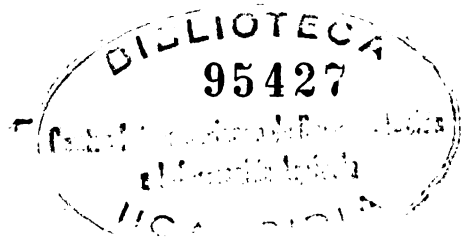
CATIE: DEVELOPMENT AND CONSERVATION IN THE AMERICAN TROPICS

TROPICAL AGRONOMICAL RESEARCH
AND HIGHER EDUCATION CENTER

TURRIALBA, COSTA RICA

1996

CATIE is an international, non-profit civil association, whose purpose is research and education in agricultural sciences, natural resources, the environment and development, and related subjects in the American tropics, with emphasis on Central America and the Caribbean.



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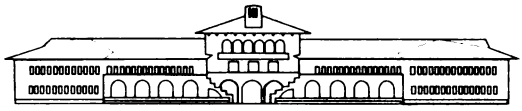


WHAT IS CATIE?

CATIE is an international, non-profit civil association, whose purpose is research and education in agricultural sciences, natural resources, environment and development, and related subjects in the American tropics, with emphasis on Central America and the Caribbean.

It is independent, apolitical, and has power of attorney. It is based in Costa Rica where it has the same previleges and immunities as the Inter-American Institute for Cooperation on Agriculture (IICA), and the Organization of American States (OAS).

CATIE's MANDATE AND MISSION

CATIE's mandate was established in Chapter 1, Clause 1 of the Constitutional Contract approved by the Inter-American Board of Agriculture (IABA). It states that CATIE is a civil association, with power of attorney, whose aim is to conduct research and postgraduate education in agriculture, animal husbandry and natural resource sciences to benefit Member States of the Inter American Institute for Cooperation on Agriculture.

Within the framework of this mandate, CATIE's mission is:

> to stimulate and promote research and education in agricultural and related sciences aimed at development, conservation and sustainable use of natural resources in the American tropics to improve the well-being of mankind.

OBJECTIVES

The Center's overall objective is to:

Establish and generate research, education and technical cooperation programs that contribute to solving socioeconomic and agroecological problems in the American tropics, in terms of the sustainable development of agricultural and forestry production and natural resource management and conservation for the benefit of the community.

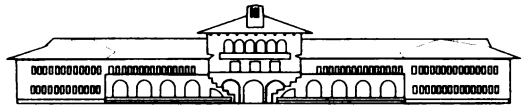
Specific objectives:

a. To generate and validate technological practices for agricultural production and natural resource management which are economically feasible, socially and culturally acceptable and environmentally sustainable.

b. Prepare professionals at postgraduate level to contribute to the development of knowledge and execution of programs conducive to the solution of the socioeconomic and agroecological problems in tropical America.

c. Transfer and promote proficiency in technological practices developed through institutional collaboration and diffusion to end users.

d. Disseminate the information generated and stimulate the adoption of new technological practices.



MEMBERS

CATIE membership may be full or associate. As of 1995 current full members are the governments of Belize, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Dominican Republic the Venezuela and the Inter-American Institute for Cooperation on Agriculture (IICA). Brazil, Bolivia, Colombia and Peru have shown interest in becoming full members and are close to signing the Constitutional Contract.

The following may be associate members of CATIE: Governments of countries outside the Americas, international governmental and non-governmental organizations, international centers and private organizations whose objectives are compatible with those of the Center and with the prior approval of the Board of Directors.

ORGANIZATION

The governing bodies of CATIE are:

a) the Interamerican Board of Agriculture (IABA), which acts as the Center's General Assembly, comprising all the Ministers of Agriculture of the American continent

b) the Council of Ministers, made up of Ministers of Agriculture and/or Natural Resources/Environment from the member countries, acting to safeguard the interests of the countries

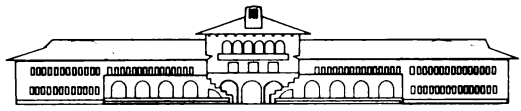
c) the Board of Directors, which acts as the instrument of higher management, is autonomous, independent, and self-perpetuating

d) the Executive and Finance, and Academic and Scientific Committees

e) the General Directors' Office.

Costa Rica presides over the Council of Ministers and the Director General of CATIE acts as ex-officio Secretary.

