



Solutions for environment and development
Soluciones para el ambiente y desarrollo

Biennial Report

2007-2008

CATIE brings science, graduate education and technical cooperation together to reduce poverty through integrated management of agriculture and conservation of the environment.


www.catie.ac.cr

Serie Institucional
Informe Bienal 28

Biennial Report

2007-2008

Tropical Agricultural Research and Higher Education Center (CATIE)
Turrialba, Costa Rica
2009



The Tropical Agricultural Research and Higher Education Center (CATIE) is a regional center dedicated to research and graduate education in agriculture and the management, conservation and sustainable use of natural resources. Its members include the Inter-American Institute for Cooperation on Agriculture (IICA), Belize, Bolivia, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Venezuela and Spain.

© Tropical Agricultural Research and Higher Education Center, CATIE 2009

ISSN 1659-0597

630.72

C397 Centro Agronómico Tropical de Investigación y Enseñanza
Informe bienal 2007-2008 = Biennial report 2007-2008 /
Centro Agronómico Tropical de Investigación y Enseñanza. – Turrialba,
C.R. : CATIE, 2009.
48 p. – (Serie institucional. Informe anual / CATIE ; no. 28)

ISSN 1659-0597

1. CATIE – Informes anuales I. Título II. Serie

Contents

1. Introduction	5
2. Governing Bodies	6
Governing Council	6
Board of Directors	6
3. Executive Summary Office of the Director General	7
Research and Development	8
Education	9
Member Countries	9
Efficient and Effective Internal Organization	10
Planning, Monitoring and Evaluation	10
Interinstitutional Alliances in the region	11
CATIE Governing Bodies and Foundations	11
Strengthening CATIE's Financial Situation	12
4. Education Division	13
Graduate School	13
Training and Conferences	17
Orton Memorial Library	19
Biometrics Unit	20
5. Research and Development Division	21
CATIE as a Scientific Platform	21
CATIE and Its Work with the Private Sector	21
Development of the Mesoamerican Agronenvironmental Program (MAP)	22
Implementation of CATIE's New Research and Development Structure	22
Development of New Projects/Proposals	23
Impact on the Political and Legislative Framework at Local, National and Regional Levels	24
Brief Summary of Outstanding Projects	24
6. Outreach and Development Office	26
Outreach and Development Strategic Plan	26
Coordination and Integration	26
Follow-up with Memberships	27
Performance of National Technical Offices	27
The Opportunities Management Unit	28
Investments in the Countries	28
Conclusions	29
7. Commercial Division	30
Achievements	30
8. Corporate Services Office	33
Strategic Planning at CATIE	33
Strategic Planning for the DSC	33
9. Communication	36
Public Relations	36
Publications	37
International Outreach	37

10. Financial Report	39
Financing, by Fund.....	39
Audits.....	39
Financial Statements.....	39
11. Governing Authorities	42
Governing Council (2007–2008).....	42
Board of Directors (2007–2008).....	42
12. Acronyms	43
Annex 1. Technical Personnel, International, Associate and National 2007–2008	44
Annex 2. Publications	46
Publications 2007.....	46
Publications 2008.....	50

1. Introduction

The Tropical Agricultural Research and Higher Education Center (CATIE) is a nonprofit civil institution created in 1973 through an agreement between the Inter-American Institute for Cooperation on Agriculture (IICA) and the government of Costa Rica.

CATIE is a regional organization known for its work in research, education and technical cooperation, the latter normally carried out through the execution of development projects in agriculture and natural resource management in the American tropics. The center's headquarters are in Turrialba, Costa Rica, and it has offices in several of its member countries. The following are regular members of CATIE: Belize, Bolivia, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Venezuela and the Inter-American Institute for Cooperation on Agriculture (IICA). CATIE also has a portfolio of affiliated members, including Spain, the first European country to become a member.

CATIE's long-term vision for its region of mandate is as follows: "The rural sector is consolidated as a key element in the process toward sustainable development, contributing to social equality and improvement in quality of life in the American tropics."

Toward this end, CATIE combines science, graduate education and technical cooperation to achieve poverty reduction through integrated management of agriculture and conservation of the environment.

The institution is directed by the Inter-American Board of Agriculture (IABA) that acts as the Constituent Assembly; the Governing Council, made up of the ministers of agriculture or environment of CATIE member countries and the general director of IICA; and the Board of Directors, which includes outstanding scientists, academicians and representatives of public and private sectors from the region and the rest of the world. Their guidelines are applied by the director general with the support of personnel specialized in different areas and programs developed by this international organization.

This report, in accord with Article Nine of the Constitutional Contract of CATIE, presents the center's most relevant results and progress during 2007–2008, organized according to the principal areas of research, education and technical cooperation, with a summary by the Office of the Director General and specific information about the governing bodies.

2. Governing Bodies

Governing Council

During the 2007-2008 period, the Governing Council of CATIE held two ordinary meetings. These meetings were chaired by the Minister of Agriculture and Livestock of Costa Rica, Alfredo Volio (2007) and Javier Flores (2008). The principal resolutions of the Governing Council in 2007-2008 are the following:

- Election of a new director general for CATIE for 2008-2012
- Approval of procedures for bringing in membership quotas in arrears from CATIE's member countries
- Election of a new member to the CATIE Board of Directors
- Ratification of CATIE's 2006 and 2007 annual reports
- Approval of CATIE's 2008 and 2009 annual budgets
- Designation of CATIE's director general as an adjunct deputy director general of IICA
- Reelection of CATIE to represent the Governing Council on CATIE's Board of Directors for the period 2008-2011
- Establishment of the Joint IICA-CATIE Committee to give follow up to the joint action plan
- Request to CATIE to continue working with IICA to face the food security crisis in the region
- Request to CATIE's director general to use the experience gained in the development of the Mesoamerican Agroenvironmental Program (MAP) in other CATIE member countries, outside Mesoamerica
- Approval of modification of Article 1 of CATIE's Constitutional Contract to give the center the right to award graduate degrees
- Receipt of the external evaluation report of CATIE for the period 2001-2006
- Approval of CATIE's annual reports for 2006 and 2007
- Approval of CATIE's budgets for 2008 and 2009
- Consolidation of CATIE's communication strategy
- Approval of CATIE's Annual Operating Plans (AOP) for 2007 and 2008
- Proposal of a modification to Article 1 of CATIE's Constitutional Contract to give the center the right to award graduate degrees
- Modification of CATIE's Intellectual Property Policy
- CATIE was asked to work diligently in the area of climate change
- Authorization to CATIE's director general to sign contracts with Norway and Sweden for the Mesoamerican Agroenvironmental Program (MAP) and for the Central American Cacao Project (PCC)
- Support for the nomination by CATIE's Administrative Committee to award honorary doctoral degrees to Drs. Björn Lundgren, Rodrigo Gámez, Jefferey Burley and Cristian Samper
- Approval of CATIE's new organizational structure
- CATIE was asked to prepare a plan to work with the private sector
- CATIE and IICA were asked to work closely to achieve the well-being of the countries in the Americas
- The director general was authorized to sign a contract with the Millennium Challenge Corporation (MCC-FOMILENIO) to conduct the project Productive Development Program: Sustainable Irrigation for the Production of Vegetables for the National Market in El Salvador
- The decision to donate or cede land within CATIE's campus to the Municipality of Turrialba to build a new hospital for the city was left in the hands of the competent entities
- Request to the director general to present the modifications proposed to the institution's Strategic Plan

Board of Directors

During the period 2007-2008, the CATIE Board of Directors held four regular meetings. The meetings were chaired by Helmut Eger. The principal resolutions of the Board of Directors in 2007-2008 are the following:

- Selection of a short list of candidates for the position of director general at CATIE to be submitted to the Governing Council

3. Executive Summary

Office of the Director General

Two major events in 2007-2008 were the election of a new director general and his taking office as well as the independent external evaluation, which takes place every five years at CATIE.

The Board of Directors had a fundamental role in both cases, with the final decisions in the hands of the Governing Council, as established by the law governing CATIE.

Dr. José Joaquín Campos, who had been serving as deputy director of CATIE and director of its Department of Natural Resources and Environment, was named the new director general. The final selection was made by the Governing Council after analyzing the documentation and hearing presentations by the candidates who had been preselected by the Board of Directors.

Dr. Campos replaced Dr. Pedro Ferreira, who had served as director general since 2000. The change in leadership took place Feb. 29, 2008, in the Henry A. Wallace Building at CATIE headquarters in Turrialba.

The independent external evaluation was directed by Dr. Jeff Sayer, a consultant with WWF and an exdirector of CIFOR, Indonesia. He was joined by a distinguished panel of independent experts, some of whom were selected by different cooperating agencies and institutions. Others on the panel were Dr. Arnoldo Camacho (INCAE-Costa Rica), Dr. Ian Christoplos (Sweden), Dr. Richard Hammond (USDA-United States), Dr. Keith Andrews (IICA-El Salvador) and Dr. Luisa Castillo (UNA-Costa Rica).

The evaluation report was in general highly positive for the institution and for the administration over the past five years. The Graduate School was commended for its relevance and its quality, and it was called “the crown jewel” of the system. The quality of work and the relevance of the thematic groups as a whole were also cited as outstanding. Special recommendations were made on the need to strengthen or modify the groups of agroecology, integrated management of watersheds and environmental services. Observations were also made on the need to strengthen the research-action methodologies and the role of the sociology group within the institution.

Recommendations to strengthen communication efforts and to search for long-term financing for the core budget were also made.

The evaluators found CATIE unique in the developing world for its “combination of research, higher education, links to farmers and policy makers and the combination of cutting-edge science and grass-roots realism.” They also found the center to be “alone in combining the capacities, networks and facilities desperately needed in the region to address interlinked problems of enabling innovation and growth in the rural sector while conserving the natural resource base upon which the livelihoods of the rural poor depend.”

The report states: “The need for CATIE is greater than it has ever been—if CATIE did not exist, then the region would have to create it.”

Other highlights include:

- 5th Henry A. Wallace Scientific Conference. Coordinated by CATIE and Iowa State University, United States, the conference “Sustainable Livelihoods Approach to Agricultural and Rural Development” attracted professionals from around the world, especially from Latin America and Africa. The enriching South-South interchange took place May 14-17 at headquarters in Turrialba, Costa Rica. The Swedish International Development Cooperation Agency (Sida) and the United States Department of Agriculture (USDA) provided financial support.
- New master’s degree: Master of International Agribusiness Management (MIAM). In conjunction with INCAE Business School, CATIE initiated the new master’s in 2007, with the first class graduating in 2008. This program was given high priority for the region in a resolution by CATIE’s Governing Council. It responds to the new challenges springing from the signing of free trade agreements in the region and the need to strengthen agroenterprise development and value chains in the agricultural sector.
- New Mesoamerican Agroenvironmental Program (MAP). MAP also responds to regional needs and priorities identified by intersectorial councils of ministers in the region. It is an innovative and

integrative strategic program based on a multisectorial approach. Serving as a platform with multiple partners, MAP's goal is to help Mesoamerican countries improve competitiveness and sustainability in the management of their territories through implementation of national strategies and policies that are also in compliance with international environmental conventions. This ambitious program has the support of key financial partners: the governments of Sweden and Norway (agreements signed for a total of US\$24.2 million) and Finland (agreement to be signed in March 2009 for US\$7.1 million), signifying support of US\$31.3 million over the next three to five years.

- Modification of CATIE's Constitutional Law. The modification seeks to permit autonomous awarding of graduate academic degrees, with the need for agreements with national universities in Costa Rica. In 2007 the modification was approved by the CATIE Board of Directors, the Governing Council, the Executive Committee of IICA and the Inter-American Board of Agriculture (IABA). In 2008, the process continued, with support of senior officials in the Costa Rican Executive Branch and legislature for ratification of the modification by the Costa Rican Legislative Assembly. The right to grant degrees is essential for international accreditation that will certify the excellence of CATIE's graduate programs.
- Creation of the Institutional Social Responsibility Program (ISR) which seeks to recover, reinforce and propose new institutional actions in keeping with guidelines for social responsibility to benefit its members, neighboring communities, and the planet. A coordinator was hired and the institutional policy defined allowed CATIE to become part of the United Nations Global Compact, the largest forum in the world in the area of social responsibility. Programs underway within the institution include integrated waste-management, savings initiatives, recycling and the expansion of these efforts to the community.

In 2008 we established an Annual Forum of the former directors general with the graduating students as a mechanism for enhancing ties with the former directors general while allowing the students to learn from the extensive experience of these exceptional professionals.

Honorary doctoral degrees were granted to distinguished scientists in the fields of agriculture and natural resources for their contributions to the region.

2007: Björn Lundgren and Rodrigo Gámez

2008: Jeffery Burley and Cristian Samper

In communication, various high-priority tasks were completed. A new Communication Strategy and Work Plan

for CATIE were prepared and approved. With adoption of the new logo and slogan completed in 2007, efforts to position them both within and outside the institution began in 2008, with development of a compelling message, key messages and institutional presentations. Main areas of emphasis were to increase projection of CATIE's mission and work, improve internal communication and improve the quality of printed and online publications, including the electronic bulletin.

In 2008 the Office of the Director General established periodic meetings with all personnel, which were taped and made available to staff in the countries, in order to improve internal communication. In addition, informal meetings have continued with the personnel at headquarters and at several NTOs, taking advantage of visits to member countries. Monthly meetings were held with the center's Administrative Committee and Executive Committee, with the basic purpose of improving coordination, communication and teamwork.

Research and Development

In 2008 the Department of Natural Resources and the Department of Agriculture and Agroforestry were merged, creating the Research and Development Division to facilitate interdisciplinary multisectorial work. The 10 thematic groups were reorganized into eight scientific programs.

During the years 2007-2008, agreements for various strategic projects in research and regional cooperation were signed, representing more than US\$44 million.

Highlights for these years include advances in genetic improvement of cacao that keep CATIE in the forefront of research to control moniliasis, agreements with PROMECAFE and CIRAD for massive distribution of hybrid coffee material developed through a joint research program, the work of the LACEEP environmental economics network (supported by Sida and IDRC) and the successful finalization of studies on payment schemes for environmental services in livestock systems financed by the World Bank.

The CIRAD-CABI International-CATIE-INCAE-PROMECAFE agroforestry research focus was strengthened by the addition of Bioversity International to the group. Experts designated by these institutions continue to work together in an unprecedented alliance. Also, the Ibero-American Network of Model Forests continues to have its headquarters at CATIE, with Dr. Ronnie de Camino, deputy director of CATIE, as president of the

board of directors, replacing Dr. José Joaquín Campos, who chaired the network from 2004 to 2008; M.Sc. Fernando Carrera of CATIE is general manager.

The genetic resources group improved CATIE policies for exchange of germplasm. Special importance was given to exchanges related to genetically improved materials because of the many requests CATIE receives for the new coffee and cacao materials developed in genetic improvement programs conducted jointly with CIRAD and USDA. A fund has been set up that allows CATIE begin renovation of its coffee collection and other important seed collections, made possible by a donation from the Global Crop Diversity Trust (fund for genetic resources).

Important collaboration was undertaken with IICA and with CIRAD in Mexico to execute the Integrated, Sustainable Social Development project, Prodesis, (with funds from the European Union) in the state of Chiapas.

The new Central American Cacao Project (PCC is the Spanish acronym) began, working with 6,000 families and their organizations and governments (indigenous, municipal, national, regional) to increase productivity, competitiveness and the provision of environmental services of the cacao sector in Central America. This project is financed by Norway.

PCC is within the Mesoamerican Agroenvironmental Program (MAP), the intersectorial platform developed to improve rural livelihoods through competitive production integrated with good management of natural resources. By the end of 2008, other projects under MAP included Innovations II and Degraded Lands—Sustainable Management of Agricultural Lands in Mesoamerica (MESOTERRA).

Education

New sources of scholarships and financing for students have been identified. Through agreements with institutions that specialize in educational loans, we have strengthened the Scholarship-Loan Program for master's students, and there are new initiatives for scholarships for doctoral students and participants in training courses.

The year 2008 was a record year for strategic courses and special courses offered through the training program, 52 activities compared with 32 in 2007. Some 245 training activities were implemented (both at headquarters and in the countries), with participation of some 5,000 persons from 42 countries (principally from the region).

To create new academic chairs at CATIE, in 2008 we deviated from the traditional procedure by first defining the chair and the professor who will occupy it, and then working to ensure its financial sustainability. In this way, the expert appointed to head the chair will be responsible for seeking funds to ensure the project's future viability. This proposal was discussed with the Center for International Migration and Development (CIM) in Germany, an organization that, for several years, has sent experts to CATIE to work under the academic chair system. We have submitted two requests to CIM for academic chairs: in ecological agriculture and agrobiodiversity and in management of protected areas. We have also made progress on the concept of a chair in forestry policy and economics.

Member Countries

Increasing our impact in the member countries was a basic premise that was translated into a strategy of communication, coordination and collaboration of actions in these territories. The Office of the Director General has emphasized the reactivation and strengthening of the National Advisory Committees (NACs) and, to this end, the Research and Development Division and the Outreach and Development Office held six preparatory meetings in the countries of Central America. These efforts have allowed us to prepare general guidelines for the NACs and to support their development. Meanwhile, the National Technical Offices (NTOs) received an important and immediate injection of financial resources. This very necessary support will be strengthened even more with the implementation of MAP, which constitutes an engine for the development and increased role of these offices.

