, manuals, training courses and others.



agricultural sector in the Lesser Antilles. France's Technical Cooperation Mission provided financial support to several regional projects on pesticides and animal health.

Germany. The results of the activities of GTZ and the University of Hannover on a study of phytosanitary policy in Central America were presented and will now be analyzed to evaluate the possibility of future joint action. Four documents were published on methodological approaches and strategies for sustainable development, and an IICA/GTZ agreement was drawn up for the development of REMERFI.

Kingdom of the Netherlands. Under the IICA/Holland-Hillsides Agreement, support continued to promote sustainable development on hillsides in parts of Honduras and El Salvador. A project was executed with ISNAR to identify demands and priorities for projects that improve small-scale rural agro-industry in the countries of the Amazon basin.

Spain. Within the framework of a project executed with AECI, an assessment was conducted of the status of agri-food business organizations; training was provided for the staff of the leading organizations; and communications were fostered between organizations in Ibero-America for purposes of trade, investment and improved technology.

Sweden. The second stage of the IICA/SIDA project on Communications, Gender and Sustainable Development in the Central American countries continued. Through it, national networks were established in Panama with 12 public and private institutions and in Honduras with 10 NGOs and two government organizations.

Switzerland. Together with the WTO, OIE and New Zealand's Veterinary Service, the Veterinary Service of Switzerland co-sponsored a course of risk analysis and animal health, and a workshop on epidemiology, information and risk analysis.

FINANCIAL RESOURCES

Figure 1 presents the evolution of quota and external resources during 1995, 1996 and 1997. Figure 2 illustrates the execution of regular resources by budget category in 1997: 84.15% were used for direct technical cooperation services, 10.56% to cover management costs and 5.29% to meet general costs and provisions. Figure 3 shows the distribution of resources by Chapter in 1997, that is, among the technical cooperation and support units, the contributions to CATIE and CARDI, the Technical Cooperation Agencies and the Regional Centers, the inter-thematic projects, management costs and general costs and provisions.