The Board of Directors is made up of four eminent scientists or academics from the international community, four distin-



guished scientists, academics or successful businessmen from the member countries, one eminent person appointed by IICA, and one eminent scientist or development expert elected by the IABA, both acting in their personal capacity. Board members hold office for three years with the possibility of re-election for a further term. The Director General acts as ex-officio Secretary.

CATIE is headed by the Director General, who acts as its Chief Executive Officer, holds the power of attorney of the Center, is elected by the Board of Directors and ratified by the Council of Ministers. The post has a term of up to five years, and the Director General may be re-elected once.

The Director General's Office includes the Deputy Director General, appointed by the Director General.

To carry out its objectives, the Center has three Technical Programs: Education for Development and Conservation; Scientific Research, and Outreach. It has an Office for Strategic Planning and International Cooperation, and another for Administration and Finance.

More details on CATIE's organization can be found in the Appendix.

RESOURCES

CATIE has very important resources at its disposal to accomplish its mission, and carry out its objectives. The most important are described below.

Human Resources. CATIE currently has more than 50 Ph.D. level scientists, more than 70 M.Sc. level, and more than 60 B.Sc. or equivalent level scientists, outrearch or development professionals, plus support staff, assistants and field workers.

From 1993 onwards, graduate students became Research Assistants, dedicating 12 hours a week to support research and teaching work.

CATIE's professional staff members come from more than 30 countries, including Latin America and Caribbean, the USA, Canada, Europe and the rest of the world, specialized in the most important disciplines in the areas of agricultural sciences and tropical natural resource management.

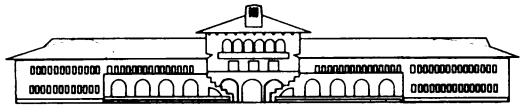
Financial Resources. CATIE has a current annual budget in the order of US$16 million. Of this, about 55% arises from approximately 20 external cooperation projects. Forty five percent of the rest is referred to as the core budget and arises from membership dues, surplus profit from CATIE's commercial farms producing coffee, sugar cane, and multiple use trees, contributions from CATIE's foundation Fundatropicos, unrestricted or restricted contributions from the international community of nations and indirect project costs (overhead).

Infrastructure. In Turrialba, CATIE has 950 hectares of land. There are more than 45,000 square meters of buildings used for offices, classrooms, staff and student housing, a social center, sports areas, a bilingual grade school, greenhouses, experimental areas (agriculture, forestry and livestock), modern laboratories, a small hotel, and other installations. There are also an additional 100 hectares of land in the vicinity of Limón, in Costa Rica's Atlantic Zone.

CATIE also possesses the Orton Commemorative Library, housed in a building donated by the Overseas Development Administration (ODA) of the British Government. This library is one of the most complete in Latin America in the field of tropical agriculture and natural resource management, and greatly supports the institution's many research and training programs.

The Center also contains an excellent biotechnology and molecular biology laboratory, a soils laboratory, two tissue culture laboratories, a large collection of phytogenetic resources, a modern computer center, a geographic information center, a forest species seed bank and several data banks specializing in agricultural science and natural resource information.

Know-how. The Center has accumulated knowledge, experience, and research results from over 50 years of work. The data banks, and know-how in the different areas of expertise are wast, important, and among the best in the world.



CONTRIBUTIONS TO SOLVING GLOBAL PROBLEMS

CATIE contributes directly to the solution of global problems which currently afflict people, and planet earth, such as deforestation, biodiversity loss, global warming caused by carbon dioxide, environmental pollution caused by excessive use of agrochemicals, soil erosion, and hunger and poverty.

In **Plant Protection**, the use of pesticides has been reduced considerably through the contributions of integrated pest management research. This also has the result of reducing the incidence of human poisoning. Biological control of plant deseases is making viable the production of organic agricultural products and the reduction of chemical applications in pest control.

The **Watershed Management and Agroforestry Systems Area** has studied many tropical nitrogen fixing species that have high biomass production and well-developed root systems to replace chemical fertilizers, enrich the microfauna and conserve and improve hillside soils. In silvopastoral systems, tropical livestock production is being converted into an activity that promotes reforestation using forage trees. Agronomic and soil related factors are also being studied in efforts to combine basic grains, coffee, cocoa, plantain and other non-traditional crops with nitrogen fixing species, using integrated pest management along with water, soil and biodiversity conservation.