We reexamined the outreach function of CATIE based on the Outreach and Development Strategic Plan, which was presented to the Board of Directors in October 2008. Using this plan as a guide, NTOs prepared a work strategy for their respective countries, which has allowed us to establish the annual plans for 2009. Both the Outreach and Development Strategic Plan and the work strategies in the countries have been developed taking into account strategic and operative elements of MAP and CATIE's general Strategic Plan. By clarifying our goals and defining efforts in this way, we will be more effective in our mission to have an impact in member countries through technical cooperation.

Coordinated efforts to secure payment of membership quotas in arrears begun in 2007 began to bear fruit. By the end of 2008, four countries had agreed to bring their payments up-to-date, an important source of funds for the core budget.

Efficient and Effective Internal Organization

The new CATIE organizational structure, based on a divisional model, has three divisions: two of them respond to the three key institutional functions and a third, whose purpose is to generate income through commercial activities. In addition, we have established an office that provides essential corporate services more efficiently and effectively and another that offers strategic support services so that we can reach our goals. This organizational model allows us to support integrated efforts by the offices at headquarters, the eight scientific programs and the offices in member countries. The result will be to consolidate our strength, represented by the integration of the three basic functions of research, education and technical cooperation and to bring us closer to the goal of being a leader in systemic, interdisciplinary and intersectorial approaches.

Planning, Monitoring and Evaluation

We are convinced that the agriculture and natural resource sectors are essential for sustainable development. Through local actions that have global relevance, CATIE marches

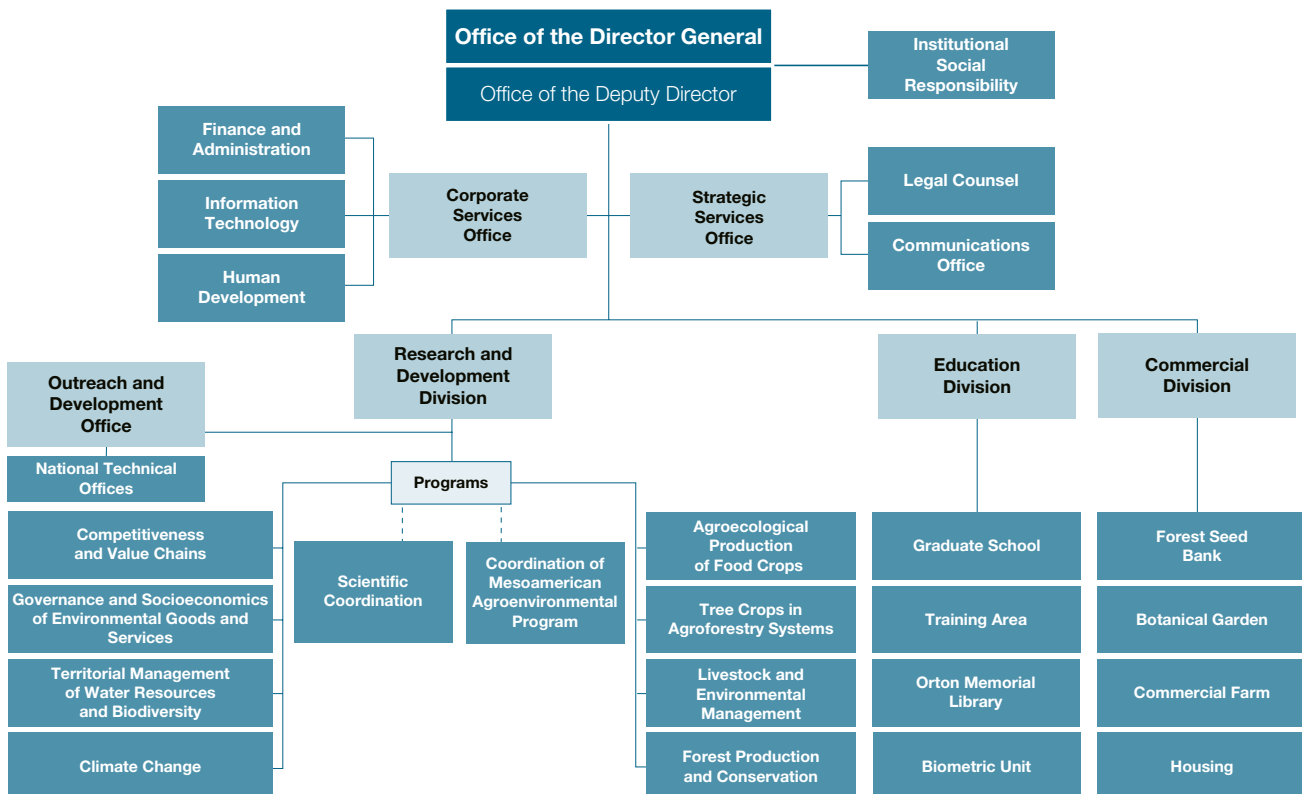
in the vanguard in the application of systems approaches to tackle these challenges.

The center is in a position to help change the conditions described through its integrated management of agriculture and environment, its intersectorial and interdisciplinary approaches, and greater integration and teamwork within the institution and in collaboration with others externally. On the basis of this situation and these strengths, we have initiated our Strategic Plan and, with it, our institutional goals.

We have implemented six strategic programs that seek

- to cost out and charge for activities
- to identify savings
- to provide compensation and incentives to personnel
- to develop staff capabilities
- to improve the organizational climate
- to improve services provided to internal clients

Closely linked to the above, we have implemented the Strategic Management System (SMP) as a mechanism to clarify goals and focus actions on achieving them, to make monitoring and evaluation of progress toward these goals more efficient and to report achievements to our governing bodies, partners and clients in a fluid and effective manner.



Interinstitutional Alliances in the Region

We have strengthened ties with IICA, the Central American Commission on Environment and Development (CCAD) and the Central American Agricultural Council (CAC); the last two agencies are part of the Central American Integration System (SICA). A significant and specific result of these partnerships was the elaboration of the Regional Agroenvironmental and Health Strategy (ERAS) and the inception of the development of the Regional Climate Change Strategy, in which CATIE has emerged as a strategic partner. With the International Union for the Conservation of Nature (IUCN) we have made substantial progress in actions, studies and strategies on climate change in Central America.

We have also signed a cooperation agreement with the Regional Unit for Technical Assistance (RUTA) to cooperate strategically in the implementation of ERAS. In addition, we have taken significant steps to cooperate with the Central American Indigenous and Peasant Coordination Association for Community Agroforestry (ACICAFOC).

CATIE continues to work with the Ibero-American Model Forest Network and the French Agricultural Research Center for International Development (CIRAD) and took the first steps in direct cooperation with the

Brazilian Agricultural Research Corporation (Embrapa). Negotiations were also begun to strengthen cooperation with the International Center for Tropical Agriculture (CIAT).

These achievements involved an intense agenda of visits for the director general to Europe, the United States and most member countries in order to raise the institution's profile in different forums, seek support for MAP and CATIE in general and listen to our partners in order to better serve them.

CATIE Governing Bodies and Foundations

The fruitful exchange of ideas with the Board of Directors during the two meetings held in 2008 merits special mention. The board's identification with the institutional repositioning resulted in a commitment to hold a workshop to improve the effectiveness of the role of CATIE's Board of Directors.

Similar positive outcomes resulted from the meetings with the CATIE Governing Council, the IICA Executive Committee, the Tropics Foundation and Fundatrópicos—the last two organizations created to support CATIE's mission—in addition to the annual meeting of donors and strategic partners. These spaces for dialogue allowed us to

Joint IICA-CATIE Work

The interinstitutional actions defined in a renewed proposal for cooperation between IICA and CATIE focus on the following areas:

- Rural landscape development, natural resource management, environment and climate change
- Technological innovation, value chains and competitiveness
- Information and knowledge management

Concrete actions for 2008, among others, included:

- Participate in a joint, high-level mission to Paraguay and Bolivia, which presented our institutions to these member countries under a different strategy
- Use organizational and infrastructure (offices) resources jointly in Paraguay and Belize
- Contribute significantly to the formulation of the Regional Agroenvironmental and Health Strategy (ERAS)
- Serve as key partners in the development of the second International Course—Leadership for Development of Ecoagriculture: Integrated Management of Rural Territories in Central America—in alliance with the University of California-Berkeley and Ecoagriculture Partners
- Cooperate in value chain and competitiveness activities in Central America, Mexico and Paraguay
- Continue joint administration of the Orton Memorial Library
- Collaborate on virtual courses related to agroforestry and silvopastoral systems
- Form a work group on the topic of food security to make our collaboration with member countries more effective in the face of this crisis

present the new direction projected for the institution, using the basic instrument *The First 100 days*, prepared by the Office of the Director General.

Strengthening CATIE's Financial Situation

CATIE continued with a positive financial closing for 2007 and 2008. Income for the core budget and projects increased substantially, thanks to the contributions of member countries and IICA and support from donor partners to MAP and several projects.

In 2008, we have reached the goal of US\$5 million for the core budget a year ahead of schedule. Equally important was funding obtained under project agreements: almost US\$33 million, in other words three times more than the amount obtained in 2007. The total budget for 2008 was 20% more than the budget for 2007.

During 2008, we proposed consolidation of the recently created Commercial Division and established a high-level committee that worked hard to initiate a process that, in the medium or long-term, will allow this division to generate significant resources for the institution.

4. Education Division

The director of the Education Division is Dr. Glenn Galloway. The division is made up of the Graduate School, the Training Area, Orton Memorial Library and the Biometrics Unit.

Graduate School

Since 1946, CATIE’s Graduate School has offered master’s degrees in specialized studies related to tropical agriculture and sustainable management of natural resources, adding a doctoral program in 1996. The objective is to form professionals who can provide leadership in solving complex regional needs in a changing world, taking into account the technical economic, social, institutional and political realities for sustainable rural development

The Education Division, like other CATIE programs, actively participated in the Independent External Evaluation in 2007. The report called the Graduate School the “crown jewel” of the institution. This favorable comment is a recognition of a collective institutional effort because practically all personnel contribute in one form or another to our Graduate School.

The Graduate School in 2007 hosted the second regional workshop for scholarship recipients and mentors in the Norman Borlaug Fellowship Program, which reflects the success that has been achieved with this program, one that seeks to encourage cooperation among scientists of Central America and nationally and internationally known mentors from the United States. A significant number of scholarship recipient were graduates and/or staff members at CATIE. This was the last group in this program coordinated by CATIE.

Also in 2007, the Graduate School coordinated the visit of Dr. Jane Goodall to headquarters. Dr. Goodall is the well-known zoologist who travels the world as the voice of the chimpanzees and champion of biodiversity. She gave an inspiring talk to the CATIE community and spoke to students, staff and visitors at the Inter-American School on campus.

In 2008 a new organizational structure for the Education Division was put in place, which was presented to the CATIE Board of Directors in Belize. It clearly illustrates the interrelationship between the divisions of Education and Research and Development as well as the links of the diverse components with strategic partners.

Master’s Program

The newest of CATIE’s six master’s degrees is in International Agribusiness Management, offered as a joint degree with INCAE Business School. The first students entered in 2007 and graduated in 2008. Even though there were only five students—two of them with financial support from the Dominican Republic through the channeling of funds from past-due quotas of that country—the program is considered a success because of the high academic performance and the excellence of the case studies. Companies and organizations showed interest in hiring these students even prior to their graduation. The second group of four students entered the program in 2008.

Reduced numbers do not point to a lack of interest in the program but rather to a lack of funding. Efforts were made in 2008 to expand the scope of funding sources for traditional master’s programs so that those admitted to MIAM can qualify. Official language for the master’s is English, but the decision was made to open it to persons with limited capacity in that language.

Table 4.1 Classification of master’s students according to study area

Area	2006–2007	2007–2008	2008–2009
Ecological agriculture	10	6	11
Tropical agroforestry	9	7	9
Integrated watershed management	9	15	9
Management and conservation of tropical forests and biodiversity	15	16	15
Environmental socioeconomics	11	12	13
International Agribusiness Management		5	4
Total	54	61	61

The other master's programs offered in Spanish, are ecological agriculture, tropical agroforestry, tropical forest conservation and biodiversity, integrated watershed management and environmental socioeconomics (tables 4.1, 4.2, 4.3).

Table 4.2 Master's students by country

Country	2006–2007	2007–2008	2008–2009
Argentina			1
Belize			1
Bolivia	6	3	2
Brazil	1		4
Chile	1		1
Colombia	8	13	12
Costa Rica	6	2	3
Dominican Republic		2	1
Ecuador	2	3	7
El Salvador	1		1
Guatemala	2	1	
Honduras	6	10	4
Italy		1	
Mexico	8	8	5
Nicaragua	6	7	7
Panama		1	4
Paraguay		1	
Peru	7	7	7
Puerto Rico	1		
South Korea		1	
United States		1	1
Total	54	61	61

Doctoral Program

Most doctoral student are in CATIE's joint doctoral programs with the University of Idaho in the United States and the University of Wales-Bangor in the United Kingdom. These programs offer a joint diploma, signed by both institutions. The official language for the doctoral program is English.

Each year CATIE receives a number of students from different universities around the world who come to research for a thesis or for specific research projects. In 2007–2008, 67 such students were supervised by CATIE reseachers (table 4.6).

Financing of students (scholarship-loans and others)

In these two years, thanks to support from many professionals and offices at CATIE, we have identified new sources for scholarships and student financing.

For example, CATIE was selected by the Japan-World Bank Joint Scholarship Program and other important sources for scholarships. These new sources complement others, including the Organization of American States, Ford Foundation, German Academic Exchange Services (DAAD is the German acronym), Rotary Foundation, Russell E. Train Program, International Federation of University Women, National Council for Science and Technology in Mexico (CONACYT, Spanish acronym), BP Conservation Program, International Tropical Timber Organization (ITTO) and the Belgian Embassy.

A new agreement was signed with LASPAU, a nonprofit organization affiliated with Harvard University dedicated to professional and academic programs for the Americas,

Cuadro 4.3 The Graduate School in numbers, 2007–2008

Categories	Men		Women		Total	
	2007	2008	2007	2008	2007	2008
# of master's students (year 2)	35	38	19	23	54	61
# of master's students (year 1)	38	33	23	28	61	61
# of doctoral students	14	13	7	8	21	21
# of exchange students	24	13	46	25	70	38
Total # of students	111	97	95	84	206	181
	2007			2008		
# of countries represented in the student body	20		22			
# of countries represented in the faculty	18		21			
# of second-year students with a CATIE scholarship: covers 50% of academic costs	44		34			
# of first-year students with a CATIE scholarship: covers 50% of academic costs	34		38			

Table 4.4 Doctoral students' countries of origin, as of December 2008

Country of origin	Number of students
Bolivia	1 (graduated)
Brazil	1 (graduated)
Colombia	2 (2 graduated)
Costa Rica	2
Dominican Republic	2 (1 graduated)
El Salvador	1
Guatemala	1 (graduated)
Guyana	1 (graduated)
Honduras	1 (graduated)
Japan	2 (1 graduated)
Mexico	10 (4 graduated)
Mozambique	1 (graduated)
Puerto Rico	1 (1 graduated)
Suriname	1 (graduated)
Switzerland	1 (graduated)
United Kingdom	1 (graduated)
United States	11 (9 graduated)
Venezuela	2
Total	42 (27 graduated)

Table 4.5 Distribution of doctoral students by study area

Area of study	U.Wales*	CATIE Ph.D.	U. Idaho*	Total
Tropical forests	1	4	3	8
Tropical Agroforestry	6	4	3	13
Ecological Agriculture			2	2
Entomology			2	2
Watershed Management				0
Geographic Information Systems			1	1
Environmental Socioeconomics			1	1
Total	7	8	12	27

*Joint CATIE-U.Wales and CATIE-U.Idaho diplomas

and approval was given to use funds coming from the Dominican Republic and Venezuela in payment for quotas in arrears to finance graduate students from those countries.

The Scholarship-Loan Program continues to evolve. Under the program, 50% of the costs for the master's are covered by scholarship and a loan for nine years covers the rest of the costs. About 35 new students benefit each year from the Scholarship-Loan Program, so that at any given time, some 70 students are participating in the program.

Table 4.6 Universities of exchange students who carried out research at CATIE

Country (universities)	Number of students/country
Brazil (University of Minas Gerais)	1
Canada (University of Waterloo)	2
Colombia (University of Tolima, University of Nariño University of Cundinamarca)	12
Costa Rica (Technological University of Costa Rica)	1
Cuba (Experimental Station for Pastures and Forages Indio Hatuey)	1
England (Imperial College London, University of East London, University of Bath, Writtle College)	4
Germany (University of Bonn, Humboldt University Berlin, University of Anhalt, University of Applied Science, National Economic Institute)	8
Spain (Polytechnic University of Madrid, Polytechnic University of Valencia, University of Barcelona, Rey Juan Carlos University)	9
United States (Purdue University, Ohio State University, University of Minnesota Twin Cities, University of California, Texas A & M University, University of Virginia, Yale University)	11
France (Jean Moulin University, Lyon 3, University of Montpellier II, Agro Paris Tech Engref, IUT La Roche Sur Yon, FIF-ENGREF/AgroParisTech, CIRAD)	6
Mexico (College of the Southern Frontier-ECOSUR)	2
Norway (Norwegian University of Life Sciences, Norwegian University of Science & Technology)	7
Sweden (Gothenburg University)	1
Switzerland (Swiss Federal Institute of Technology)	1
The Netherlands (Wageningen University)	1
Total	67

To date, 261 loans have been granted by the program. The amount to be repaid is US\$2.2 million and we have recuperated US\$613,000.