Figure 1
Execution of Quota and External Resources
in 1995, 1996 and 1997

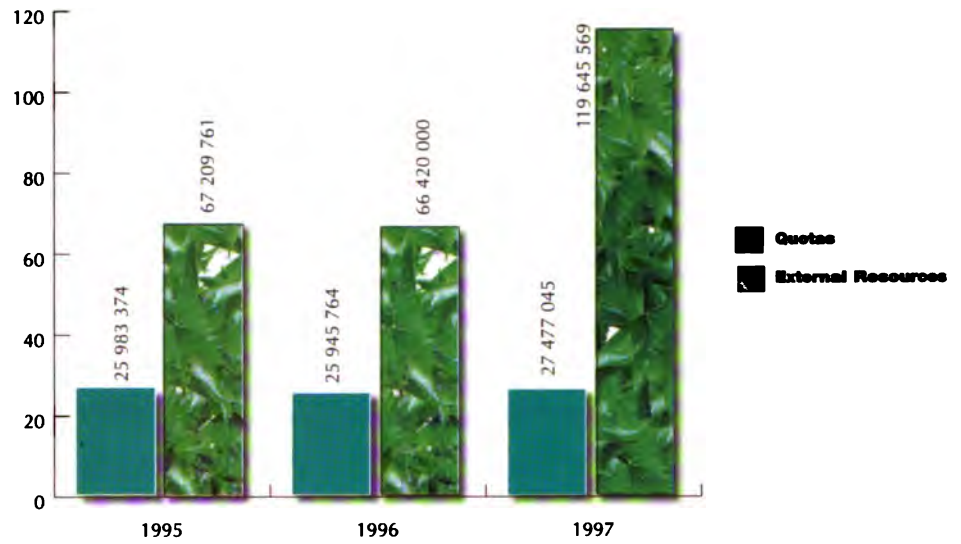


Figure 2
Execution of Regular Resources by Budget Category in 1997

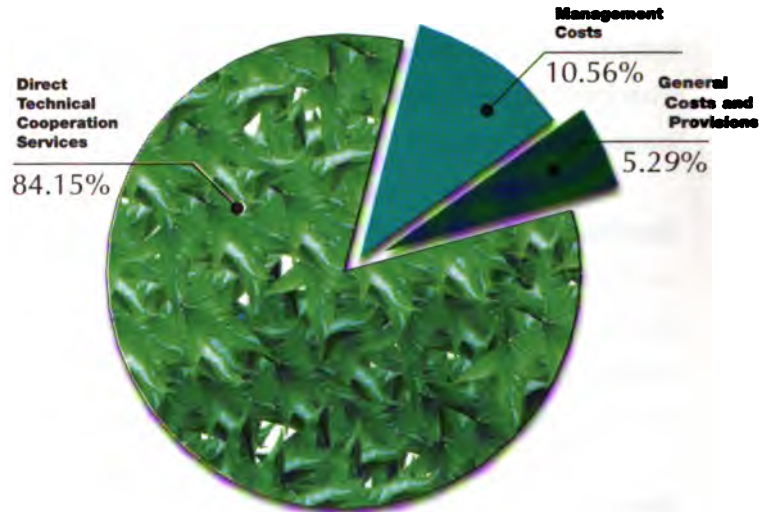


Figure 3
Distribution of Quota Resources by Chapter in 1997

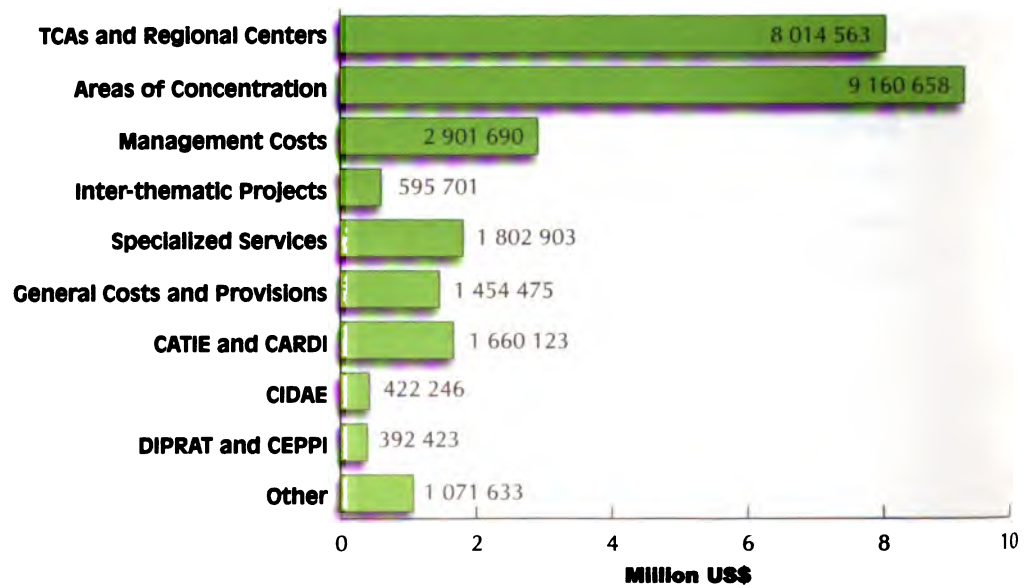
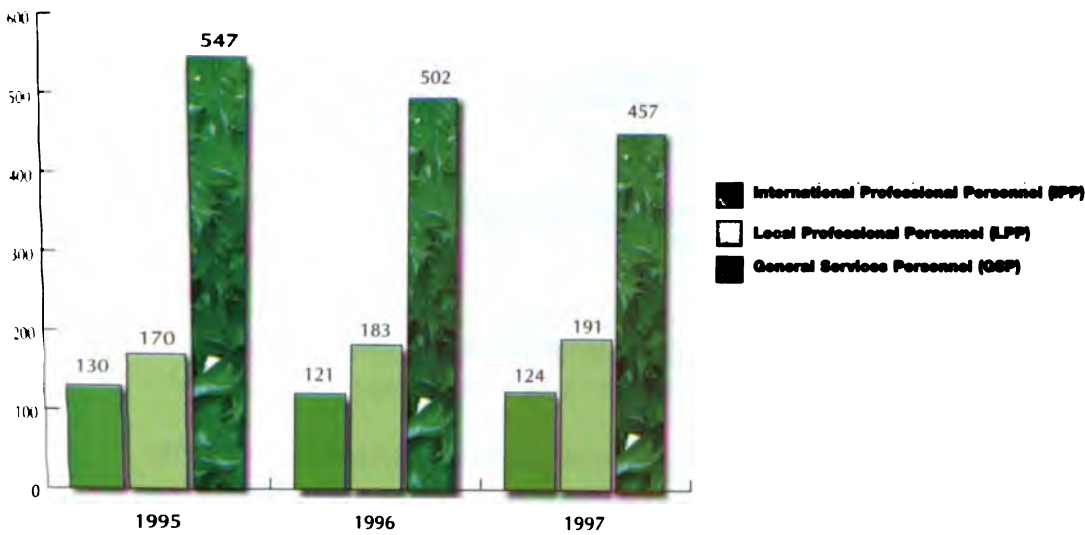