The work being carried out in watershed management contributes to soil and water conservation, reclamation of areas degraded by deforestation and adoption of technologies discovered in research into integrated pest management, agroforestry systems, management and silviculture of tropical forests and socioeconomic and gender aspects. It also contributes directly to the management of water (an increasingly scarce resource) for agricultural, human, industrial and recreational use.

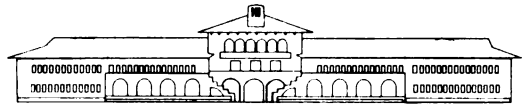
In the **Tropical Forest Management and Silviculture Area,** methods allowing sustainable management of tropical forests and which contribute to reduced deforestation are being studied. Research is also taking place on the physiology of seeds to allow better natural regeneration or promote reforestation, genetic improvement and conservation of selected stands, the socioeconomic and biological interactions in primary and secondary forest management and a knowledge of the interactions of the ecosystem, with the aim of moving further along the road to sustainability.

In research on the silviculture of plantations and multipurpose trees, more than 200 species (mostly natives) have been studied. Their adoption in plantations has begun and has result-

ed in the contribution of more than 20 tons of carbon dioxide fixed per reforested hectare per year.

In the **Area of Biodiversity Management and Conservation,** CATIE directly contributes to the conservation of biological diversity resources through an integrated focus of conservation and management of areas and natural ecosystems. At the conservation level, the work aims to preserve areas and ecosystems intact, as biological corredors, as sites where natural processes can continue unchanged, acting as a fundamental element in conservation and evolution of individuals, species and ecosystems, as research areas in these resources, as a source of germplasm for local communities and science as a whole and as regulated resources to attract tourism to these areas, vegetation and animal species in wet-lands, and forests or different habitants are included.

This focus is complemented by actions at the **natural ecosystem management** level (forests of different types, mangroves etc.) which aim to value these ecosystems through the local communities' sustainable use of the resources that support them. This implies actions ranging from research in the ecology and management of different plant and animal species that have potential for economic utilization to support for community orga-



nization, studies of markets and marketing channels, feasibility analysis for the local processing of resources extracted to attach a value at the production unit level, etc.

The complementary work of **management and conservation** allows optimization of possibilities for maintaining the natural resource production base and, at the same time, encourages a development process which benefits the local population, based on the appropriate utilization of a greater number of productive resources native to the region.

In the **Socioeconomics of Conservation Area**, all aspects related to the externalities involved in agricultural and forestry production, the value (or cost) of conservation efforts, the sustainability of natural resource management and the methodology for combating poverty through involvement of the population in resource conservation activities in their surroundings are studied. Econometric models are developed to allow governments to make policy decisions regarding agriculture and natural resources and development models which promote wealth generation and welfare through the sustainable management of resources.

This Area's strategy considers it is essential to guarantee the participation of the rural community, especially women, the young and ethnic groups, in the sustainable use of natural resources and the development of efficient methods for exploiting and economizing energy at field level.

These contributions are reinforced with the combined actions of post graduate level education, specialization, training, research and transference resulting in a synergistic effort that makes CATIE a unique institution within the tropical world.

CURRENT PROGRAMS

The Strategic Plan "Agenda for a Critical Decade" for the next 10 years, emphasises sustainable agriculture and conservation of natural resources, directed at development in the benefit of people.

The programs envisaged in the Strategic Plan are:

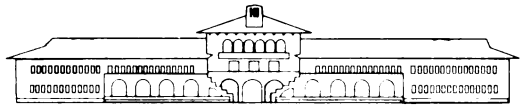
EDUCATION FOR DEVELOPMENT AND CONSERVATION PROGRAM (EDECO)

The Program is developing the following Areas for training scientists in the region:

Postgraduate Studies. CATIE's Postgraduate School trains professionals in agricultural sciences and natural resources to the level *Magister Scientiae,* and Doctor of Philosophy. This School was the first to be established for agricultural sciences in Latin America and the Caribbean in 1946.

CATIE's Postgraduate School currently admits approximately 60 students a year from Latin America, the Caribbean and, to a lesser extent, other parts of the world at the master's level, and around 20 per year at the doctoral level. Students specialize in the following areas: sustainable agriculture, natural resources management, with specialization in: plant protection, biotechnology/genetic engineering,agroforestry, watershed management, tropical forest management, management and conservation of biodiversity, and environmental socioeconomics.

The doctoral degrees are granted in cooperation with Colorado State University, and the University of Florida.