The Credit Committee, which approves or rejects applications for the Scholarship-Loan Program, improved management of the system. The goal is to ensure matriculation of students with outstanding credentials who have great financial limitations but offer good prospects for loan repayment after their studies end.

We have made significant progress in reducing our dependence on the Scholarship-Loan Program. Educational credit agencies such as CONAPE (Costa Rica), ICETEX (Colombia) and SENACYT (Ecuador) have begun to cover the loan component for qualifying students. Other agreements have been established with IECE in Ecuador and (FUNDA-PRÓ in Bolivia), creating more new alternatives for student financing.

Two funding initiatives exist to generate financing of doctoral students. First, CATIE collaborated with the University of Idaho on a new IGERT proposal (Evaluating Resilience of Biological and Social Systems in Changing Landscapes: a Doctoral Research and Education Program in Idaho and Costa Rica) for the National Science Foundation (NSF). NSF will make the final decision during the first quarter of 2009. Second, CATIE worked with The Tropics Foundation and the University of Idaho Foundation to create an endowment to help fund students in our joint doctoral program. Once the agreement is signed, The Tropics Foundation will donate US\$100,000 to the endowment and the University of Idaho has committed to contribute \$200,000. This initial fund will finance one doctoral student.

Endowed chairs

An institutional decision was made in 2008 to be more proactive in creating new chairs.

The Kenton Miller Chair in Protected Areas Management was created, though it is as yet unfunded. This chair is temporarily held by the head of CATIE's Training Area and he is supporting efforts to obtain financial support to make the chair sustainable. These efforts include developing a proposal to incorporate an expert from CIM, an organization for placement of human resources within a German cooperation agency, for the development of protected areas, whose responsibilities will include taking action to create an endowment fund for this chair. In addition, a request was made to CIM to assign a German expert to a new Agrobiodiversity and Ecological Agriculture Chair. This chair was presented to The Nature Conservancy (TNC) headquarters in Washington, D.C., the World Bank and other partners. The endowment fund is not yet created.

A Forest Economy and Policies Chair is being promoted. The World Bank has shown interest, as have the U.S. State Department and GTZ. The results of these initiatives will be revealed during the first half of 2009. Efforts were made with representatives of the University of Laval and the University of Alberta to promote the joint chair Rural Development and Environment with funding from the Research Chair Initiative of the International Development Research Center (IDRC) in Canada. This program requires identification of a counterpart chair in Canada and we are looking for potential counterparts for this connection.

Accreditation

Accreditation is a high priority for the Graduate School in order to obtain official recognition of its excellence, already recognized *de facto* throughout the region. With accreditation it will be possible to identify aspects that should be improved in the Graduate School and its academic programs. A change in CATIE's Constitutional Contract

is essential to this process, since the first condition for accreditation is the legal right to award degrees. Therefore, in 2007 a decision was made to solicit the pertinent parties for a change in the law that would state without ambiguities that CATIE has the legal right to grant graduate degrees. The decision to introduce the proposed change to the law in the Costa Rican National Assembly was approved by CATIE's Board of Directors and by its Governing Council. The IICA Executive Committee unanimously approved submitting the proposal to the Inter-American Agricultural Board (IABA), which encompasses all countries of the hemisphere. IABA unanimously issued a resolution supporting the proposal, which now must be approved by Costa Rica's Legislative Assembly.

In 2008 various efforts were undertaken to achieve ratification of the proposed change by the Legislative Assembly. The director general, deputy director and director of the Education Division met with high officials and key partners about the bill, including the National Council of Rectors (CONARE, Consejo Nacional de Rectores). Individual meetings with the rectors of the National University (UNA), National Distance Learning University (UNED), and Technological Institute of Costa Rica (ITCR) were held and letters and phone calls to legislators were made. CATIE's legal counsel has also played a key role. Intense follow-up to this amendment process will be required for the first half of 2009.

Promotion of the Graduate School

New materials to promote the Graduate School have reached National Technical Offices and other recipients to be distributed to prospective students and used in events such as graduate fairs. New materials highlight CATIE's international status and interdisciplinary work. Promotion of the school has been strengthened on our own Web page, where we show an increased number of hits, and we have established links from Web pages of various loan and scholarship programs. CATIE also benefits from our prestigious international partners, such as the Ford Foundation, OAS and Japan-World Bank, which also promote our program.

Alumni association

The Third General Assembly of the Association of CATIE and IICA graduates (AGCATIE) took place in 2008. During the activity AGCATIE presented its first seminar, "Professionals in Service to Their Countries for Development and Conservation." Planning has begun for a scientific meeting hosted by AGCATIE, scheduled for March 2010. Finally, the new director general of CATIE made a presentation via the Web to graduates, during which he indicated the commitment of the institution to strengthen AGCATIE.

Student affairs

In our efforts to ensure that CATIE has one of the best graduate programs in Latin America and the Caribbean in its areas of expertise, the Graduate School is making important advances, from improvement in the quality and efficiency of its services to ongoing innovation in its academic and training programs. Registration and course evaluation are now conducted online.

A procedure to mitigate the risks that students face was developed. A form was created that all master's and doctoral students must fill out and present before they begin their research work. The form offers information about how to avoid a series of common risks encountered in the countries and regions where they undertake thesis research. Also, immigration paperwork has been simplified, thanks to the considerable efforts of the Student Affairs Office.

A new multiuse room was created in the building that contains the student laundry, providing a space for activities for students and their families. Internet cable was replaced in student residences to ensure access to this important service, and security boxes were placed in residences for single students. We built and opened a new room in the Graduate School building where students can study and access Internet between classes.

Training and Conferences

Training is a strategic function at CATIE, reflecting the close relationship among research, technical cooperation and education.

Training activities

In 2007 there were 215 training activities in the Latin American region and 32 at headquarters, of which 19 were strategic courses. Together with the course coordinators and/or committees, we have maintained high participation and attained resources to finance some of the course participants, so that almost all training activities programmed for 2007 were successful. The work with course coordinators has permitted continued improvement and updating of teaching materials, yet there is a need for the resources and time necessary to develop new materials.

In 2008 CATIE conducted 245 training activities (both inside and away from its headquarters) with some 5,000 participants from 42 countries (chiefly from the region.) Many of the activities conducted in the various countries and some conducted at CATIE headquarters were tailored to the needs of beneficiary organizations and strategic partners to increase staff abilities and offer methodologies to respond to pressing problems.

Renovation of strategic courses

In 2008, 52 training activities were conducted at CATIE headquarters, with 35 of these being special or strategic courses. Some strategic course have the support of committees that discuss program relevance and identify strategies and changes required to maintain course quality, validity and significance. These include:

- 20th International Course on Natural Forest Management
- 30th International Course on Protected Areas
- Ninth International Course on Project Design in Bioenergy and Forest Sectors
- Second International Course on Geographical Information Systems and Teledetection Applied to Landscape Ecology with Emphasis on Biological Corridors
- Fourth International Course on Cocoa
- International Course on Extension Methodologies for Sustainable Rural Development
- International Course on Economic and Institutional Bases for the Management and Valorization of Environmental Services
- International Course on Planning for Watershed Management
- International Course on Implementation of Silvopastoral Systems and Good Livestock Practices as Tools for Adaptation to Climate Change in Tropical Production Systems
- Diploma in Rural Business Development

For courses without committee's support, CATIE's Training Office supports the respective course coordinators so that their courses are continuously supervised and updated, stimulating a strong interaction and relation with the processes of research and generation of knowledge at CATIE.

With thematic groups and National Technical Offices, the Training Area has continued to identify training needs in the region, and as part of this teamwork, courses have been proposed and developed, taking advantage of the support of research programs.

There are various ways that the Training Area publicizes courses, including printed materials, e-mails distributed through databases and networks and CATIE's Web page—with the last two being the principal sources of dissemination of information.

Financing for courses

The Training Area launched a new initiative to create an endowment fund to provide scholarships for students in the strategic courses. This is the first step toward a program that provides a critical mass of participants in all strategic courses. The goal is to work with institutions

and organization that have an interest in strengthening capacities in the region to obtain the necessary funds.

Alliances

To strengthen activities executed by CATIE and in light of complex challenges resulting from climate change, the current world food crisis and environmental deterioration, CATIE has continued developing joint activities with international organizations including Conservation International, The Nature Conservancy, the International Union for the Conservation of Nature (IUCN), IICA, Ecoagriculture Partners, CIRAD, FAO, the Center for Sustainable Resource Development of Berkeley, GEF (UNDP), WHC-UNESCO United Nations University, as well as a large number of local organizations.

We are working with the Japanese International Cooperation Agency (JICA) through their agencies in Latin America (including Mexico, Costa Rica and Colombia) to develop and support training activities aimed at the region's professionals. These include sustainable natural forest management, connectivity and conservation in protected areas, and biological corridors. A project agreement was negotiated with Germany's Inwent to lead training activities on Reduction of Emissions from Deforestation and Degradation of forests (REDD). Under the agreement with Inwent, CATIE will work together with INCAE, EARTH, Zamorano, ESNACIFOR, CCAD and other institutions to develop a five-year training process to reinforce skills in the region on critical issues such as climate change and sustainability. In addition, together with Inwent and in coordination with CATIE's Climate Change group, a first REDD (Reducing Emissions from Deforestation and Degradation) course was offered for Latin America.

In 2008 CATIE won a proposal to develop training activities jointly with the National System of Conservation Areas (SINAC, Sistema Nacional de Áreas de Conservación) related to REDD. Under an agreement with Inwent they will work in two programs: one for Costa Rica's Ministry of Environment, Energy and Telecommunications and its agencies; the other aimed at organizations and individuals in other sectors to reinforce socioecological management of territories. The initiative, which should strengthen current SINAC management in Costa Rica, includes social management of territories based on ecological units to ensure provision of ecosystem services.

Distance learning

We continue working with IICA's Distance Learning Center (CECADI) to complete three distance-learning modules for the Virtual Diploma in Agroforestry. The first course or module is Agroforestry with Trees and Annual and Perennial Crops, ready to be validated with CATIE's

graduate students in 2009 as well as through use in the Chapingo Graduate School in Mexico. The Introductory Agroforestry course formerly developed in CD format was turned into a virtual course, to be offered during the first half of 2009. Steps were taken for CATIE experts to provide materials for the other two courses in the virtual Diploma Program (Agroforestry Planning and Silvopastoral Systems), working in coordination with IICA.

The second virtual course on Integrated Management of Watersheds was successfully developed with support from 32 professionals. This distance-learning course will continue to be offered as part of the program to strengthen watershed management capabilities, complemented by hands-on activities in the Territorial Management of Water Resources and Biodiversity Program.

The director of the Education Division worked with representatives of IICA's Distance Learning Center (CECADI) to reshape the proposal called Partnership for the Development and Utilization of E-learning in Latin America to Foster Agricultural Innovation, Competitiveness and Sustainable Development. Even though the proposal was well-received at a presentation made to the Executive Committee (made up of representatives from 20 American universities) of the American Distance Education Consortium (ADEC), no funding has been provided so far. In order to make the proposal more marketable, the number of partners and the budget levels were reduced. Even without this program, CATIE and IICA continue to collaborate in the development of distance-learning courses. Additional opportunities to enhance our own abilities and promote our own virtual education program must be pursued.

Diplomas

Continuous support has been given to the Rural Business Development Diploma, jointly led by CATIE's CeCoEco Program and CIAT. In conjunction with the Innovation in Value Chains project and the National Technical Offices and Alliance for Learning (made up of nine local and regional organizations) in Nicaragua, a Diploma in Strengthening Business Management of Associated Rural Businesses was negotiated and launched. At the same time, a Diploma in Modern Cocoa Production in Costa Rica was negotiated and approved, promoted by the Central American Cocoa Project (PCC, Proyecto Cacao Centroamérica) and EARTH.

Cooperative Study Abroad Program

The Cooperative Study Abroad Program (CSAP) was officially launched within the Training Area and seven courses were developed with universities in the United States, Canada and Europe in 2008. M.Sc. Elena Florian

was named Training Area assistant and CSAP coordinator as part of the process to strengthen the technical team. A page was developed on CATIE's Web site to publicize the program. In addition, a course in tropical ecology was developed jointly with the Organization for Tropical Studies. As a result of CSAP efforts, 16 other universities have indicated interested in developing similar programs at CATIE.

Orton Memorial Library

Orton Memorial Library served more than 10,000 onsite users and 167,000 virtual users in 2008. Its bibliographical catalog reached more than 85,110 records with some 4,400 full-text documents available. A total of 37,755 pages were scanned.

The virtual library sold 1,756 IICA, CATIE and associated organizations publications. In addition, the Cocoa Agroforestry Resource Center, funded by ICRAF/CATIE, was strengthened.

The library's collection was kept up to date as a result of the purchase of 36,026 technical and scientific papers, both in hard copies and electronic format, plus subscription to 90 hard-copy and online scientific journals and 200 exchange publications. In addition, two international full-text and reference databases were acquired: CABI and TEEAL (Essential Electronic Agricultural Library of Cornell University in the United States). Also, agreements exist with prestigious universities that complement the information services offered to users in member countries.

The library completed its first phase of modernization with the CATIE/ARS (Agricultural Research Service) project of the U.S. Department of Agriculture/National Agricultural Library (USDA/NAL) to preserve the Orton Inter-American Collection and improve its infrastructure. All of the metal bookshelves were renewed, the entire collection was cleaned and documents were repaired and preserved. The *Turrialba* magazine is now available in full text and indexed through AGNIC and Google browsers, thanks to USDA/NAL financial support.

Training and virtual courses

The library gave 35 courses to 800 participants, including two virtual courses offered in English: Information Resources and Services for the Agricultural Sector in the Caribbean and Digital Library Building and Management. We continue to provide training on accessing information products and services, software handling and computer programs related to our fields, including intellectual property rights.

Physical infrastructure and technology

Library infrastructure was improved with a remodeled conference room and audiovisual rooms (the latter complete with air conditioning, electric screen, furniture and blinds.) Reading rooms were modified, chairs and windows repaired, electric outlets were placed in research areas to accommodate use of laptops, wireless networks were installed and inner gardens were renovated. In recognition of Laura Coto's 30-year service to the library, the main reading room was named for her and a commemorative plaque was dedicated.

Project proposals

Project proposals developed to improve both service and infrastructure were sent to major donors, including Elsevier Foundation, USAID-ASHA and the British Embassy. Our strategic alliance with USDA resulted in a pilot project launched through the use of DIGITOP, a scientific information platform of the National Agricultural Library (NAL), to be evaluated in 2009. In addition, we collaborated in development of the 2010 NAL thesaurus in Spanish. Negotiations were conducted with Google to digitalize IICA and CATIE's collections, starting in March 2009.

SIDALC

Since its beginning in 1999, the Agricultural Information and Documentation Service of the Americas (SIDALC, Sistema de Información y Documentación Agrícola de América Latina y el Caribe) has focused on meeting the information needs of the scientific community, students, development agencies, businesspeople and rural actors. Agri2000, a metadatabase of agricultural, data was developed as well as nondocumentary resources from various agricultural services and information systems, which serve as the base for the Agricultural Information Finder. These two constitute the Virtual Agricultural Library.

Ninety-four databases were updated at SIDALC in 2008 and 48 new databases were included. SIDALC has now 265 databases, 2,155,266 entries and more than 88,000 full-text electronic resources. The number of visitors has grown dramatically as a result of indexing with the Google browser, from a few thousand per year to about 7 million visitors and more than 14 million pages visited. Currently, 158 Latin American and Caribbean organizations share their information in Agri2000, one of the largest agricultural information networks in the world. Two metadatabases were developed as byproducts of Agri2000 for the agricultural information networks of Mexico and Costa Rica.

Biometrics Unit

The Biometrics Unit provided statistical information and methodological support to CATIE students and researchers. At the same time, statistical software has been continuously developed that is highly useful not only to CATIE researchers but also to those in other organizations throughout the region and worldwide.

The most important packages are

- InfoStat (database management and analysis) www.infostat.com.ar
- SeqSam (software to develop sequential sampling plans) <http://agro.uncor.edu/~estad/SeqSam.exe>
- F-diversity (to analyze functional diversity) <http://sites.google.com/site/functionaldiversity/>

The unit was principal researcher for the following projects:

- Biodiversity in Fragmented Livestock-Dominated Landscapes, financed by the World Bank and the Netherlands Bank, 2005–2008.
- Functional Biodiversity Effects on Ecosystem Processes, Ecosystem Services and Sustainability in the Americas: An Interdisciplinary Approach, financed by the Inter-American Institute for Global Change Research—IAI, 2006–2010.
- Clean Stock Program, financed by the government of Costa Rica, 2006–2008.

Three courses were taught to provide our researchers with the growing number of statistical methods for analysis of information, in addition to teaching the required course for the Graduate School. We managed the data analysis and methodological supervision of projects and thesis research for more than 120 students.

5. Research and Development Division

The structure of this report reflects the major goals defined by the 2008 Annual Operating Plan for the two former departments of Agriculture and Agroforestry and Natural Resources and Environment, which were brought together in the new Research and Development Division (DID), created as a result of the reorganization that began in 2008 with the new director general.

Some of these goals have been integrated into this report on the progress made in 2008 on the six key responsibilities of the DID, along with information from 2007. The details of achievements in scientific research and technical assistance are presented in the Technical/Scientific Reports of the thematic groups, which were converted into programs in 2009.