Figure 1
Distribution of Human Resources
by category in 1995, 1996 and 1997



HUMAN RESOURCES

Figure 1 shows the distribution of human resources by category in 1995, 1996 and 1997. Figures 2 and 3 show the distribution of personnel in 1997 by category and source of funding, and by duty station and category, respectively.

Detailed information on human and financial resources can be found in Chapter I of the Appendices to the 1997 Annual Report.

Figure 2
Distribution of Human Resources by Category and Funding Source in 1997

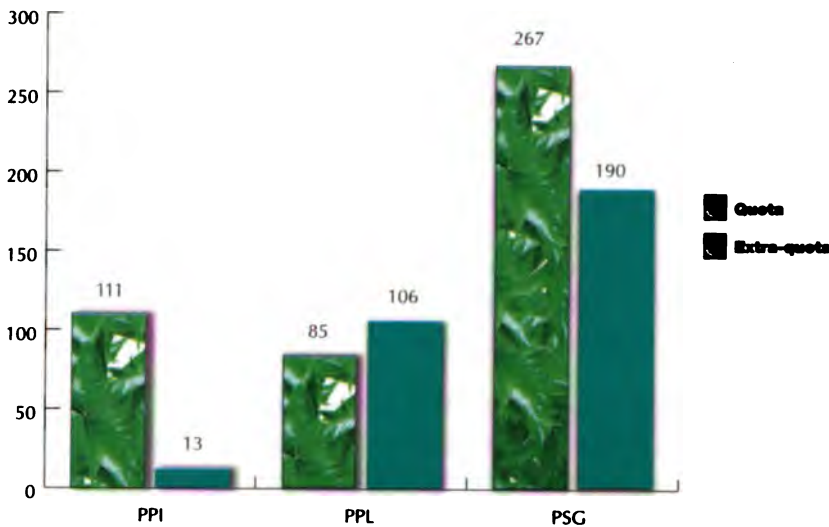
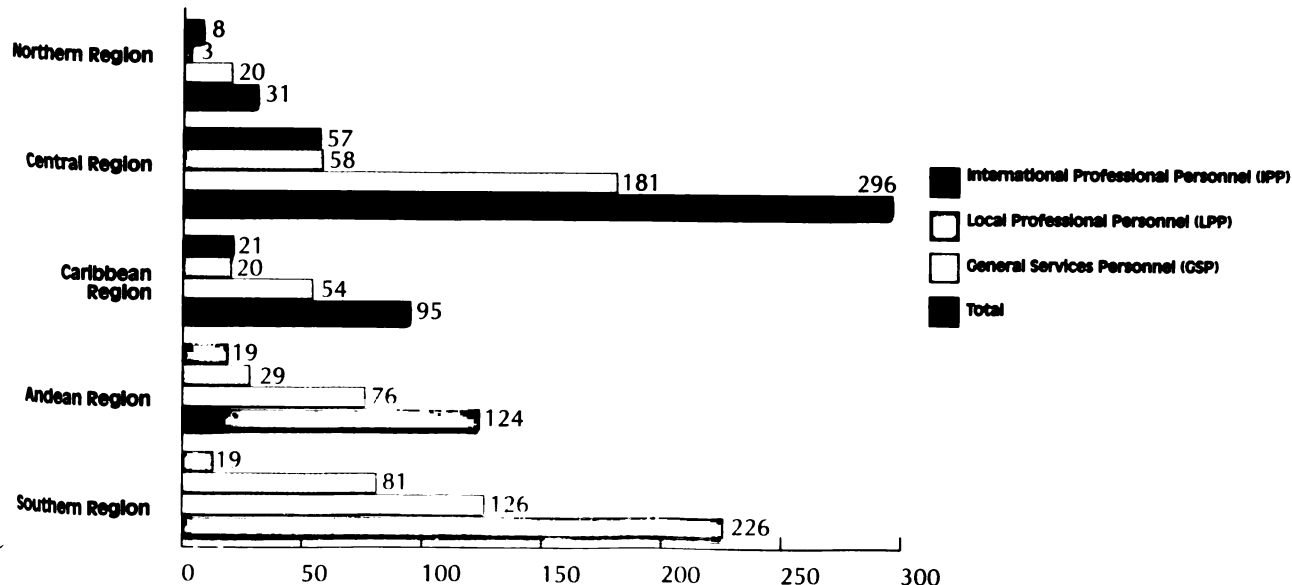