Training. Training activities developed by the different Areas offer courses, lasting between two weeks and three months, on specific topics at different academic levels.

Over 100 training and specialization activities, conferences and seminars are held annually, involving over 3000 professionals

from member countries and others in Latin America and the Caribbean.

Continuing education is also offered with the aim of bringing scientists working in agricultural sciences and natural resources up to date with the latest technologies developed by CATIE during its research.

Scientists in the middle stages of their professional development are given the opportunity of advancing their careers to higher levels of responsibility through updating their knowledge in sustainable agriculture and integrated management of natural resources.

Support. The object of this is to provide systematic support for Alumni of the Postgraduate program and other types of training at CATIE. It aims to provide feedback for the teaching and learning processes and benefit graduates of the Center's Programs. The creation and strengtening of alumni associations is an elemental part of this office.

SCIENTIFIC RESEARCH PROGRAM

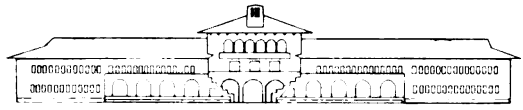
This program aims to study, validate and transfer results for the practice of sustainable agriculture in the various countries of the continent, the integrated management of natural resources, and matters associated with the environment and development.

The Program aims to generate, analyze and contribute environmental, socioeconomic and biophysical information for the integrated management of the region's natural resources, conduct natural resource planning and management as a basis for the development of sustainable agricultural production systems, conduct research on the management and conservation of soil, water, forests and biological diversity and provide information and technical assistance on natural resource conservation.

It is divided into the following Areas:

Sustainable Management of Tropical Crops. The objectives of this Area are: a) improvement and genetic conservation of coffee, cacao, plantain, selected vegetables, and other promising crops in order to obtain genetic material that is more productive and more resistant to invertebrate pests and diseases; b) development of technologies for components limiting the agricultural production of traditional and non-traditional crops in search of sustainability; c) evaluation, conservation and distribution of genetic material of promising tropical crops and d) management of traditional agricultural crops; e) contributing to the health and welfare of the population through reducing their exposure to pesticides, increasing agricultural production at lower cost and providing products free of dangerous pesticide residues for both national and international consumption.

It includes the use of biological control, farming practices that prevent and control pests and diseases and crop improvement.



Watershed Management and Agroforestry Systems. The purpose of this area is to study, further and practice agroforestry and silvoagricultural systems in the tropics, particularly on the small farms of tropical America to stabilize shifting cultivators and/or to increase the profitability of small farms under sustainable development considerations. It includes the use of nitrogen fixing trees in combination with tropical crops, with the aim of reducing the use of chemical fertilizers, improving and conserving farm soils, diversifying farm production and finding cropping combinations that produce the greatest income for producers.

It contributes to planning the appropriate use of land and natural resources using geobiophysical, socioeconomic and cultural information and to developing sustainable methods for soil, water and vegetation management to insure fertility, water quality and quantity, minimize erosion and achieve sustainable agriculture. Amongst the tools it uses are land use configuration and the relevant social, biological and geophysical disciplines.

This Area contributes to planning the appropriate use of land and natural resources using geobiophysical, socioeconomic and cultural information and to the development of sustainable management methods for soil, water and vegetation so as to guarantee fertility, water quality and quantity, to minimize erosion and achieve sustainable agriculture.

It uses land-use configuration as a tool and the relevant social, biological and geophysical disciplines. It also uses geographical information systems for land use planning and management.

Tropical Forest Management and Silviculture. The object of this Area is experimentation with methods of sustainably managing natural primary and secondary tropical forest and silviculture of plantations of timber species, multi-purpose species and fuelwood production and alternative energy. These techniques aim to reduce deforestation, find alternatives for the management of remaining tropical forests, forest conservation and genetic improvement, the collection, experimentation and distribution of forestry germplasm (seed) for plantations with different purposes.

The Forest Principles of UNCED 1992, the Objective Year 2000 of ITTO, the Tropical Forestry Actions Plans of FAO, and others relevant worldwide initiatives and compromises are taken into account.

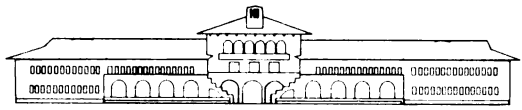
Biodiversity Management and Conservation. This Area includes management of protected areas, wetlands management, protection of biological corredors, non-wood forest products, ethnobotany and the management of buffer zones in protected areas. It seeks natural resource management alternatives to benefit the inhabitants, above all ethnic groups, that live in such areas.