CATIE as a Scientific Platform

CATIE intends to establish itself as the best option and base in Central America for the generation of regional research and development programs focused in the interface between agriculture and natural resources. The contributions of scientists and other professionals from partner organizations are fundamental for CATIE's education and training programs. In 2008 advances were made in the following areas:

- The Scientific Partnership Platform (PCP) established with CIRAD (five scientists based at CATIE), Bioversity (two scientists), CABI (one scientist) and participation by INCAE and PROMECAFE
- Negotiations for a new agreement with Embrapa, which it is hoped will place Embrapa scientists at CATIE
- Establishment of a special relationship and specific initiatives with CIAT, for example, forage species
- Making CATIE a regional center of CGIAR has been discussed with the CGIAR Scientific Council, Secretariat and others
- Negotiations with NIVA (the Norwegian Institute for Water Research) for the establishment of its regional office in CATIE
- Work with NINA (the Norwegian Institute for Nature Research), strengthening links with two new projects, a new proposal (to the European Union) and joint supervision of students

- Recognition of CATIE as a strategic regional center for the conservation of germplasm, including negotiation and implementation of two joint projects financed by the Global Crop Diversity Trust
- Collaboration with INIA, Spain, for INIA to use CATIE as a strategic partner in its regional initiatives with the National Agricultural Research and Technology Institutes (INIAs) in Latin America
- Two collaboration platforms/mechanisms (Latin American and Caribbean Environmental Economics Program—LACEEP, Environment for Development Program for Central America—EFD), developed by the Governance and Socioeconomics of Environmental Goods and Services (GSEBSA) Program on issues of environmental economics (and policies) to establish closer ties with scientists and organizations worldwide
- Strengthening of the Ibero-American Network of Model Forests, whose presidency and management are based at CATIE headquarters, supporting more than model forests in 12 countries.

CATIE and Its Work with the Private Sector

In 2008, CATIE sought various initiatives to increase its links with the private sector (commercial) through various initiatives:

- The new Central American Cocoa Project (PCC), involving 10 cooperatives and associations in six countries, focused on improving the value chains for this sector
- Negotiations for a project with the semiprivate National Coffee Institute of Costa Rica (ICAFFE) for the semicommercial reproduction of improved varieties of coffee (the F1 hybrid)
- Development with Nestlé of a concept for a medium-term program to improve cocoa
- Negotiations with the International Finance Corporation (IFC) of the World Bank-ECOM-Nestlé for the participation of CATIE in different activities of a Central American program to improve the coffee sector
- Discussions with the German Cooperation Agency (GTZ) on a possible participation in a public-private partnership project for the coffee sector in Nicaragua, Mexico and Peru, including training and adaptation to climate change

- Development of links with the Central American Bank for Economic Integration (CABEI) to support different commercial agricultural groups that could contribute to the conservation and management of biodiversity and that will receive loans from CABEI (for example, with the Local Development Fund (FDL)–Nitlapan, support to Nicaraguan cattle producers in the Muy Muy zone, site of the CATIE Recuperation of Degraded Pastures project)

Development of the Mesoamerican Agronenvironmental Program (MAP)

CATIE intends to position itself as an exemplary institution in the areas of research, development and education on intersectorial and territorial issues, with interdisciplinary approaches and genuine integration. MAP, which illustrates these characteristics, is a banner program of this division and of CATIE. In the future we hope to replicate MAP (for example, in South America). In 2008, we completed negotiation for support to MAP from Norway and Sweden, and significant progress was made with other partners, in particular Finland.

The main achievements were

- Conclusion and approval of the proposal to implement MAP
- Workshops in six countries to discuss MAP with strategic partners and promote the establishment of National Advisory Committees
- Ensuring the full involvement of the Office of Outreach and Development and the NTOs in the presentation and discussion of MAP (and the plans for MAP regional projects)
- Signing of agreements with Norway to support MAP (US\$20 million/four years) and with Sweden (for MAP, US\$2.5 million/three years; extension of Focuecas, \$1.7 million/two years)
- Elaboration of eight concise guidelines to channel the use of MAP funds through competitive funds, funds channeled through the NTOs, etc.
- Numerous presentations about MAP in Central America, in international forums, in the United States, at CATIE, and in six European countries, to promote this holistic and intersectorial approach
- Negotiations conducted with Finland leading to the Finnish government's request for a proposal for a regional forestry project as a component of MAP (US\$8 million/three years)

MAP program objective

Local, national and regional organizations have the tools, knowledge and competence to implement technological innovations, policies and programs to develop and promote sustainable land management that improves rural livelihoods.

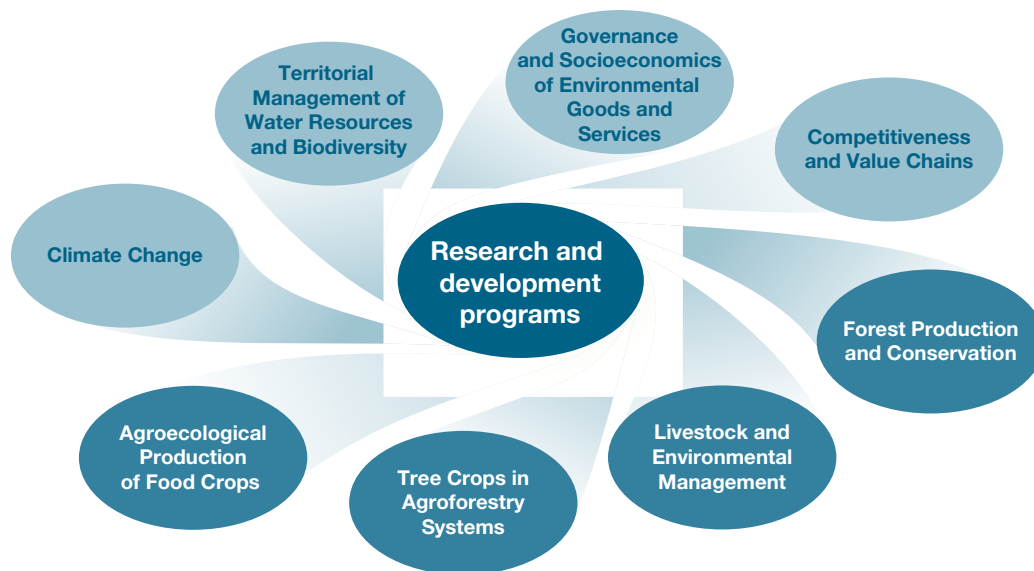
- Negotiation and signing with Norway and Sweden of a Code of Conduct (guidelines for international cooperation with CATIE), to ensure greater accountability (and recognition) of CATIE in the management of donor funds for research and development in the Central American rural sector

Implementation of CATIE's New Research and Development Structure

Among the numerous measures taken to improve integration of the different sections of CATIE to offer a more holistic, interdisciplinary, efficient and effective service to its partners and clients, the previous technical/scientific departments have been restructured and integrated, together with regional outreach (NTOs).

Actions and achievements include:

- Organization of numerous internal workshops and meetings, especially among directors and with leaders of programs and projects, to ensure participative development of the new structure
- Elaboration of terms of reference for the principal posts in the Research and Development Division and a new organizational chart/matrix that promotes internal integration
- Participation of the Outreach and Development Office with the programs (former thematic groups) to develop new concepts and guidelines (for example, to manage MAP funds)
- Beginning of a change in the way that the NTOs work and other initiatives to change the institutional culture, seeking more integration
- Start of the process to integrate the two departments and their technical/scientific staffs (for example, collaboration of both groups in preparation of MAP proposals for the forestry component (FINNFOR) and a follow-up to Recuperation of Degraded Pastures project (Sustainable Management of Agricultural Lands in Mesoamerica, or MESOTERRA)
- Reduction in the number of thematic groups (programs) from 10 to eight, in keeping with the recommendations of previous external evaluations
- Formalization and recognition of the value of the matrix nature of CATIE's existing structure, with four



programs centered on production systems (agricultural and forestry sectors), intersected by four cross-cutting programs (socioeconomics, environmental services, etc.)

- Realignment of some thematic groups (now programs): 1) integration of the coffee and cacao groups in the program Tree Crops in Agroforestry Systems (CASA); 2) integration of work with coffee and cacao phytogenetic resources (formerly under the MURF Thematic Group) in CASA; 3) emphasis on adaptation to climate change as well as mitigation in the former Global Change group, now the Climate Change Program; 4) transition of GAMMA into a program that continues to support the livestock sector but with an increasingly environmental, intersectorial and crosscutting approach.

Development of New Projects/Proposals

One of CATIE's principal goals is to provide innovation and leadership in the introduction of new concepts, methodologies and technologies in the member countries. MAP offers an avenue for attaining this goal, while at the same time other CATIE programs continue to generate additional initiatives that nourish the center's research, development and educational activities and of the member countries.

Examples of this in 2008 include:

- FINNFOR (MAP forestry program): the CATIE forestry program, in conjunction with colleagues from other programs, has devoted an enormous

effort in developing FINNFOR, which includes four forestry/agroforestry components focused on eliminating or reducing the political, economic, social and technological barriers to the success of the Central American forestry sector.

- Sustainable Management of Agricultural Lands in Mesoamerica (MESOTERRA): the preparation of this proposal has involved four programs (Territorial Management, Climate Change, Tree Crops in Agroforestry Systems, Livestock and Environmental Management) in developing ideas on how Central America's agricultural/livestock sectors could respond to the challenges related to land degradation and the threat posed by climate change.
- The preparation and approval of several proposals centered on how to manage and improve the environmental services of agroforestry/fragmented landscape systems, especially in the perspective of the conservation and management of biodiversity—for example, with the Norwegian Institute for Nature Research (NINA).
- The approval of a final phase of Focuecas for dissemination of the lessons learned from this innovative project on joint management of natural resources, in particular water resources.
- The very successful conclusion of the agroecological component of the Prodesis project, to train rural extensionists in 100 communities of Chiapas, Mexico. The latter is an example of how CATIE has worked with IICA and CIRAD in outreach and training. Several new initiatives in Mexico and Central America have been proposed based on the approach and experience developed by Prodesis.

Impact on the Political and Legislative Framework at Local, National and Regional Levels

CATIE's donors and partners have supported an increase in the efforts to improve the institutional, economic, social and political framework within which CATIE, through technological and methodological interventions, seeks to achieve impacts such as reducing poverty and conserving the environment. Several CATIE programs and projects (for example, Governance and Socioeconomics of Environmental Goods and Services Program, the Central American Cacao Project and Focuecas) have contributed to this. At the divisional level, principal activities and achievements include:

- Regional Agroenvironmental and Health Strategy (ERAS): CATIE directors, principal personnel and consultants have made significant contributions to this Central American initiative, which was approved by the presidents in 2008 and which should lead to a greater recognition and use of intersectorial approaches in member countries of the region (MAP was designed, in parallel, to support the implementation of ERAS).
- Regional Climate Change Strategy: CATIE was appointed by the Central American Commission for Environment and Development (CCAD) to coordinate the technical development of this Central American strategy and the center's directors, scientists and consultants have developed a proposal, with guidelines on how to prepare this ambitious initiative, that has involved the participation of many sectors of society.
- Communications and Policy Unit (CPU) of MAP: design and definition of the CPU work program was initiated; the central objective of this unit is to help CATIE's programs and projects contribute knowledge, scientific background, concepts and methodologies toward improving legislation, especially that related to management of agriculture, forestry and natural resources).

Brief Summary of Outstanding Projects

The Scientific Partnership Platform (PCP, French acronym) "Agroforestry Systems with Perennial Crops in Mesoamerica," established in 2007, organized and hosted the II Symposium "Multistrata Agroforestry Systems with Perennial Plants" at CATIE headquarters in September 2007, with 140 participants from 26 countries. Financing was from the French Embassy in Costa Rica, the World Cocoa Foundation, and Nestlé, among others.

The Special Coffees project (World Bank-Japanese Social Development Fund) ended with great success after three

years of supporting coffee cooperatives in Guatemala, Honduras and Nicaragua to improve the quality of their products, the efficiency and effectiveness of their organizations and their integration in value chains geared to certified niche markets. Impacts include training 2,000 farm families in ecological and quality management and assisting eight cooperatives to become certified by Rainforest Alliance, CafePractices or Utz Kapeh. In addition, 14 cooperatives received assessment on quality control and more than 40 in administration, financial management and marketing. The principal achievement was formation of the new coffee marketing cooperative CORECAFE in Honduras, where many cooperatives had no access to this service. Part of this work continues with the help of the Innovations-Coffee project, which is part of MAP.

A new project was established in Costa Rica, Guatemala and Nicaragua focused on added value of coffee in agroforestry systems. The project Connecting and Sustaining Environmental Services and Markets for Coffee in Agroforestry Systems (CAFNET) is a collaboration among CIRAD, ICRAF and the University of Wales-Bangor in Central America, East Africa and India, financed by the European Union. CATIE manages activities in Central America and has involved institutions such as ANACAFE, Defensores de la Naturaleza, CAFENICA, FONDEAGRO, Nitlapan, MARENA, Rainforest Alliance and Starbucks. Priority areas were established taking into account their importance in connectivity within the Mesoamerican Biological Corridor.

To promote adoption of good practices on livestock farms, the Silvopastoral-GEF project demonstrated that payment for environmental services to livestock farmers over a four-year period has a strong impact on increasing forest cover on these farms. In Colombia, results of this project captured the interest of the National Federation of Livestock Producers (FEDEGAN) and other national institutions to replicate the lessons of the project at the national level, designed to intensify livestock production through silvopastoral systems, which permits the protection of zones having a priority for conservation. In Nicaragua, it contributed to the design and implementation through the Local Development Fund (FDL) of a green credit program for livestock producers, using environmental indicators generated by the project.

The Livestock and Environmental Management group began work with Rainforest Alliance to development norms for certification of sustainable cattle production, the first of its kind in Latin America.

The Phylogenetic Resources group increased distribution of CATIE germplasm to reach development institutions,

national programs and producers in member countries as well as distribution to organizations and researchers outside the region. With support of a documentation expert from INTA in Argentina, the database of CATIE's germplasm collections was deputed for the first time and all data from the collections was moved to DBGERMO software, which supports germplasm collections in management of information. Personal in the Seed Bank were trained in the use of DBGERMO.

Another achievement within the Phylogenetic Resources group has been work with genetic material from the International Cacao Collection through the Cacao Genetic Improvement Program to obtain genotypes with high productivity and quality along with resistance to disease. The group manages the 17-hectare cacao collection and continues to work in deputation of the collection using molecular markers and the corresponding documentation. Elite materials, generated and selected through the program, are in the process of validation in experimental stations and with producers in Costa Rica and other Central American countries (Central American Cacao Project).

The group also contributed significantly in the elaboration of a new document on CATIE policies on intellectual property rights and an agreement on transfer of genetic materials improved at CATIE. Both documents were approved by the Scientific-Academic Committee of the CATIE Board of Directors in its XXXI Ordinary Meeting.

The Latin American Chair on Ecological Management of Forests and Biodiversity and the Latin American Chair on Territorial Forest Management have worked actively in developing tools for management of natural resources at the landscape scale. The Ecology Chair has played a key role in elaboration of a manual for monitoring the ecological integrity of national parks and biological corridors in Costa Rica. The issues presented in the document are expected to be implemented over the next years by the National System of Conservation Areas (SINAC) in collaboration with The Nature Conservancy.

The FORMA project in the Climate Change Program disseminated concepts and methodologies about emissions reduction via forest plantations, agroforestry systems and bioenergy projects. It also supported the design of 10 forestry projects in seven countries of Latin America under the Clean Development Mechanism (CDM); tools and guidelines were developed to facilitate the design of this type of project as well as guidelines to help project developers know about and understand the regulated and voluntary market for emissions reduction certificates. Through alliances with key institutions such as the World Bank, the work group on forestation and reforestation of the United Nations Framework Convention

on Climate Change (UNFCCC) and evaluator of Tüv Süd forest projects, demonstrated that the tools developed in the Climate Change group were being used worldwide (including some certified). Additionally, in alliance with the World Bank, this program contributed to creation of baseline and monitoring methodologies for forestry projects that was approved by the Board of Directors of the CDM. It is an enormous contribution to the promotion of this type of project.

The Center for the Competitiveness of Ecoenterprises (CeCoEco) made important advances toward conclusion of the Forestry SMEs project (CATIE/FOMIN), which it directed, and the establishment of its second phase. The most important achievements were development of tools and technical guides for marketing of timber products and the analysis of markets for agricultural and forestry ecoproducts to update and broaden the Platforms for Promotion of Ecoenterprises: Forest EcoBusiness and AgriEcoBusiness.

CeCoEco concluded a consultancy about rural community business worldwide for the Ford Foundation in collaboration with the University of London (Ford I). A second consultancy for the foundation with emphasis on the impact of value chains on poverty reduction, also global (Ford II), was approved.