Figure 3
Distribution of Human Resources by Duty Station and Category in 1997



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IICA



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A C R O N Y M S

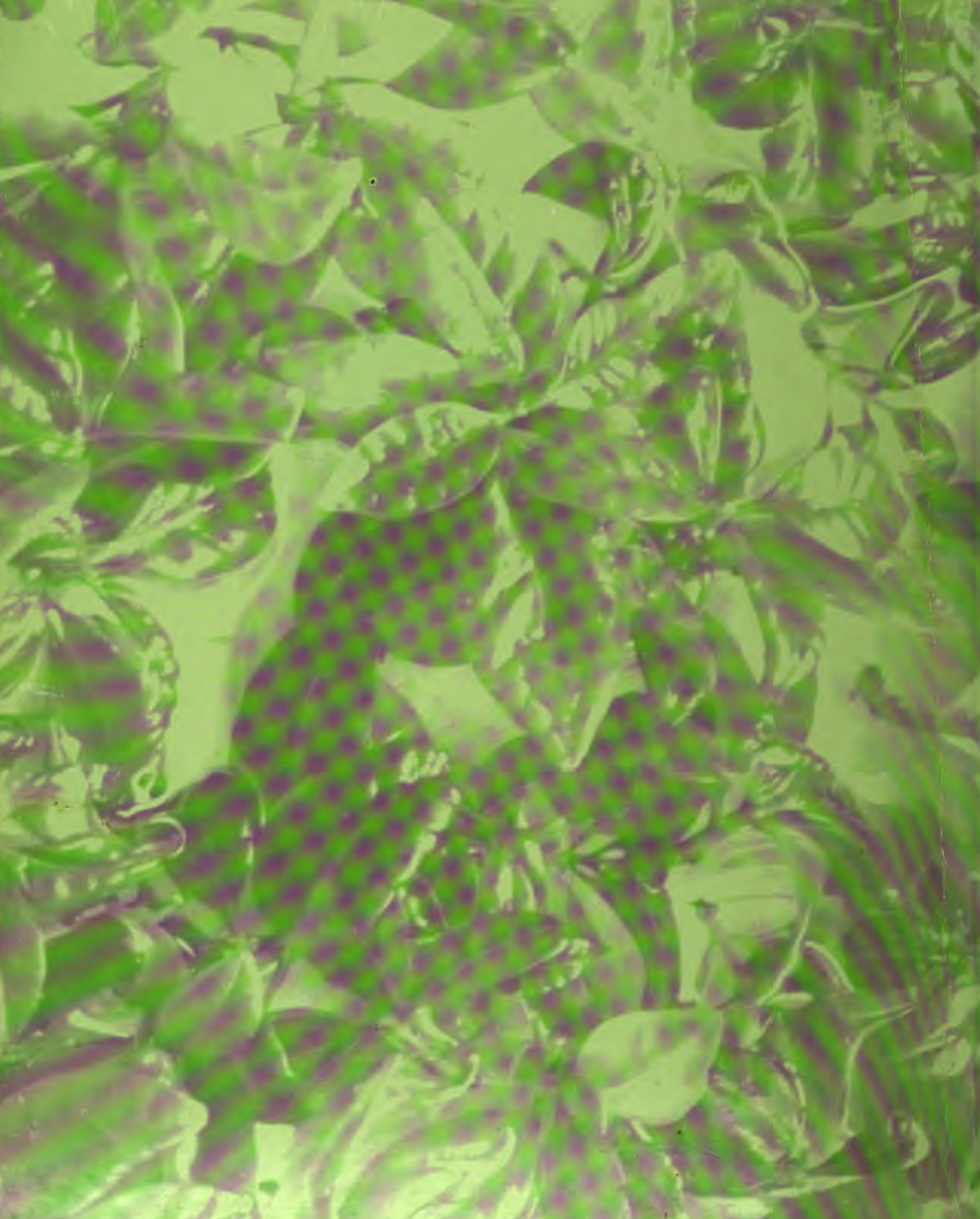
ACI	International Cooperative Alliance	DIA	Agricultural Research Directorate (Paraguay)
ADCU	Agricultural Diversification Coordinating Unit	DIPRAT	Directorate of Planning, Programming, Projects and Technical Audit (IICA)
AECI	Spanish International Cooperation Agency	ECLAC	Economic Commission for Latin America and the Caribbean
AIC	Agricultural Institute of Canada	EMBRAPA	Brazilian Institute of Agricultural Research
AID	Agency for International Development (USAID)	ENA	National School of Agriculture (Honduras)
ALADI	Latin American Integration Association	ERS	Economic Research Service (USDA)
APEMEP	Association of Small and Medium-scale Producers (Panama)	FAO	United Nations Food and Agriculture Organization
APHIS	Animal and Plant Health Inspection Service (USDA)	FAVA/CA	Florida Association of Voluntary Agencies for Caribbean Action (USA)
AVRDC	Asian Vegetable Research and Development Centre	FECALAC	Central American Dairy Federation
BAGRICOLA	Agricultural Bank of the Dominican Republic	FEDECAMARAS	Federation of Chambers (Venezuela)
BAS	Barbados Agricultural Society	FIAB	Spanish Federation of Food and Beverage Industries
BMZ	German Ministry of Economic Cooperation	FONAIAP	National Agricultural Research Fund (Venezuela)
CABEI	Central American Bank for Economic Integration	FONTAGRO	Regional Agriculture Technology Fund
CAC	Central American Council for Agriculture	FTAA	Free Trade Area of the Americas
CAF	Andean Development Corporation	FUNDAGRO	Agricultural Foundation of El Salvador
CAMAGRO	Chamber of Agriculture of El Salvador	GATT	General Agreement on Tariffs and Trade
CARDI	Caribbean Agricultural Research and Development Institute	GDP	Gross Domestic Product (GDP)
CARICOM	Caribbean Community	GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
CATIE	Tropical Agricultural Research and Higher Education Center	IABA	Inter-American Board of Agriculture