It includes sociological, socioeconomic and cultural studies, environmental education and rural economic studies based on the biodiversity.

Socioeconomics of Conservation. The objective of this Area is the study of environmental, social and economic factors which affect natural resource management as a basis for production. It includes analysis of schemes for generating wealth, community participation in development, the effect of externalities and internalities on the value of natural resources and the causes and effects of their inadequate use.

The work of this Area favors development strategies that take into consideration and reflect the crucial role of women in rural activities (on-farm processing, marketing, community activities). Women should have equal access to, and control over water, land, education, training, decision making, credit and extension services as the rest of the community.

Amongst other things it considers that the development of successful technologies and natural resource management requires the participation of the farmer and the involvement of the whole community, especially women, the young and ethnic minorities.



OUTREACH PROGRAM

CATIE's third Program, Outreach, transfers technology, strenghtens institutions, and disseminates research results and thus reinforces the ability of the region's institutions to accelerate the process of sustainable development in the American tropics.

The Program encourages work through networks, and the communication of the latest advances and practices concerning agricultural sustainability and strengthens the means of disseminating the results of research carried out between the CATIE member countries.

The Program seeks the involvement, and partnership with the private commercial sector, NGOs, governments, and society in general.

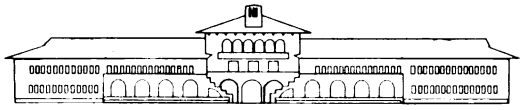
The Program carries out its actions through two Areas:

Communications and Management Information Systems Area. The object of this Area is to document and channel research results, technology validation and socioeconomic findings generated at CATIE to the different end user groups, using a variety of media. The achievements of this Area include the production of a series of technical and scientific bulletins on subjects related to tropical agriculture and natural resource management, the publication of three journals: the Central American Forestry Review, Review of Agroforestry in the Americas, and the Integrated Pest Management Review, and carrying out several public relations and communication activities.

It also produces over 300 technical publications per year and maintains geographic information systems, information services and data bases such as the Forestry and Agroforestry Information and Documentation Service for Latin America (INFORAT), the Geographic Information System (GIS) and the Arboreal Resource Information Management System (MIRA).

It employs the latests communications techniques, and computer technology to reach out throughout the continent and beyond.

Technical Cooperation Area. The objective of this Area is to establish programs and mechanisms to strengthen the research and education capabilities of counterpart institutions in the member countries so that problem-solving research, higher education, extension and the diffusion and implementation of results can be carried out more effectively. Part of this technical cooperation is



directed at increasing community participation in research, training, and transfer, with particular attention to gender factors, contributing to solving problems in the field, and diffusing improved technologies.

This area advances the consolidation of regional horizontal technical collaboration networks in several fields from integrated pest management and multiple use trees to tropical forest management and higher education. It also supports technical assistance actions in the countries and the execution (via bidding) of development projects, as well as consultancy work.

Major institutional networks managed by the Area include: the Regional Network for Higher Education, Research and Transfer (REDCA), made up of over 130 institutions in 11 countries; the Mesoamerican Phytogenetic Resources Network (REMERFI) with participants in 8 countries and IICA, and the Forestry and Agroforestry Dissemination Network made up of over 40 institutions, mostly NGOs, and a few additional networks.

DIRECTORATE OF STRATEGIC PLANNING AND INTERNATIONAL COOPERATION

Strategic planning and international cooperation for executing and financing CATIE programs constitutes one of the fundamental strategies for the Center's evolution.

The Directorate of Strategic Planning and International Cooperation is in charge of three well defined work areas:

a. Strategic Planning
b. International Cooperation
c. Monitoring, Evaluation, and Impact Assessment

The Strategic Planning Area furthers CATIE's institutional development while at the same time providing feedback of the design processes from technical areas and complementary activities to satisfy the basic needs of CATIE end users for technological findings that favor sustainable development.

It helps position CATIE, with umparalleled vision, as a leder in the fields of its expertise in LAC. It also sets the stage for CATIE's actions in time aimed at impacting sustainable development.

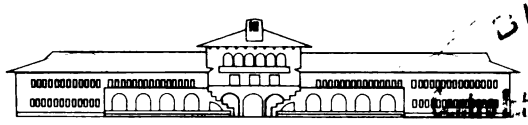
In this way, short, medium and long-term actions (one,

two, four or ten years) can be planned to give continuity and consolidate education, research and technology transfer actions.