The major efforts and achievements of the Territorial Management of Water Resources and Biodiversity Program have been tied to the Focuecas II project, which implemented an action-research program in four model watersheds in Nicaragua and Honduras. Research and technical assistance in these watersheds were integrated with other scientific programs under a common agenda involving active participation of students in CATIE's Master's Program with the researchers. At the same time, the program responded to the interests of local water committees, who expect to apply the results in the following areas:

- Local institutions—local organizations and government, watershed organizations, committees, councils, water tables, local development agencies, private enterprise
- Planning and monitoring systems—co-management plans, management plans, municipal development plans, viable monitoring systems for local actors
- Systems and mechanisms for local financing—forms of administration, rates and fees, payments for environmental services, link to credits, links to national funds, administrative and transaction costs
- Territorial management of critical recharge zones and areas of environmental risks—territorial regulations, protection, mechanisms for management at a territorial level, appropriate use
- Scaling—institutionalization of co-management of watersheds at the national level and at the territorial level

6. Outreach and Development Office

CATIE's Outreach and Development Office (DPD), with Jorge Jimenez as director in 2007–2008, carries out its activities through its central office at headquarters and the National Technical Offices (NTOs) in Guatemala, Honduras, El Salvador, Nicaragua and Panama. Offices are being set up in Paraguay and Bolivia, and there are institutional managers in Colombia, Venezuela, Dominican Republic and Belize (in the latter together with the IICA office).

The DPD develops activities in the countries along two main lines of work: 1) institutional cooperation and outreach; and 2) project management with donors or through competitive bidding processes. This report provides a summary of the achievements, expectations and goals.

This report is a summary of goals and achievements, focused mainly in 2008 with the redefinition of the outreach function at CATIE.

Outreach and Development Strategic Plan

The DPD Strategic Plan was prepared based on a participative process, in keeping with CATIE's strategic guidelines and its new structure and institutional goals; the plan was presented to the Board of Directors and approved in October 2008. Then the NTOs developed a work strategy for their respective countries, which has served as a basis to prepare of the 2009 annual plans. All plans were developed taking into account the strategic and operative elements of the Mesoamerican Agroenvironmental Program (MAP). The DPD projects the actions of CATIE's research, education and technical cooperation in the countries. The DPD strategic plan has four objectives and basic functions:

- CATIE strengthens its presence and improves its institutional position in the member countries and the region
- CATIE cooperates and takes adequate action in its areas of expertise in the countries of the region
- The different technical, academic and political audiences in the region have adequate access to knowledge generated by CATIE
- The entities within the DPD and others at headquarters work in a coordinated and integrated manner.

Coordination and Integration

At the regional level integration efforts were made through participation in different bodies, especially the Central America Integration System (SICA). In the Regional Agroenvironmental and Health Strategy (ERAS), DPD took part in the Inter-Agency Advisory Committee, coordinating actions and providing support in the process of planning and definition of goals. It participated as a member of the Central American Integration System for Agricultural Technology (SICTA), providing support for planning and monitoring. The development of the new CATIE-IICA-SICTA agreement, regulating joint cooperation as of 2009, should be underscored. Support was also provided in developing the profile for the Regional Climate Change Strategy—the strategy is to be prepared in 2009 with CATIE's support.

Joint integration missions have been carried out with IICA, with the participation of senior management staff from CATIE. These have allowed us to make headway on agreements concerning joint actions with IICA in the countries, for example in El Salvador, Paraguay, Belize, Dominican Republic and Bolivia.

Internally, the transfer of the DPD to headquarters has allowed us to improve interaction with the scientific programs, MAP and the management committees. Specific actions include:

- Integration into the MAP program; organization/participation in consultation workshops
- Integration into the Communications and Policy Unit
- Participation in the formulation of guidelines and integrated Annual Operating Plans (MAP)
- Facilitation of technical cooperation activities
- Increase in response to country requests
- Expansion of joint actions between NTOs and programs
- Coordination between the NTOs in Nicaragua, Honduras, El Salvador and Guatemala (horizontal integration)
- Improvement in reporting systems and application of norms and procedures

Table 6.1. Outreach and Development Strategic Plan

Strategic objectives	Outreach and Development work strategies
1. Enhancing the presence and positioning of CATIE in the countries and the region	<ul style="list-style-type: none"> • Creation and functioning of a National Advisory Committee • Preparation and execution of national strategies • Preparation and dissemination of reports and rendering of accounts at the national level • Active participation: networks, processes, committees, meetings, etc. • Collaboration with IICA: technical cooperation, partnerships in competitive bidding processes and projects, establishment of NTO (with/IICA)
2. Cooperation and impact in areas of competence	<ul style="list-style-type: none"> • Organization of relevant national and regional events, contributing to capacity development • Response to requests, based on agreements with shared contributions and institutional capacities • Participation in policy decision-making bodies with results, positions, and proposals. (strategies, impact) • Establishment of a database of national experts
3. Our target audiences and partners have adequate access to products and services	<ul style="list-style-type: none"> • Active participation in communication and development strategy of national components; joint activities with CPU/MAP in the dissemination of the products • Gather and forward to CATIE norms, policies, studies and results of key related research, etc. • Increased links with regional bodies, especially the Central American Integration System (SICA) and with institutions, associations, graduates, etc.
4. Coordination and integration among CATIE offices	<ul style="list-style-type: none"> • Improvements in the use of existing coordination mechanisms, intensive use of the MAP connection, increase in the interaction among NTOs through regional projects • Increase of the search for scholarship agreements • Coordination to share and formulate common agendas among countries, to be applied jointly with regional bodies • Maintenance and improvement of the current administration and accountability systems

Follow-up with Memberships

Support was provided to the Office of the Director General to provide follow-up on memberships and develop arrangements for the payment of quotas in arrears by drawing up guidelines for the preparation of payment arrangements based on institutional interests and regulations. Specific progress was the payment agreement reached with Panama allowing 12 students to enroll for 2009, a proposed arrangement with Colombia and an addendum with the Dominican Republic. Additionally, a partial payment was made by Guatemala. Income from quotas totaled \$909,851 in 2008; of this, \$600,000 corresponds to quotas in arrears. This amount represents an increase of 50% over the total received in 2007.

- Nourish the system for institutional decision making with up-to-date, relevant information and receive feedback on needs and demands
- Support scientific programs and their research and development projects as well as the CATIE Division Education so that their actions in the countries are strengthened and carried out satisfactorily
- Disseminate to CATIE’s audiences institutional products and services (publications, strategic courses, the Graduate School, execution of research and development projects and others) and facilitate operational access to them
- Efficiently execute and support the provision of CATIE services (technical assistance, training, bids for development projects, etc.)
- Apply institutional management systems efficiently and with transparency (technical, administrative and financial)

Performance of National Technical Offices

The basic institutional functions of the National Technical Offices (NTOs) are

- Represent CATIE in all its dimensions in the countries of the region under its mandate, giving opportune responses to the demands and needs of each country, according to the institutional vision and mission
- Facilitate the positioning of CATIE in its area of mandate through diverse mechanism (participation in round tables, meetings, congresses and others) to promote coordination and collaboration with partners and influence policies directed to improve the lives of rural people

The greatest advances have been in internal integration and in the initial steps for joint actions in horizontal integration. The opening of the office in Paraguay (with IICA) and the progress made in Panama are important achievements. The financial situation of the offices is stable, with a noteworthy financial recuperation in the office in El Salvador, Nicaragua and Panama. The contributions to the core budget and to programs and graduate programs can be seen in table 6.2.

Table 6.2. NTO Support and financial position

Technical office	Support to core	Support to programs and Graduate School*	Technical cooperation*	Total	NTO financial position	
					2007	2008
Guatemala	100.000	4.500	8.750	113.250	161.192	91.579
Honduras	5.000	34.600	21.500	61.100	12.791	21.608
El Salvador	5.000	14.500	10.900	30.400	-32.718	22.773
Nicaragua	5.000	56.900	98.300	160.200	-8.104	9.300
Panama	1.500	40.400	8.000	49.900	-1.474	15.012
Total US\$	116.500	150.900	147.450	414.850		

*Estimations

Table 6.3. Project and management execution, headquarters and technical offices, 2008

Outreach office and technical offices	Projects executed	Projects approved or in execution	Regional projects supported by NTOs*
Headquarters DPD	6	2	-
Guatemala	18	10	5
Honduras	7	7	6
El Salvador	28	22	1
Nicaragua	3	1	7
Panama	4	3	1
Total	66	45	20

*Financed by cooperation, coordinated by scientific programs and executed in two or more countries.

The Opportunities Management Unit

The DPD project management unit responded to requests received by NTOs in the countries and also took part in open competitions, as well as public and private bidding processes and other forms of administrative contracting announced through other means. In the case of regional initiatives, these opportunities are channeled according to the topic to programs, groups or specialists at headquarters; local or national initiatives are channeled to the NTOs. In both cases, the unit supports the preparation of expressions of interest and formal proposals, follow-up during negotiations and technical and administrative support during project execution.

Management of national and regional projects has allowed the DPD to expand activities in the countries and to increase joint actions with national and international partners that are implementing activities in the region. The management of opportunities has led to an increase in the level of response to requests from the countries and an increase in the adoption of methodologies developed and/or promoted by CATIE through the projects and activities executed in each country (table 6.3).

Investments in the Countries

In 2008, DPD attempted for the first time to calculate the contribution made in the countries through the different agreements, projects or other technical cooperation activities, including direct contributions,

Table 6.4. Summary of investment by country during 2008

Country	Salaries	Operations	Total US\$
Belize	21.668	153.809	175.477
Bolivia	32.744	55.066	87.810
Colombia	66.480	196.659	263.139
Dominican Republic	19.315	151.414	170.729
El Salvador	547.676	491.845	1.039.521
Guatemala	1.062.705	2.946.721	4.009.426
Honduras	857.978	1.087.944	1.945.922
Mexico	119.241	319.693	438.935
Nicaragua	1.459.449	1.718.305	3.177.754
Panama	184.328	178.657	362.985
Paraguay	11.200	41.024	52.224
Venezuela	1.512	29.039	41.963
Total US\$	4.384.296	7.381.589	11.765.885

core financing, funds generated, projects executed and indirect contributions in technical assistance and training by the staff at headquarters. Direct contributions were considered according to the cost centers of the projects executed by the offices and the regional projects, while indirect contributions summarize the contributions made in technical assistance and training, according to authorizations and payments of international trips (based on the number of days applied).

Significant differences can be observed in the summary of the contributions made (table 6.4), the products of the regional projects and the application of funds from donations through CATIE (Guatemala). Clearly, the contributions have been higher in countries with better positioning, where we have offices.

It is worth noting that 45% of the institutional efforts in research and education is invested in direct actions in the member countries. Only 37% is applied to salaries.

Conclusions

In summary, we conclude that 2008 was a year during which a successful adjustment was made to comply with the basic functions of CATIE in the area of technical cooperation. This was due not only to the strategic reassessment of the Outreach and Development Office and to the work strategies in the countries but also to the positive attitude of the leaders of the NTOs and of CATIE's programs and projects. Another strategic element has been the implementation of MAP, which is, indisputably, a strategic program reflecting the integrating and facilitating nature of CATIE the work in the Mesoamerican region. In 2009, DPD has set indicators or goals that contribute to the larger institutional goals, and in this regard 2008 will be considered the baseline year.

7. Commercial Division

As of May 5, 2008, for the first time since its creation, CATIE had an administrative structure that seeks to strengthen commercial activities, promoting improved efficiency and productivity and the generation of resources to support the institutional mission and vision.

In order to look for new alternatives to improve efficiency and new options for production, the new Commercial Division analyzed strengths and weaknesses of its components: the Forest Seed Bank, (BSF—Banco de Semillas Forestales), the germplasm collections and Botanical Garden, the commercial farm, La Lola farm and housing facilities (figure 7.1).



Figure 7.1 Commercial Division components

Achievements

Forest Seed Bank

Seed sales continue to grow, with income amounting to \$692,304.48 as of Dec. 31, 2008 (a 13.9% increase over 2007.) At the same time, operational costs declined, thus improving profits (figure 7.2).

Total seed sales amounted to 15,613 kilograms, with teak seed accounting for 63% and melina seed accounting for 32%. For the first time, melina was the species making the largest contribution to total income (43%) as compared to teak (37%). These results stem from the superb management of the melina clonal seed bank (Farm

Vision

The Commercial Division becomes a motor for generation of resources to support CATIE's vision and mission, with ideas and work plans aimed at achieving greater efficiency in use of resources (human resources, capital, infrastructure, equipment and others). Better alternatives for sustainable production will also be sought to ensure minimum environmental impacts and to cultivate innovation. Each of its activities, carried out by a committed, motivated staff, should serve as a model that can be replicated at the community level and by society as a whole.

XA) acquired in 2006, which has significantly increased production at very low costs. In 2008, 3,471 kilograms of seed were collected and processed, 55% more than in 2007 and an accumulated growth of 475% compared with 2005 (603 kg). The genetic quality of the melina seed is well-recognized, so reforesters are willing to pay higher prices for the guarantee of quality and outstanding tree growth, key factors in long-term projects.

In 2008 CATIE negotiated with the Costa Rican Electricity Institute (ICE—Instituto Costarricense de Electricidad) the imminent flooding of the area where the seed bank is located due to construction of a new hydroelectric power plant. An analysis of actual and potential current costs and income was conducted to serve as the basis for negotiation. To ensure their survival, these materials are being relocated; to date, 90% of the materials are at CATIE's farm in Turrialba.

A four-year agreement to provide seeds to CONAFOR in Mexico was signed in 2008; that year 4,744 kilograms of seed from four tropical species were delivered, worth US\$240,018.

Normal seed collection and processing of other commercial species continued, as well as marketing and the recuperation and management of important sources of seed developed earlier under various genetic improvement projects conducted at CATIE.

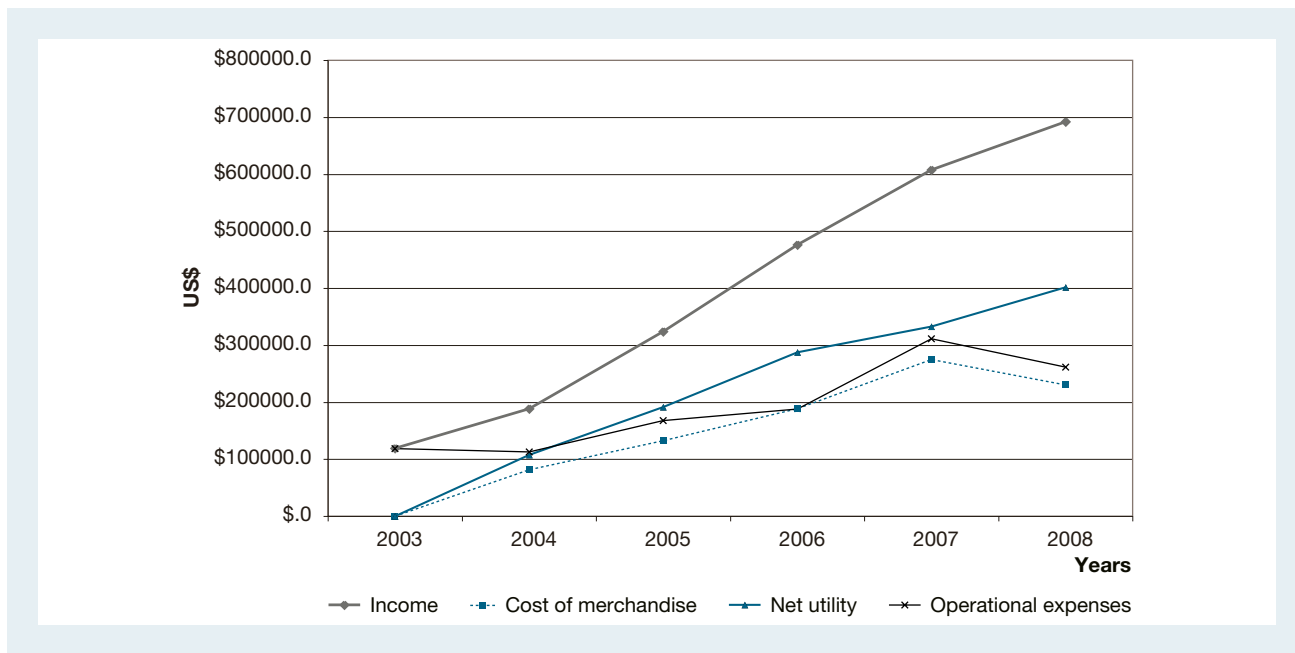


Figure 7.2 Forest Seed Bank income and expenses

In coordination with Research and Development Division staff, new alternatives for generation of resources are being analyzed, such as selling melina clonal material and products for biological control of pests. Also, *Jatropha* sources are being tested to provide better-quality seed in the near future for this species that has high potential for biofuels.

Botanical Garden and germplasm collections

In addition to maintenance of the collections, elaboration of a master development plan was initiated that involves improvement in both staff and infrastructure.

A number of new activities focus on turning the Botanical Garden into an educational park to increase income, reach out to communities and provide visitors with learning opportunities. In 2008, some 4,689 people visited the Botanical Garden—this figure does not include students from public schools who visit under the CATIE-Ministry of Education Cooperation Agreement.

The Office of the Director General created a support committee for management of the collections, made up of staff from the Commercial Division and the Research and Development Division. This committee has facilitated maintenance and regeneration of the collections and has participated in proposal development. A proposal submitted to the Global Crop Diversity Trust to recover the *ñame* collection (*Dioscorea* spp) was approved. This is

in addition to the trust's support for recuperation of other collections conserved in cold chambers and in the field. Because of this successful relationship, a proposal seeking permanent support will be sent to Global Crop Diversity Trust in early 2009.

Housing

A current challenge is that of improving housing infrastructure, which will increase income, provide better service and prevent a level of deterioration that limits opportunity for infrastructure recovery.