CCAA	Canadian Consulting Agronomists Association	IAEA	International Atomic Energy Agency
CCAC	Canadian Council on Animal Care	IAN	National Agrarian Institute (Venezuela)
CCMPGR	Caribbean Committee for the Management of Plant Genetic Resources	IBRD	International Bank for Reconstruction and Development
CENARGEN	National Center for Genetic Resources (Brazil)	IDB	Inter-American Development Bank
CENTA	Agricultural Technology Center (El Salvador)	IDRC	International Development Research Centre
CGIAR	Consultative Group on International Agricultural Research	IFAD	International Fund for Agricultural Development
CIAT	International Center for Tropical Agriculture	IFPRI	International Food Policy Research Institute
CIDA	Canadian International Development Agency	IICA	Inter-American Institute for Cooperation on Agriculture
CIDAE	Center for Integration and Agribusiness Development (IICA)	IMA	Agricultural Marketing Institute (Panama)
CIMMYT	International Maize and Wheat Improvement Center	INBio	National Biodiversity Institute (Costa Rica)
CIMPA	Animal Production Research Center (Dominican Republic)	INCAE	Central American Institute of Business Administration
CIRAD	Center for International Cooperation in Agricultural Research for Development (France)	INDAP	Agricultural Development Institute (Chile)
C/LAA	Caribbean/Latin American Action	INDHRI	Dominican Water Resources Institute
CLAFE	Canadian and Latin American Farmers' Exchanges Project	INIA	National Agricultural Research Institute (Chile)
CLASAS	Canadian and Latin American Studies in Sciences Project	IPGRI	International Plant Genetic Resources Institute
CORECA	Regional Council for Agricultural Cooperation in Central America, Mexico and the Dominican Republic	IRRI	International Rice Research Institute
CORPOICA	Colombian Agricultural Research Corporation	ISA	Higher Agricultural Institute (Dominican Republic)
COSAVE	Plant Protection Committee for the Southern Area	ISNAR	International Service for National Agricultural Research
		JAD	Dominican Agribusiness Board
		JUNAGRA	National Granja Board (Uruguay)
		LAC	Latin America and the Caribbean