The International Cooperation Area supervises about 40 cooperation agreements with approximately 20 national, regional and international development institutes covering the areas of highest priority for the member countries.

The strategic action of this Area also centers on the quest for financial resources which contribute to the execution of activities. It also coordinates drawing up project proposals that have national and international impact in the field of tropical agriculture and natural resource management.

The countries and institutions that have or have had cooperation agreements with financial contributions to CATIE include: the United States Agency for International Development (AID), both through its bilateral offices and through the Regional Office for Central American Programs (ROCAP); the European Union (EU); the Federal Republic of Germany through the German Society for Technical Cooperation (GTZ) and the German Academic Exchange Service (DAAD); the Government of the Confederation of Switzerland, through DDA and COSUDE; the Government of Great Britain, through the ODA; the Government of Denmark through DANIDA; the Government of Sweden through SIDA; the Government of Norway through NORAD; the Government of Finland through FINNIDA; the Government of Canada through ACDI and CIID; the World Bank; the



Interamerican Development Bank; the Government of Japan through JICA and the Government of the Netherlands through DSO.

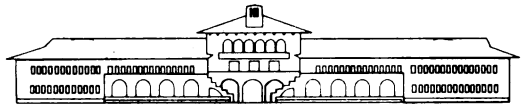
CATIE also receives technical cooperation from CIRAD in France and currently has a mutual collaboration program with the Agricultural University of Wageningen; the Universities of Colorado and Florida State (both in the USA); the Universities of Alberta and Laval (both in Canada); the World Wide Fund for nature (WWF); the International Union for Nature Conservation (UICN); the University of Wisconsin; the University of Missouri; the Natural Resources Institute (NRI) of Great Britain; ORSTROM of France and others.

There are also reciprocal cooperation agreements with international research centers such as the International Center for Research in Agroforestry (ICRAF), the International Tropical Agriculture Center (CIAT), the International Center for Forestry Research (CIFOR), the International Plant Genetic Resource Institute (IPGRI), the Smithsonian Tropical Research Institute, the Interamerican Institute for Agricultural Cooperation (IICA), the International Network for the Improvement of Bananas and Plantain (INIBAP), the Organization for Tropical Studies, Inc. (OTS) and many more.

An additional component to cooperation with external organizations is CATIE's acceptance of students who have graduated from different industrialized countries. This has been done with the aim of training them in aspects of agriculture, livestock production, natural resources and the environment in tropical areas, through in-service training and participation in on-going research. This mechanism has allowed graduates from Europe and the United States to gain a Ph.D or Masters degree through their work and study at the Center.

The Monitoring, Evaluation, and Impact Assessment Area works intensively to follow up planned activities and evaluate development and institutional impact in the region. If the Center is incapable of demonstrating that its actions are relevant to the needs of member countries, it cannot justify its existence. Nevertheless, as long as it is relevant, it is hoped that the international community's support will continue and increase to assist CATIE in fulfilling its mission.

Part of this Area's actions is the implementation of the Program's Administration System (SAP) stored in CATIE's central computer under the ORACLE data base administrator. The com-



pletion of activities is monitored using this system by means of periodic reports. This permits improved execution and administration of the institutional strategic plan.

DIRECTORATE OF ADMINISTRATION AND FINANCE (DAF)

This program is concerned with the logistic and administrative support for the research, education, and outreach programs and is responsible for finances, administration , financial control and accounting. Its basic units are: Human Resources, Administration, and Finance.

The Integrated Financial Information System (SIIF) allows an unimpeded management of CATIE finances and daily control of each project's expenses and obligations. The system is currently one of the most modern in the world in these matters, allowing donors permanent access to the balances and financial information of each one of its projects from any location via modem.

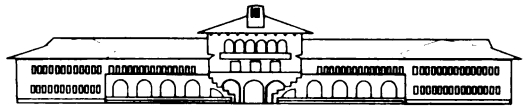
DEVELOPMENT STRATEGIES

The Center has established seven fundamental strategies to give a general framework for developing the 10 year Strategic Plan and to strengthen the institution and its programs:

- The first of these strategies is a permanent consultation with the appropriate authorities of the member countries, at all levels of decision making, and with private organizations that have direct relations with the Center's tasks. Grassroots, and local interest groups are also involved.