Income for 2008 amounted to US\$616,565 and activity costs, including accounts receivable, equaled US\$350,517. Thus, net income plus investment amounts to US\$266,047, 15% more than in 2007. These costs do not include depreciation or central administration expenses.

Replacing equipment began at the laundry facility, which serves both graduate students and housing. Maintenance and repair work was conducted at several of the housing units, including the director general's house.

An analysis of hotel occupancy was carried out, and a strategy to improve occupation in the low season will be tested in 2009. The possibility of using existing housing facilities at La Lola farm are being explored, which could be targeted for tourism activities related mainly to cocoa production and cocoa collections.

Commercial farm

In addition to reviewing reports of the Finance and Administration Office, the internal audit and those prepared by the farm manager, a detailed study was requested for the sugar cane and coffee activities, with information on production per lot and costs. Areas were remeasured in order to identify per-lot profitability and corrective measures to be taken in 2009.

A review of reports revealed a series of problems accumulated over the years to be resolved as soon as possible. For instance, some equipment is more than 20 years old, is not fuel-efficient and has high maintenance costs and low efficiency. Sugar cane yield per hectare was found to be quite low, not even reaching 60% of previous years' yields. An in-depth analysis must be conducted for all production activities, fertilization programs, weed control, crop management and other technical issues.

These conditions resulted in very low/negative profitability in most farm activities. Total income in 2008 amounted to US\$723,370 with expenditures amounting to \$616,914 (including accounts receivable) for a net income equal to only \$106,456. This income accounts for less than half of that obtained in 2007 and does not take into account

depreciation and central administrative expenses (table 7.1). Efforts in 2009 will focus on rectifying the current situation and to develop new alternatives for production in the middle term, finally transforming it into a model farm.

The 2008 budget was analyzed to identify and prioritize farm necessities, mainly as a result of the nearly \$33,000 deficit resulting from a huge increase in the cost of farm supplies and also to explore possibilities for investment.

New production alternatives are being sought. A work plan will be developed in 2009 including analysis of production alternatives as well as efficiency of current activities.

An agreement was signed with the Natural Resources Defense Council (NRDC), an American NGO, for reforestation on a 30-hectare plot. NRDC is providing US\$30,000 the first year for planting and maintenance, with a variable annual contribution for maintenance for 20 years, for a total amount of \$55,050.

An inventory of the forested area of the farm, basically of existing plantations, was initiated to define management needs and a plan for cutting and planting, as well as to improve the sawmill.

Table 7.1 Balance of income less expenses for commercial activities of the commercial farm

Activity	Expenses	Income	Balance
Coffe	\$84.373	\$37.454	-\$46.918
Cane	\$243.837	\$284.661	\$40.824
Forestry	\$57.611	\$78.857	\$21.246
Beef	\$2.869	\$8.498	\$5.629
Rents	\$6.841	\$24.000	\$17.159
Milk	\$216.354	\$289.900	\$73.546
Totals	\$611.885*	\$723.370	\$111.485*

*Does not include accounts receivable of \$5,029

8. Corporate Services Office

CATIE's Corporate Services Office (DSC—Dirección de Servicios Corporativos) was created in May 2008, with Josué Díaz as director, and began by first conducting an examination of CATIE's general situation and then the areas under DSC responsibility:

- Information Technology
- Human Resources
- Finance and Administration

In 2008 the Corporate Services Office set as its goal the development of a Strategic Plan for CATIE using the Balanced Scorecard, a methodology new to CATIE, and then undertook the same process within DSC itself. The DSC plan serves as a pilot effort for strategic planning in the divisions and other offices.

This reports deals with the process of the strategic planning process at both CATIE and DSC as well as with advances in Strategic Programs (PROEs, Programas Estratégicos)—a report by strategic objectives.

Strategic Planning at CATIE

In the second half of 2008, at the request of the Board of Directors and in coordination with the director general, directors and representatives of the divisions and offices at CATIE were invited to a Strategic Planning Workshop using the new methodology. In four intensive sessions, the group reviewed CATIE's mission and vision and identified values and strategic objectives, starting from the definition of CATIE's strategic perspectives: partners and allies, integrated management, organizational development, key functions and target audiences. The overall results of the workshop were presented to the board in September 2008.

At the end of 2008 and beginning of 2009, the Office of the Director General began the task of integrating the results of the workshop to reflect organizational strategy and begin the process of validation with directors.

Strategic Planning for the DSC

In the second half of 2008, the DSC began its own strategic planning process based on the results of the workshop for the institutional strategic plan organized by the Office of the Director General.

After validation and communication of the plan, implementation of the PROEs was begun. These aim at making the DSC Strategic Plan operational, beginning with the creation of working groups to take concrete action to attain the proposed strategic goals.

This report describes the progress made in the DSC strategic programs (See the strategic map in figure 8.1).

ABC PROE

This PROE is responsible for costing of DSC services for 2009 as well as for cost invoicing and collection. Its major goal is to recover and obtain the financial resources required to enable functional, quality service.

Advances: During the last third of 2008, the Information Technology Unit costed all of the services it provides: e-mail, use of systems, technical support, Web mastering (a new service) and development of services. Currently it is determining charging mechanisms and collection levels and defining new mechanisms. Potential alternatives being evaluated include direct charge to internal customer cost centers and charges to projects using these services.

Savings PROE

This strategic program promotes saving throughout CATIE. The goal for 2009 is to generate \$150,000 through savings institutionwide.

Advances: A working group of representatives from different CATIE offices was formed to gather ideas on how to save, ideas subsequently evaluated and put into practice. During the first month, savings of \$17,000 were achieved (table 8.2). Of special note were negotiations with the bank that issues credit cards to acknowledge of miles accumulated during previous years that could not be exchanged because of CATIE's organizational status.

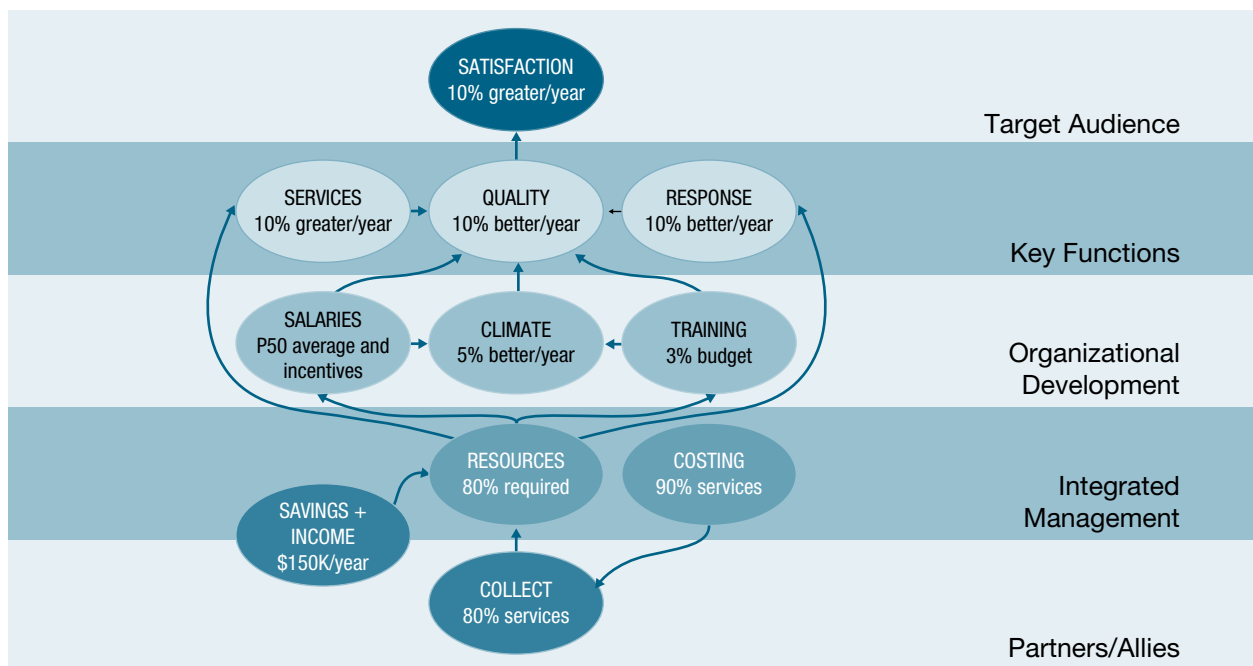


Figure 8.1 DSC Strategic Map

Table 8.1 Cost of services and activities in Information Technology

IT activities								
IT package	\$/user	E-mail	System use	Internet	Support	Web	Development	\$/hour
Complete regular	46	3,2	12	14	6,5	9,7		
Complete intensive	99	3,2	65	14	6,5	9,7		
Local basic	34	3,2		14	6,5	9,7		
Complete external	56	3,2	43			9,7		
E-mail	3,2	3,2						
Students	34	3,2		14	6,5	9,7		
Interns	24	3,2		14	6,5			
Development systems							14,3	14,3

Salaries and Incentives PROE

This PROE aims at providing CATIE staff with competitive salaries and designing an incentive program. A baseline is being established in the first quarter of 2009 to set annual goals for the objective of competitive remuneration (known as 50th percentile).

Advances: Work has begun with the Commercial Division to design an incentive system. A range of related surpluses and percentages has been identified with an eye to submitting a proposal to the Office of the Director General that would provide economic recognition in 2009 to those responsible for commercial activities. At the same time, an incentive model is being outlined for the staff of the Research and Development Division, which consists of an incentive proportional to the profits generated by consultancies,

Table 8.2 Savings generated during one month

Savings (category)	US\$
Cleaning/hygiene articles	953
Computer equipment	495
Investments	1.387
Credit card miles	12.358
Money negotiation	761
Other purchases	60
Stationary and equipment	343
Airline tickets	746
Sale of obsolete equipment	111
Total	17.214

once indirect costs are factored in. This model is still in the development phase, as is the one for the Commercial Division. Figure 8.2 presents the preliminary model.

Training PROE

The objective of this program is that CATIE invest 3% of its budget in training to promote management and leadership skill development at the center.

Advances: A Leadership School promoting personal leadership was offered and enthusiastically received in 2008 by many CATIE staff. A similar training event is being developed for 2009, specially aimed at middle and top managers and mainly focused on management skills and workplace leadership. In addition, MAP has set aside \$15,000 for training activities in 2009, and through the abc PROE, inclusion of training as a part of the resources that should be taken into account in the determination of costs is promoted.

Organizational Climate PROE

The aim of this strategic objective is to promote a better organizational climate, with a goal of a 5% improvement per year. DSC will set its baseline in 2009 and plans to do so for CATIE by the following year.

Advances: Survey results from participants in the Leadership School provided input regarding aspects CATIE needs to improve in developing a plan for enhancing the organizational climate. Directors have established concrete plans and others are still under development. During 2009, follow-up to the proposed plan will be given.

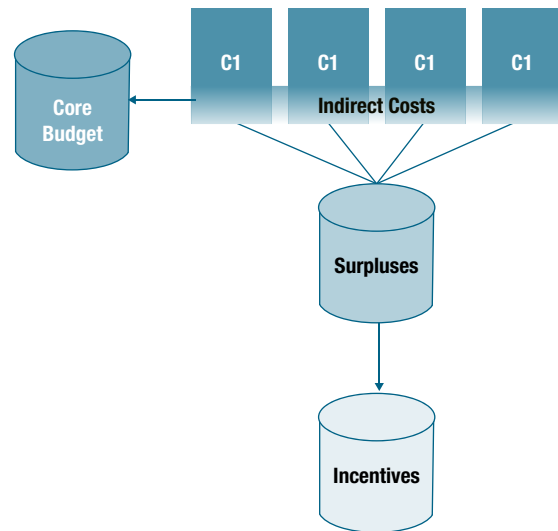


Figure 8.2 Preliminary model

Clients PROE

This program aims at monitoring internal clients' perceptions about actions taken under the aforementioned PROEs.

Advances: The first round of interviews was conducted with six CATIE offices to gather comments and suggestions and rate issues such as quality, response time, compliance, staff treatment and innovation. The results were presented at the first meeting on DSC indicator results. The quantitative result for this initial consultation was 3.6/5 (71%).

9. Communication

With the adoption of the new institutional logo and slogan at the end of 2007, work began in 2008 to position these within and outside the organization. Changes involved ranged from stationery, flags, and informational material to the design of the new entrance to headquarters. With the Communications Committee, the Office of Communication developed tools to strengthen the institutional image, such as the compelling message for the center, key messages, an electronic signature including the logo, slogan and compelling message, and a basic institutional presentation.

In 2007 the CATIE Web site was redesigned to improve organization of content and offer more efficient, user-friendly access. To provide up-to-date information on current activities at headquarters and in member countries, a section on events and courses was included. In 2008, the new logo was incorporated on the Web page and changes were begun to better communicate key messages. The key messages were placed on CATIE's Intranet, along with the institutional presentation and templates for PowerPoint presentations.

The Internet/Intranet Committee was reactivated to help define needed changes, resulting in a proposal to the administration to hire a webmaster and develop a multiuse, efficient Intranet that would also facilitate online courses.

Initiatives at all levels began to improve internal communication, from meetings and better use of Intranet and the Web page to training activities. Based on a policy of open and participative dialogue, the Office of the Director General organized six meetings with all the personnel based at headquarters in 2008, and the meetings were recorded and forwarded to personnel in the countries. In addition, the director general held informal meetings with personnel at headquarters and at several NTOs, taking advantage of visits to member countries.

He holds weekly meetings with directors who make up the management team. Monthly meetings are held with the center's Administrative Committee and Executive Committee to improve coordination, communication and teamwork.

Public Relations

In 2007-2008, the Office of Communication prepared 56 press releases about CATIE's work in research, technical cooperation and education, both at headquarters and in member countries; they were distributed throughout the region. The press releases are also placed on the CATIE's Web page, which is one of our most powerful tools for publicizing these activities. In addition, 205 news notes on recent events were placed on the Web page. According to Google monitoring services, there was a 20% increase in publication of articles about CATIE between 2007 and 2008.

Communications staff coordinated the production of television programs about CATIE in Costa Rica, including *Siete Días* on Channel 7, a popular weekly program; a segment to promote the CATIE International Fair on *Buen Día*, a daily morning program; and a segment on *Telenoticias* about the mangosteen found in CATIE's germplasm collections. Staff also responded to more requests from the media seeking interviews with CATIE experts, especially on global change, coffee and cocoa. Communication also distributed articles published about CATIE in various mediums via its electronic mailing lists to inform staff at headquarters and in member countries.

The Office of Communication assisted Human Development staff in training 55 staff members (drivers, guards, secretaries and hospitality personnel)

Table 9.1 Principal publications and other materials published by the Office of Communication 2007-2008

Publications	Quantity
Banners	25
Electronic bulletins	13
Printed bulletins	12
Press releases	56
Books and catalogs	41
Brochures	54
Posters	42
Technical magazines	4
Technical series	15
Total	262

on institutional image, protocol, attention to visitors, appropriate clothing, etc.

Exhibits and materials were developed for four events in Costa Rica and for the Presidential Summit on Climate Change in Honduras. Materials were provided to the NTOs for events in the countries.

Publications

In 2007 the Office of Communication began establishing a standard style for CATIE publications. In 2008, a new procedure was put in place to ensure that all relevant publications that pass through the office receive an ISBN or ISSN number, an international certification that increases access to technical knowledge generated by CATIE. In 2007 23 documents were published with ISBN or ISSN numbers; in 2008, 42.

Table 9.1 presents the principal publications and other institutional materials produced by the Office of Communication during these two years. There has been a notable increase in publications and materials produced compared with previous years.

An important achievement was the redesign of the format and content of the bimonthly electronic newsletter, with greater focus on the impacts of CATIE's work in the region. Subscribers to the newsletter increased by 1,397 during 2007–2008, resulting in a total of 6,500 subscribers plus 2,000 more who are on the institutions mailing list. Articles in the newsletter were republished regularly in other publications, such as the *Boletín de Ciencia y Tecnología*, published by CONICIT (National Scientific and Technological Research Council of Costa Rica).

The NTOs in El Salvador, Guatemala, Honduras, Nicaragua y Panama produced informative bulletins in these two years about CATIE activities in each of their countries, highlighting the institution's support to economic, social and environmental development of communities in the region.

Table 9.2 Subscription to CATIE's journals (2007–2008)

Journal	RAFA		IPM and Agroecology	Natural Resources and Environment	
	2007	2008	2007–2008	2007	2008
Exchanges	60	60	60	43	46
Donations	104	104	77	70	69
Subscriptions	140	137	142	41	73
Electronic subscriptions	22	10	22	--	--
Total	314	311	301	154	188

Table 9.3 Publications by category, 2007–2008

Categories (12)	2007	2008	Total
Academic and educational texts	1	0	1
Articles in bulletins, journals, publications, etc.	0	2	2
Books and monographs	4	7	11
Chapters in books	16	29	45
Proceedings	16	25	41
Articles in refereed scientific journals	28	29	57
Articles in technical journals	45	48	93
Presentations in conferences, seminars and others	71	28	99
Reports and other publications	44	15	59
Technical Series	20	25	45
Software	1	0	1
Theses	56	54	110
Total	302	262	564

Between 2007 and 2008, printed and electronic versions of editions of CATIE magazines—*Manejo Integrado de Plagas y Agroecología* (MIPA), *Agroforestería en las Américas* (RAFA) y *Recursos Naturales y Ambiente*, were published (see table 9.2).