A C R O N Y M S

MAARA	Ministry of Agriculture, Food Supply and Agrarian Reform (Brazil)	PROMECAFE	Regional Cooperative Program for the Protection and Modernization of Coffee Cultivation in Mexico, Central America, Panama and the Dominican Republic
MAC	Ministry of Agriculture and Husbandry (Venezuela)	PRONADER	National Sustainable Rural Development Program (Ecuador)
MAG	Ministry of Agriculture and Livestock	PRONIUR	Nicaraguan Rural Youth Program
MAGA	Ministry of Agriculture, Livestock and Food (Guatemala)	PROTOKOL	Proje Teknologi Organizasyon Kombit Lakay (Haiti)
MALMR	Ministry of Agriculture, Land and Marine Resources (Trinidad and Tobago)	REDAR	Rural Agroindustry Network (Venezuela)
MARD	Ministry of Agriculture and Rural Development (Barbados)	REDARFT	Andean Network for Phytogetic Resources
MERCOSUR	Southern Common Market	REDCA	Central American Rural Agroindustry Network
MIC	Ministry of Industry and Trade (Venezuela)	REDCAHOR	Collaborative Vegetable Research and Development Network for Central America
MIDA	Ministry of Agricultural Development (Panama)	REMERFT	Meso-American Network of Plant Genetic Resources
MINAGRI	Ministry of Agriculture (Chile)	RUTA	Regional Unit for Technical Assistance
MINEDUC	Ministry of Education (Chile)	SAG	Agricultural and Livestock Service (Chile)
NARIs	National Agricultural Research Institutes	SAGAR	Secretariat of Agriculture, Livestock and Rural Development (Mexico)
NCFAP	National Center for Food and Agricultural Policy (USA)	SAGyP	Secretariat of Agriculture, Livestock and Fisheries (Argentina)
NGOs	Nongovernmental Organizations	SCMA	Standing Committee of Ministers Responsible for Agriculture (CARICOM)
OAS	Organization of American States	SEA	Secretariat of State for Agriculture (Dominican Republic)
ODEPA	Agricultural Studies and Policy Office (Chile)	SELA	Latin American Economic System
OECS	Organization of Eastern Caribbean States	SENASA	National Agrifood Health and Quality Service (Argentina)
OIE	International Office of Epizootics	SIAPA	Information System for Agricultural Policy Analysis in Latin America and the Caribbean
ORSTOM	French Institute of Scientific Research for Development in Cooperation	SIGTA	Central American Integrated System for Agricultural Technology
OSPESCA	Central American Organization for the Fisheries and Water Resources Sector	SIDA	Swedish International Development Authority
PAHO	Pan American Health Organization	SIHCA	Hemispheric Training System for Agricultural Development
PAM	Global Action Plan (for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture)	TCA	Technical Cooperation Agency (IICA)
PRD	Partners in Rural Development (Canada)	TROPIGEN	Genetic Resources Network for the Amazon Humid Tropics
PREDEG	Granja Reconversion and Development Program (Uruguay)	UCR	University of Costa Rica
PREVAL	Programme for Strengthening the Regional Capacity for Evaluation of Rural Poverty Alleviation Projects in Latin America and the Caribbean (IFAD/IICA)	UNA	National Autonomous University (Costa Rica)
PRIAG	Regional Program to Upgrade Agricultural Research on Staple Grains in Central America and Panama	UNAH	Autonomous National University of Honduras
PROCIANDINO	Cooperative Agricultural Research and Technology Transfer Program for the Andean Subregion	UPEB	Union of Banana Exporting Countries
PROCISUR	Cooperative Program for the Development of Agricultural Technology in the Southern Cone	USAID	United States Agency for International Development
PROCITROPICOS	Cooperative Research and Technology Transfer Program for the South American Tropics	USDA	United States Department of Agriculture
PROCODFR	Cooperative Program for Rural Development in the Countries of the Southern Area	USPADA	Sectoral Agricultural and Food Planning Unit
PRODAR	Rural Agroindustrial Development Program	UWI	University of the West Indies
		WCPA	Wakapoa Coffee Producer's Association (Guyana)
		WTO	World Trade Organization

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