- The second consists of strengthening technical cooperation links with national, regional and international institutions and centers through joint or complementary endeavors and by establishing research and technical cooperation networks (so as to avoid duplicity, and get a synergistic effect of our actions).

- The objective of the third strategy is to contribute to the strengthening of national research, education, training, and



outreach institutions, state institutions of the countries and non-governmental organizations (ONGs) in the Center's area of action (institutional strengthening, and empowerment through knowledge).

- The fourth is aimed at strengthening CATIE's scientific-academic-outreach capacity, so as to guarantee the greatest success of the programs and projects embraced by the institution and make best use of the personnel, with the motto of practicing what is preached. The aim here is to reduce to the minimum the time from obtaining research results to their adoption by the final users, using modern communication, information technology and extension.

- The fifth is defined as the search for resources aimed at strengthening CATIE's core budget so as to assure financial sustainability. It includes the search for financial support, or donations to strengthen the CATIE Foundation (FUNDATROPICOS). This is done establishing a Patrimonial Fund and various Trusts which generate income that is used to fund CATIE's activities.

- The sixt strategy consists of a search for multidisciplinary and integrated technologies, which in CATIE is also understood as an encouragement of inter-program work and coordination. This is needed in the advancement towards sustainability.

- The seventh strategy is to put people first. Everything we do, has to involve the local populations from the onset. We do research, teaching and technical assistance to improve quality of life, to achieve food security, and to protect the environment, for the benefit of people. We also work for and with people.

THE FUTURE

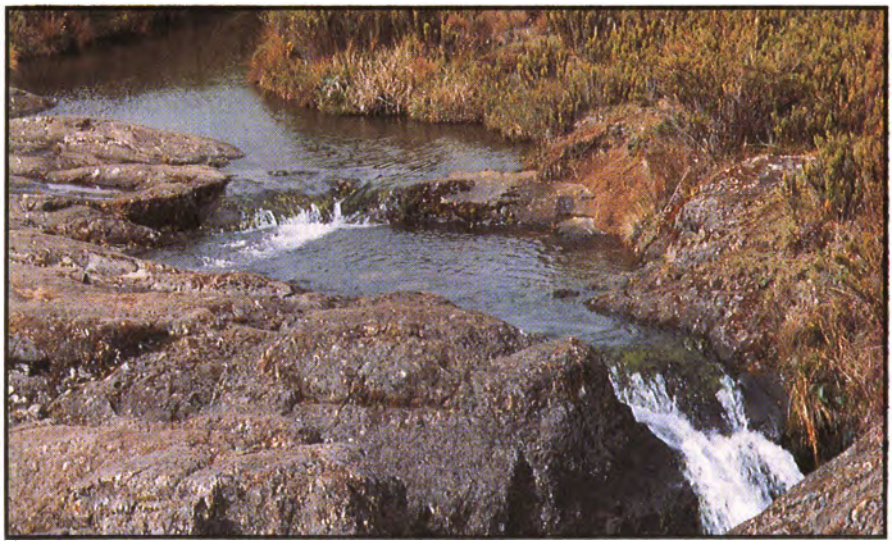
CATIE is in a very favorable strategic position compared to other international centers of research and development with respect to current world tendencies.

The Center is currently strong in areas of world interest such as tropical forest management, biodiversity conservation, integrated pest management, agroforestry /agrosilvopastoral production systems, water and watershed management and multiple use of land, aimed at protecting the environment, and reducing poverty.

These topics have recently been debated and received commitments for action at the Earth Summit meetings held in Rio de Janeiro.

The current staff numbers more than 50 doctorate level, over 70 masters level and more than 100 first degree level members, specializing in the aforementioned areas and related ones such as socioeconomics, sociology, information science, biometrics, business administration and education.

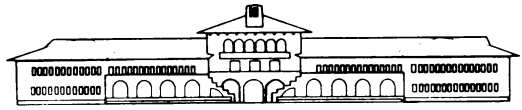
The Center has a high level of credibility among the countries of the region because of the relevance and success of its projects, and the support of the international community has continued and is strengthening. The most recent meetings of the



area's Ministers and Presidents have resulted in an expression of support for CATIE and its initiatives for seeking finance for its programs.

The premises for the revised Strategic Plan establish that CATIE should become an institution dedicated to improving sustainable agriculture under the principles of natural resource management by methods that are economically viable, culturally acceptable, environmentally sound, socially feasible, with wide participation of the populace, equity, and continuity.