In addition to CATIE publications, knowledge generated at CATIE was disseminated by technical and scientific staff and students through events, magazine articles, books and chapters in books, software and theses. See table 9.3 for a presentation of the breadth of these scientific contributions from the data provided by the Research and Development Division.

International Outreach

In addition to events held at headquarters and in member countries, CATIE personnel presented the work of the institution in events around the world. A list of some of these events follows.

2007

- Tropentag 2007: Utilisation of Diversity in Land Use Systems: Sustainable and Organic Approaches to Meet Human Needs, Witzenhausen, Germany
- Tagung des Arbeitskreises Nematologie, Germany
- Specialty Coffee Association of America Conference, Long Beach, California, United States
- Trondheim Conference on Biodiversity: Ecosystems and People—Development and Biodiversity, Norway
- Ecosummit 2007: Ecological Complexity and Sustainability: Challenges and Opportunities for 21st Century's Ecology, Beijing, China

- Ecology-Based Restoration in a Changing World, Ecological Society of America, Society for Ecological Restoration Joint Meeting, San José, California, United States
- Ford Foundation CRD Worldwide Meeting, Lombok, Indonesia
- VI Encuentro Latinoamericano y del Caribe de Biotecnología Agropecuaria, Viña de Mar, Chile
- VI Congreso Latinoamericano de Derecho Forestal y Ambiental, Quito, Ecuador
- IUFRO Conference on Management of Forest Research in an Era of Globalization, Washington, D.C., United States
- International Roundtable on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, Belgium
- EXPOCACAO 2007, Quevedo, Ecuador
- Clima Latino, Guayaquil, Ecuador
- Expo Carbon, Colonia, Germany
- Workshop on the Prevention and Management of the Global Spread of Cocoa Pests and Pathogens. ICCO/CABI, Abidjan, Ivory Coast
- ASA-CSSA-SSSA International Annual Meetings at the Ernest N. Morial Convention Center in New Orleans, Louisiana, United States
- Tallberg Forum 2007, Sweden

2008

- I Congreso Iberoamericano de Bosques Modelo, Soria, Spain
- Tropentag 2008: International Research on Food Security, Natural Resources Management and Rural Development. University of Hohenheim, Stuttgart, Germany
- IRC Symposium: Sanitation for the Urban Poor Partnerships and Governance, The Netherlands
- 10th Annual BIOECON Conference, Cambridge, United Kingdom
- Global Seed Hub Declaration Ceremony, National Agrobiodiversity Center, Rural Development Administration, Korea
- Recent Advances in Banana Crop Protection for Sustainable Production and Improved Livelihoods, South Africa
- 5th International Congress of the Nematology Society, Brisbane, Australia
- Banana and Plantain in Africa: Harnessing International Partnerships to Increase Research Impact, Mombasa, Kenya
- 14th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), Poznan, Poland
- IUFRO: Productivity of Tropical Plantations, Porto Seguro, Bahia, Brazil

During 2008, the director general traveled to various countries in Europe, Central America, South America and the United States to present the program of CATIE's new administration as well as the Mesoamerican Agroenvironmental Program (MAP) and to identify new opportunities for collaboration.

- March 2008. Atlanta. Strategic Planning Meeting of The Tropics Foundation
- April 2008. Colombia and Panama. Meetings with different partner institutions
- May 2008. Spain, Switzerland and Italy. Meetings with donor institutions to present MAP
- June 2008. Sweden, Norway and Finland. Meeting with donor institutions to present MAP
- June 2008. Nicaragua. Present MAP to COSUDE, meeting with the minister of agriculture, the rector of UNA and NTO-Nicaragua staff
- August 2008. United States. Meeting of The Tropics Foundation and with the University of Idaho
- August 2008. Paraguay and Bolivia. Meetings with institutions, partners and donors in conjunction with IICA
- September 2008. Belize. Meeting of the CATIE Board of Directors
- October 2008. United States. Presentation about CATIE at Yale University
- November 2008. United States. Washington, D.C. Presentation about CATIE and MAP

10. Financial Report

Financing, by Fund

The activities that CATIE develops are financed from five funds that are managed separately according to their origin and the application of the resources.

- **Core Activities Fund:** Made up of income from quotas of member countries (13 countries), IICA's regular contribution, teaching activities, sale of goods and services (project administrative costs, income from commercial activities and other minor income) and finally specific support from the governments of Sweden and Norway (see table 10.1).

Table 10.1 Specific contributions to core budget

Source	2007	2008
IICA	1.000.000	1.000.000
Member countries	700.000	700.000
Teaching activities	296.262	356.012
Goods and services	1.222.435	1.332.803
Norway	881.675	997.740
Sweden	539.703	640.000
Total US\$	4.640.075	5.026.555

- **Commercial Activities Fund:** Consists of income from administration of farm and livestock activities (the farms) and services (housing and vehicles). The net support to the Core Activities Fund from the commercial area was US\$371,495 in 2007 and US\$445,788 in 2008. The activities that provide the greatest income to the Commercial Division are housing, the dairy farm and cane.
- **Funds in Custody:** Funds managed by CATIE through its technical and graduate programs to support research and teaching. They are managed independently because they require greater agility and effectiveness in their management. The funds are classified in three areas: education, institutional and specific (see figure 10.1)
- **Projects and Agreements Fund:** Restricted funds that have specific, defined conditions that are established by agreements with the donor. During 2008, 80 projects were executed, for a total of US\$16.3 million, while in 2007, the 64 projects executed totaled US\$12.6.
- **Institutional Fund:** An accounting tool that allows the administration to adequately control and register

institutional assets. At the closing of the books in 2008, net assets totaled US\$5.3 million; for 2007 the amount was US\$5.5 million.

Audits

CATIE is audited annually by a well-known firm of external auditors who have earned international prestige. The firm is chosen by the Inter-American Agricultural Board (IABA) via an external bidding process to audit the financial position of both CATIE and IICA. In addition, the agreements and special projects are audited periodically by other external companies that are in some cases chosen by donors; in other cases, the donor allows CATIE to select the company through an open bidding process in order to maintain the transparency under which the center operates.

CATIE also has an Internal Audit office that reports to the CATIE Board of Directors; as part of its annual plan of work, the office carries out a review of management of the funds, expenses executed by the projects, institutional accounts and internal control procedures. Thanks to the results of both audits, CATIE obtained for both 2007 and 2008 a clean report that permits donors and partner countries to maintain confidence in the center as an administrator of their contributions.

Financial Statements

Tables 10.2 and 10.3 present CATIE's financial statements for 2007 and 2008, based on the audited reports for those years.

As can be seen in both tables, in general terms CATIE has adequately managed the balances in accounts receivable, achieving a reduction of more than a million dollars, principally due to collection measures with clients of the Commercial Division, a greater control of advances in management of projects and recuperation of member country quotas.

With respect to liability accounts, the reduction in accounts payable responds to payments to local suppliers and other

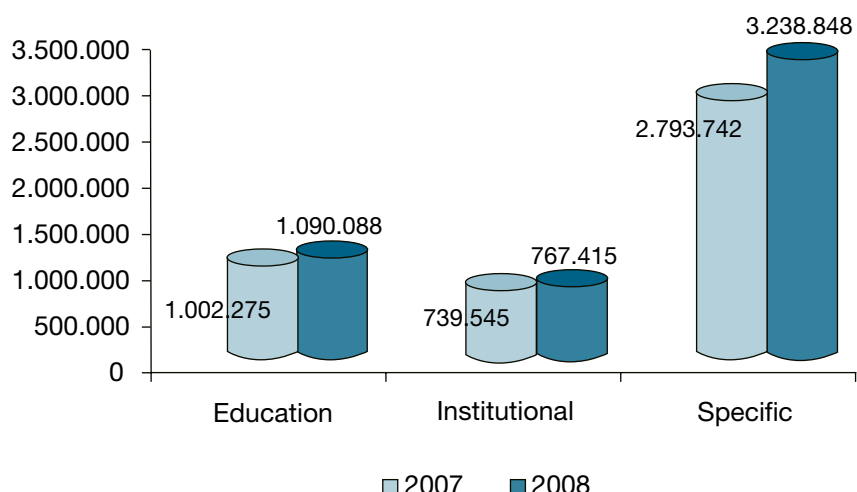


Figure 10.1 Distribution of funds in custody

smaller liability accounts. In addition, deferred income in 2007 showed a balance of US\$285,000, corresponding to a payment for management of a project in Guatemala, a situation that was not repeated in 2008. As for long-term liabilities, CATIE paid off a debt with a local bank—the money had been used for land purchase.

As can be seen, in 2008 income from commercial activities exceeded that in 2007 by US\$105,000, mainly due to renovation of the cane crop and sales from it and, to a lesser degree, to an increase in income from dairy activities.

In addition, in 2008 donations and specific contributions to the core budget were greater than in 2007 by US\$216,000, coming from the Swedish International Development Cooperation Agency (Sida) and the Ministry of Foreign Affairs (MFA) of Norway (see table 10.1). These funds provided great support to cover expenses in the Core Activities Fund.

In 2008 CATIE continued its success in the administration of projects, with an increase in project executive of US\$3.7 million over 2007, in addition to income from funds in custody that grew by US\$0.6 million. This represents a strength that the institution has to continue work with rural communities in the region to bring about improvement in quality of life.

These are the principal items that contributed to a surplus of US\$380,382, an amount that gives CATIE room to breathe as far as management of cash flow and to cover operational needs caused by the delay in payment of quotas by member countries, which we hope to recover in the short and medium term.

Table 10.2 Assets, liabilities, combined statement of fund balances as of 31 December 2007 and 2008 (US\$)

Assets	2007	2008
Current Assets:		
Cash	8,851,869	8,207,649
Temporary investments	8,777	102,851
Accounts and documents receivable		
CATIE's members	2,416,920	2,311,036
Other accounts	2,248,034	1,145,816
Total accounts receivable	4,664,954	3,456,852
Inventories	116,695	212,483
Total current assets	13,721,289	11,979,835
Buildings, machinery and equipment	5,493,338	5,340,567
Other assets	499,531	442,603
Trust funds	1,250,000	1,250,000
Total assets	20,964,158	19,013,005
Liability and balance of funds		
Current liabilities:		
Accounts payable and accumulated expenditures	2,052,975	1,699,824
Deferred income and other liabilities	442,849	78,245
Total current liabilities	2,495,824	1,778,069
Long-term debt	108,522	4,9820
Total liabilities	2,604,346	1,827,889
Institutional fund	5,493,338	5,340,569
Regular funds	4,251,707	4,477,014
Funds in custody	3,020,193	3,786,773
Donors—projects and agreements	5,594,574	3,580,760
Balance of funds	18,359,812	17,185,116
Total liabilities and working fund	20,964,158	19,013,005

Table 10.3 Balance of income and expenditures for the core budget and projects for 2007 and 2008 (US\$)

Income	2007	2008
IICA support	1.000.000	1.000.000
Membership quotas	700.000	700.000
Technical support services	177.096	164.151
Teaching activities	296.262	356.012
Commercial activities	1.454.477	1.559.718
Administrative and logistical support	486.390	544.008
Donations and specific contributions	1.421.378	1.637.740
Working fund	166.315	176.885
Miscellaneous	21.138	1.970
Subtotal	5.723.056	6.140.484
Income from projects and contracts funds	12.566.574	16.245.048
Income from funds in custody	4.535.561	5.096.350
Total income	22.825.191	27.481.882
Expenditures		
General Directorate and governing bodies	829.051	915.312
Administration and services	1.131.401	1.299.202
Technical programs	2.270.188	2.369.664
Commercial activities	1.082.982	1.113.930
Others	248.248	61.994
Subtotal	5.561.870	5.760.102
Expenditures for projects and contracts funds	12.566.574	16.245.048
Expenditures for funds in custody	4.535.561	5.096.350
Total expenditures	22.664.005	27.101.500
Excess income over expenditures	161.186	3 80.382

Table 10.3 provides an excellent summary of CATIE's outstanding financial performance even in times of crisis. This has been possible thanks to the support of our members and partners and the efforts of our personnel.

11. Governing Authorities

Governing Council (2007–2008)

Belize

Vildo Marín (2007)
René Montero (2008)

Bolivia

Susana Rivero (2007–2008)

Colombia

Andrés Felipe Arias (2007–2008)

Costa Rica (Presidency)

Alfredo Volio, Marco Vargas (2007)
Javier Flores (2007–2008)

Dominican Republic

Salvador Jiménez (2007–2008)

El Salvador

Mario Salaverría (2007–2008)

Guatemala

Bernardo López (2007)
Raúl Robles (2008)

Honduras

Héctor Hernández (2007–2008)

Mexico

Alberto Cárdenas (2007–2008)

Nicaragua

Ariel Bucardo (2007–2008)

Panama

Guillermo Salazar (2007–2008)

Paraguay

Carlos López (2007–2008)

Venezuela

Elías Jaua (2007–2008)

IICA (Vice Presidency)

Chelston Brathwaite (Director General, 2007–2008)

CATIE (Secretaría Ex Officio)

Pedro Ferreira (2007)
José Joaquín Campos (2008)

Inter-American Board of Agriculture (JIA)

Reinhold Stephanos (Brazil) (2007–2008)

Board of Directors (2007–2008)

- Helmut Eger (Germany, President, 2007–2008)
- Godfrey Eneas (Bahamas, Representative of IABA, 2007–2008)
- Marcelino Ávila (Belize, 2007–2008)
- Lionel Peralta (Costa Rica, Representative of the Ministry of Agriculture and Livestock, 2007)
- Lorena San Román (Costa Rica, Representative of the Ministry of Agriculture and Livestock, 2008)
- Mariano Olazábal (Peru, Representative of IICA, 2007–2008)
- Rosalía Arteaga (Ecuador, 2007–2008)
- Ana María Majano (El Salvador, 2007–2008)
- David Kaimowitz (United States, 2008)
- Benjamín Figueroa (Mexico, 2007–2008)
- Luis Osorio (Nicaragua, Vice president, 2007–2008)
- Erick Santamaría (Panama, Representative of the Governing Council, 2007)
- Adonai Ríos (Panama, Representative of the Governing Council, 2008)
- Geoffrey Hawtin (United Kingdom, 2007–2008)
- Bjorn Lundgren (Sweden, 2007)
- Hans Jöhr (Switzerland, 2007–2008)

12. Acronyms

ACICAFOC	Central American Indigenous and Peasant Coordination Association for Community Agroforestry
AGCATIE	Association of CATIE and IICA graduates
ARS	Agricultural Research Service
BSF	Forest Seed Bank (CATIE)
CABEI	Central American Bank for Economic Integration
CAC	Central American Agricultural Council
CASA	Tree Crops in Agroforestry Systems
CATIE	Tropical Agricultural Research and Higher Education Center
CCAD	Central American Commission on Environment and Development
CDM	Clean Development Mechanism
CECADI	IICA's Distance Learning Center
CeCoEco	Center for the Competitiveness of Ecoenterprises (CATIE)
CIAT	Center for Tropical Agriculture
CIM	Center for International Migration and Development
CIRAD	French Agricultural Research Center for International Development
CONACYT	National Council for Science and Technology in Mexico
CONARE	National Council of Rectors
CONICIT	National Scientific and Technological Research Council of Costa Rica
CSAP	Cooperative Study Abroad Program (CATIE)
DAAD	German Academic Exchange Services
DID	Research and Development Division (CATIE)
DPD	Outreach and Development Office (CATIE)
DSC	Corporate Services Office (CATIE)
EfD	Environment for Development Program for Central America (CATIE)
Embrapa	Brazilian Agricultural Research Corporation
ERAS	Regional Agroenvironmental and Health Strategy
FDL	Local Development Fund
FEDEGAN	National Federation of Livestock Producers
FOMILENIO	Millennium Challenge Corporation
GTZ	German Cooperation Agency
IABA	Inter-American Board of Agriculture
ICAFFE	National Coffee Institute of Costa Rica
ICE	Costa Rican Electricity Institute
IDRC	International Development Research Center
IFC	International Finance Corporation

IICA	Inter-American Institute for Cooperation on Agriculture
INIAs	National Agricultural Research and Technology Institutes
ITCR	National Technical University of Costa Rica
ITTO	International Tropical Timber Organization
IUCN	International Union for the Conservation of Nature
JICA	Japanese International Cooperation Agency
LACCEP	Latin American and Caribbean Environmental Economics Program (CATIE)
MAP	Mesoamerican Agroenvironmental Program (CATIE)
MESOTERRA	Sustainable Management of Agricultural Lands in Mesoamerica (CATIE)
MIAM	Master of International Agribusiness Management (CATIE/INCAE)
NACs	National Advisory Committees
NINA	Norwegian Institute for Nature Research
NIVA	Norwegian Institute for Water Research
NRDC	Natural Resources Defense Council
NSF	National Science Foundation
NTOs	National Technical Offices (CATIE)
PCC	Central American Cacao Project (CATIE)
PCP	Platform for Scientific Cooperation
PRODESIS	Integrated Sustainable Social Development project
PROEs	Strategic Programs (CATIE)
REDD	Reduction of Emissions from Deforestation and Degradation of forests
RUTA	Regional Unit for Technical Assistance
SICA	Central American Integration System
SICTA	Central American Integration System for Agricultural Technology
Sida	Swedish International Development Cooperation Agency
SIDALC	Documentation Service of the Americas
SINAC	National System of Conservation Areas
TEEAL	Essential Electronic Agricultural Library of Cornell University in the United States
TNC	The Nature Conservancy
UNA	National University
UNED	National Distance Learning University
UNU	United Nations University
UNFCC	United Nations Framework Convention on Climate
USDA	United States Department of Agriculture
USDA/NAL	Department of Agriculture/National Agricultural Library