If we do our part, with the international community's support, we can have a safer, better world. Inducing behavior, and finding answers that lead people to produce while conserving, and conserve while producing.



CATIE

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Scientist/Businessman, Nicaragua (1992 - 1999)

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International scientist, Brazil (1992 - 1998)

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Dr. Paulo Galvao
Scientist/Academic, Appointed by IICA

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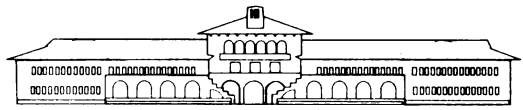

CATIE

GENERAL DIRECTORATE AND ADMINISTRATIVE STRUCTURE

Dr. Rubén Guevara Moncada (Forestry/Business Management)
Director General and C.E.O.

M.Sc., M.B.A. Rómulo Olivo (Agronomy/Business Management)
Deputy Director General, Director of Finance and Administration and C.O.O.

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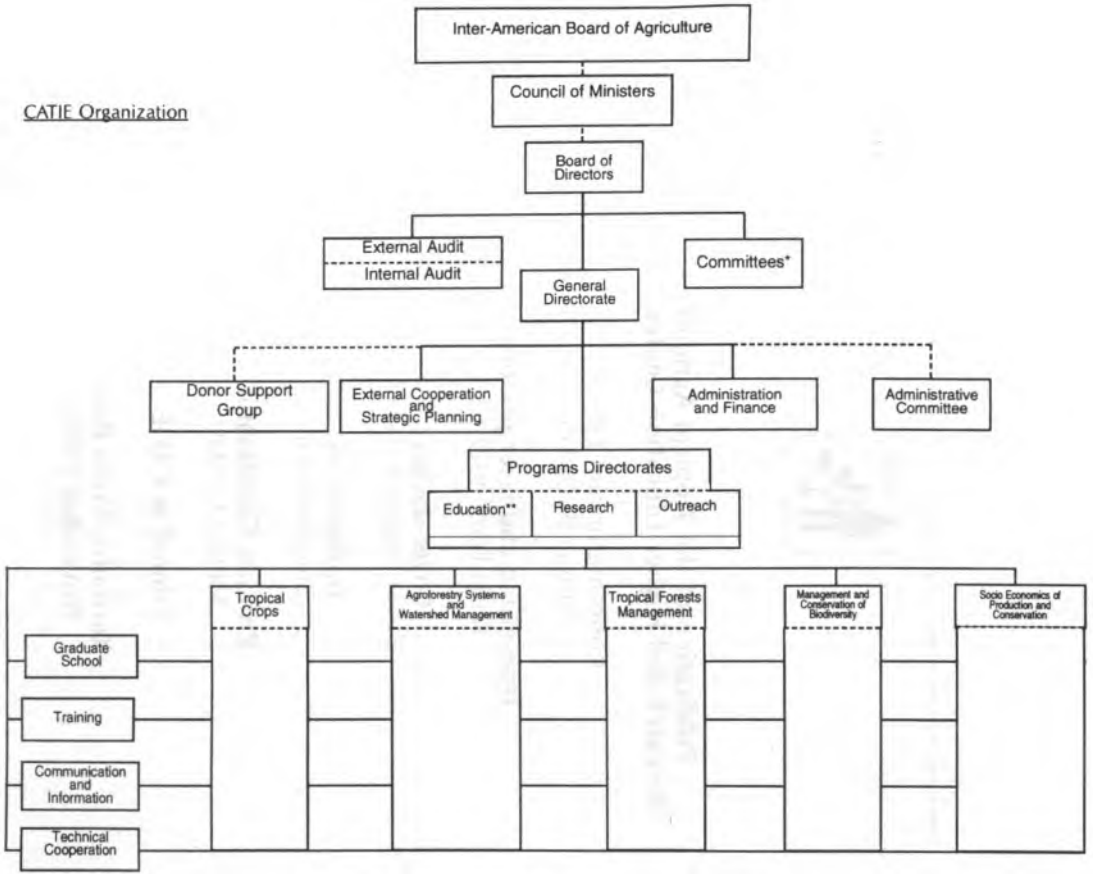
Chief of Administration

Lic. Luis F. Coto (Public Administration)
Chief, Human Resources

Dr. Walter Coto
Legal Adviser

APPENDIX

CATIE Organization



* Academic-Scientific Committee; Executive and Finance Committee; Nominations Committee.
** Education for Development and Conservation.