Annex 1. Technical Personnel, International, Associate and National 2007– 2008

Personnel	Expertise
Aguilar Carrillo Amilcar	Tropical Agroforestry
Aguilar Vega María Elena	Plant Biotechnology
Alemán Mercado Estela	Economy and Development Planning
Alpizar Rodríguez Francisco	Environmental Economics
Astorga Domian Carlos	Genetic Resources and Biotechnology
Barborak James Roger	Protected Areas and Corridors
Barrios Aguirre Mirna	Production Systems—emphasis in Plant Protection
Beer John William	Agroforestry
Benegas Negri Laura Andrea	Integrated Watershed Management
Benjamin Tamara Jo	Agroforestry
Campos Arce Jose Joaquín	Forestry
Carrera Gambetta Fernando	Forest Management
Casanoves Boschetti Fernando	Agriculture and Livestock Science
Casasola Coto Francisco Rolando	Silvopastoral Systems
Cascante Carvajal Carolina	Forestry
Corrales Castro Olga Marta	Environmental Policy
Crozier Jayne	Plant Pathology
Cruz Bolaños Jorge Luis	Natural Forest Management
Curruchiche Otzoy German Alonzo	Anthropologist
Chacón García Walter Wenceslao	Biologist
De Clerck Fabrice	Ecologist
De Melo Virginio Elias	Agriculture and Livestock Science and Natural Resources
Deheuvels Olivier	Agronomy
Delgado Hernández Eduardo	Sustainable Agriculture
Delgado Rodríguez Luis Diego	Natural Forest Ecology
Ebert Andreas Wilhelm	Plant Genetic Resources
Faustino Manco Jorge	Watershed Management
Ferreira Rossi Pedro	Biometry
Finegan Bryan Gerald	Ecology, Management of Tropical Forests
Flores López Juan Carlos	Socioeconomics
Franceschi Jara Luiggi Fanor	Conservation
Galloway Glenn	Tropical Forestry and Silviculture
García-Moreno Meade Jaime	Population Biology
Gentes Ingo Georg	Political and Social Science
Gobbi Jose Alberto	Agricultural Economics

Personnel	Expertise
Gómez Rivera Sonia Nohemi	Integrated Management of Watersheds
González Figueroa Alan	Watershed Management
González López José Manuel	Environmental Socioeconomics
Gottret Arce María Verónica	Monitoring and Evaluation of Impacts
Gutiérrez Montes Isabel Adriana	Rural Sociology
Haggar Jeremy Philip	Ecology of Tropical Agroforestry Systems
Hidalgo Jamienson Eduardo	Applied Entomology
Ibrahim Muhammad	Silvopastoral Systems
Jiménez Burgos Jorge	Agroforestry
Jiménez Otarola Francisco	Vegetable Production
Juárez Vásquez Modesto	Sustainable Tropical Agriculture
Kammerbauer Johann	Environmental Science and Natural Resources
Kuan Saunig Elia María	Agricultural Development
Leandro Montoya Patricia	Chemistry
Leandro Muñoz Mariela Eugenia	Biotechnology
Leon Carvajal Josué Anibal	General and Applied Hydrology
Lol Hernández Gregorio	Management for Sustainable Development
López Payes Julio Gustavo	Management and Silviculture of Natural Forests
Louman Bastiaan	Silviculture
Madrigal Ballesteros Roger	Environmental Socioeconomics
Martínez Alonso Celia	Ecology
Mata Quirós Allan	Biotechnology
Medina Banegas Juan Manuel	Integrated Management of Natural Resources
Mock Mock Karen	Population Genetics
Naranjo Barrantes María Angélica	Environmental Economics and Natural Resources
Navarro Monge Guillermo	Economics and Forest Policy
Navarro Pereira Carlos Manuel	Agriculture and Forestry
Nieuwenhuyse Andreas	Soils
Orozco Vilchez Eva Lorena	Silviculture Ecology
Ortiz Vargas Juan Luis	Plant Genetic Resources and Biotechnology
Padilla Castillo Danilo	Integrated Pest Management

Personnel	Expertise
Palacios Pineda Herminia Isabel	Environmental Economics and Sociology
Pedroni Lucio	Forest Engineering
Pesquero Henche Marta	Environmental Management
Pezo Quevedo Danilo A.	Pasture Nutrition
Phillips Mora Wilbert	Plant Diseases and Genetic Improvement
Piniero Maricel C.	Environmental Ecology
Pinoth Arguijo Rut Ester	Agronomy
Pocasangre Enamorado Luis Ernesto	Pathology/Nematology
Powell George Van Nostrand	Biodiversidad
Quim Xol Carlos Rafael	Bilingual Education
Quirós Solano Luis Enrique	Computers
Rapidel Bruno	Agronomy/Planta Physiology
Reyes Martínez Raquel	Business Administration
Reyes Rodas Reginaldo	Area Management and Conservation
Rivas Platero Gonzalo G.	Plant Geneticws and Biological Interaction
Riveros Angarita Alba Stella	Agronomical Science/Plant Pathology
Robalino Herrera Juan Andrés	Environmental Economics
Robles Valle Gabriel	Agronomical Engineering
Rosales Izaguirre Franklin E.	Plant Genetics
Rosales Pérez Jose Nestor	Rural Business Development
Roupsard Olivier	Forest Biology

Personnel	Expertise
Salinas Marcenaro Isidro Humberto	Management of Watersheds
Salinas Vallecillo Zenia María	Environmental Socioeconomics
Sanchez Garita Vera	Plant Pathology and Biological Control
Santos López Cesar Alejandro	Environmental Economics
Sepulveda López Claudia Janeth	Agroecology
Solano Sánchez William Alberto	Plant Technician
Somarriba Ch. Eduardo	Agroecology and Agroforestry
Soto Muñoz Gabriela María	Organic Agriculture
Stoian Dietmar	Forestry
Vallejo Rendon Alvaro	Forestry
Vásquez Carballo William	Forest Management
Vásquez Morera Nelly	Biotechnology
Velásquez Mazariegos Sergio	Geographic Information Systems
Velásquez Nimatuj Irma Alicia	Social Anthropology
Venegas Villegas Geoffrey	Forestry
Vignola Raffaele	Environmental Economics
Villalobos Rodríguez Marilyn	Public Administration of the Rural Sector
Villalobos Soto Roger	Natural Forests
Villanueva Najarro Cristobal	Tropical Agroforestry
Viquez López Edgar	Forest Genetics
Wulfhorst J.D.	Rural Sociology

Annex 2. Publications

Publications 2007

- Alas Martínez, J.M. 2007. Barreras para la implementación de sistemas silvopastoriles y usos de suelo amigables con la biodiversidad en Matiguás, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 96 p.
- Alcázar Caicedo, C. 2007. Patrones de regeneración natural establecida de especies leñosas y su relación con aspectos estructurales, funcionales y de manejo en un agropaisaje mesoamericano. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 196 p.
- Alfaro Reyna, T. 2007. Estudio de condiciones para nuevas cosechas en bosques naturales en la zona norte de Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 134 p.
- Andrade Castañeda, H.J. 2007. Growth and inter-specific interactions in young silvopastoral systems with native timber trees in the dry tropics of Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 224 p.
- Andrade, H.J.; Segura, M.; Pérez Quintanilla, N.; Pinsón Rincón, E.P.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2007. Escuela de campo para promotores y promotoras de La Selva Chiapas, México. Mód. 9: Producción orgánica y agroforestal de cultivos perennes. Sección 1: Cacao. Sección 2: Plátano. Serie Técnica. Manual Técnico (CATIE) no. 70. 96 p.
- Angulo Aguilar, O.G. 2007. Gobernabilidad e institucionalidad para la gestión, protección y aprovechamiento de los recursos hídricos en el municipio de Valle de Angeles, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 156 p.
- Angulo, O.; Prins, C.; Faustino, J.; Madrigal, R. 2007. Elementos clave para el manejo y gestión del agua en el municipio de Valle de Ángeles, Honduras. Recursos Naturales y Ambiente no. 51-52:124-134.
- Arana, A.; Campos, J.J.; Velásquez, S.; Villalobos, R.; Días, A. 2007. Dinámica y factores determinantes de los cambios de la cobertura forestal en el área colindante al Parque Nacional Tapantí Macizo de la Muerte, Costa Rica. Recursos Naturales y Ambiente no. 51-52:77-84.
- Arboleda Obando, M.O. 2007. Desarrollo y validación de principios, criterios e indicadores para la gestión de paisajes en América Latina y el Caribe bajo el marco de bosque modelo. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 229 p.
- Argüello Ruiz, M.R. 2007. Potencial del mecanismo de desarrollo limpio en las plantaciones forestales de Panamá. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 106 p.
- Arguello, R.; Locatelli, B.; Navarro, G.; Piedra, M.; Salinas, Z. 2007. Potencial del mecanismo de desarrollo limpio en las plantaciones forestales en Panamá. Recursos Naturales y Ambiente no. 51-52:12-18.
- Baldizón Reyes, F.; Faustino, J.; Jiménez, F. 2007. Creación de institucionalidad para el manejo de la subcuenca del río Copán, Honduras: análisis de procesos recientes. Recursos Naturales y Ambiente no. 51-52:135-142.
- Barriga, M.; Campos, J.J.; Corrales, O.M.; Prins, C. 2007. Gobernanza ambiental, adaptativa y colaborativa en bosques modelo, cuencas hidrográficas y corredores biológicos: diez experiencias en cinco países latinoamericanos. Serie Técnica. Informe Técnico (CATIE) no. 358. 93 p.
- Basil, J.G.A. 2007. Diversidad genética en poblaciones de *Swietenia macrophylla* King (meliaceae) en Costa Rica y Bolivia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 88 p.
- Benavides López, D.N. 2007. Escalamiento de los procesos y experiencias de cogestión de cuencas en la subcuenca del río Aguas Calientes a la subcuenca del río Inalí y la subcuenca del río Musunce, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 210 p.
- Benegas N., L.A.; Jiménez O., F. 2007. Adaptación de los productores a la variabilidad climática, principalmente a la sequía, en cuencas hidrográficas en América Central: el caso de la subcuenca del río Aguas Calientes, Nicaragua. Serie Técnica. Informe Técnico (CATIE) no. 352. 32 p.
- Benegas, L.; Jiménez, F.; Locatelli, B.; Faustino, J.; Campos, M. 2007. Evaluación de la adaptación de los productores a la variabilidad climática, principalmente a la sequía, en cuencas hidrográficas de América Central; 2. Estudio de caso en la subcuenca del río Aguas Calientes, Nicaragua. Recursos Naturales y Ambiente no. 51-52:117-123.
- Benegas, L.; Jiménez, F.; Locatelli, B.; Faustino, J.; Campos, M. 2007. Evaluación de la adaptación de los productores a la variabilidad climática, principalmente a la sequía, en cuencas hidrográficas de América Central; 1. Propuesta metodológica. Recursos Naturales y Ambiente no. 51-52:107-116.
- Benites Sánchez, A.Y. 2007. Manejo participativo de los recursos naturales basado en la identificación de servicios ecosistémicos en la cuenca del río Otén - Pereira, Colombia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 102 p.
- Bermúdez Cardona, M.B. 2007. Determinación de indicadores agroecológicos en sistemas agroforestales y de medios de vida de fincas cafeteras de Colombia, Costa Rica y Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 107 p.
- Buzolich, G.; Donal, M.; Reynolds Vargas, J.; Torres Corral, L. 2007. Capacidad potencial de las franjas ribereñas del río Bermúdez para reducir la erosión. Recursos Naturales y Ambiente no. 51-52:175-183.
- Cajina Canelo, M.J.; Faustino, J. 2007. Alternativas de captación de agua, la esperanza de mejores cosechas y la conservación ambiental: cogestión de actores locales y acción colectiva en la subcuenca del río Aguas Calientes, Nicaragua. Serie Técnica. Informe Técnico (CATIE) no. 355. 44 p.
- Calle Díaz, Z.; Piedrahita, L. 2007. ¿Cómo diseñar estrategias para el manejo de plantas de interés para la conservación en paisajes ganaderos? Agroforestería en las Américas no. 45:117-122.
- Calvo Vargas, B.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2007. Manejo integral de la granja porcícola. Mód.10: Manejo integral de la granja porcícola. Serie Técnica. Manual Técnico (CATIE) no. 72. 66 p.
- Camacho, O.; Guzmán, R.; Peña Claros, M. 2006-2007. Situación del manejo forestal sostenible en la Amazonia boliviana. Recursos Naturales y Ambiente no. 49-50:18-23.
- Campos, J.J.; Alpízar, F.; Madrigal, R.; Louman, B. 2007. Enfoque integral para esquemas de pago por servicios de ecosistemas forestales. Ecosistemas 16(3). Disponible en línea: <http://www.revistaecosistemas.net/>.
- Campos Arce, J.J.; Camacho Calvo, M.; Villalobos Soto, R.; Rodríguez, C.M.; Gómez Flores, M. 2007. La tala ilegal en Costa Rica: un análisis para la discusión. Serie Técnica. Informe Técnico (CATIE) no. 353. 70 p.
- Candela Restrepo, S.E. 2007. Convergencias y divergencias entre organizaciones indígenas y externas respecto al uso y la conservación de recursos naturales en los territorios indígenas de la Alta Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 139 p.

- Canet Desanti, L. 2007. Herramientas para el diseño, gestión y monitoreo de corredores biológicos en Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 217 p.
- Carrillo, P.R. 2007. Estudio comparativo de bosques latifoliados del Área de Manejo y Conservación de Río Bravo, Belice: con énfasis en impactos de manejo forestal. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 85 p.
- Casasola, F.; Ibrahim, M.; Ramírez, E.; Villanueva, C.; Sepúlveda, C.; Araya, J.L. 2007. Pago por servicios ambientales y cambios en los usos de la tierra en paisajes dominados por la ganadería en el trópico subhúmedo de Nicaragua y Costa Rica. *Agroforestería en las Américas* no. 45:79-85.
- Castañeda, F.; Sabogal, C. 2006-2007. Manejo sostenible del bosque tropical en la cuenca amazónica: tendencias y perspectivas. *Recursos Naturales y Ambiente* no. 49-50:6-11.
- Centeno Altamirano, E. 2007. Análisis de la participación de la mujer en la gestión integrada del recurso hídrico en Nicaragua, con énfasis en la subcuenca del río Jucuapa, Matagalpa. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 139 p.
- Cerdán Cabrera, C.R. 2007. Conocimiento local sobre servicios ecosistémicos de caficultores del Corredor Biológico Volcán Central Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 69 p.
- Chacón L., M.; Harvey, C.A.; Delgado, D. 2007. Diversidad arbórea y almacenamiento de carbono en un paisaje fragmentado del bosque húmedo de la zona atlántica de Costa Rica. *Recursos Naturales y Ambiente* no. 51-52:19-32.
- Chará, J.; Pedraza, G.; Giraldo, L.; Hincapié, D. 2007. Efecto de los corredores ribereños sobre el estado de quebradas en la zona ganadera del río La Vieja, Colombia. *Agroforestería en las Américas* no. 45:72-78.
- Chaves Méndez, N.P. 2007. Utilización de bacterias y hongos endofíticos para el control biológico del nemátodo barrenador *Radopholus similis* (Cobb). Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 85 p.
- Cisneros, J.; Alpizar, F.; Madrigal, R. 2007. Valoración económica de los beneficios de protección del recurso hídrico bajo un esquema de pago por servicios ecosistémicos en Copán Ruinas, Honduras. *Recursos Naturales y Ambiente* no. 51-52:143-152.
- Colán, V.; Sabogal, C.; Snook, L.; Boscolo, M.; Smith, J.; Galván, O. 2006-2007. La extracción maderera en la Amazonia peruana: diagnóstico de prácticas e implicaciones para promover el manejo forestal. *Recursos Naturales y Ambiente* no. 49-50:90-99.
- Contreras Hermosilla, A.; Vargas Ríos, M.T. 2006-2007. Reformas a la política forestal de Bolivia: impactos sociales, ambientales y económicos de los primeros cinco años del régimen forestal boliviano. *Recursos Naturales y Ambiente* no. 49-50:44-57.
- Copa Escalante, E. 2007. El rol de la familia, en especial de la mujer en la producción, certificación y comercialización del café en Caranavi, Bolivia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 155 p.
- Corea Flores, L.L. 2007. Análisis de la acción colectiva de las cooperativas y asociaciones de pescadores artesanales en la costa pacífica hondureña. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 139 p.
- Couttolenc Brenis, E. 2007. Conocimiento local de especies del bosque en relación con los medios de vida en Sharabata, Chirripó, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 123 p.
- Cruz Collaguazo, E.P. 2007. Estudio sobre la interacción entre la biodiversidad y el bienestar de los productores ganaderos para la implementación de sistemas silvopastoriles en Copán-Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 128 p.
- Díaz Briones, A.A. 2007. Evolución de instituciones adaptativas frente a problemas hidrológicos en dos cuencas de Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 119 p.
- Donovan, J.; Stoian, D.; Grouwels, S.; Macqueen, D.; Leeuwen, A. van; Boetkees, G.; Nicholson, K. 2007. Hacia un ambiente favorable para el desarrollo de pequeñas y medianas empresas forestales. *Recursos Naturales y Ambiente* no. 49-50:163-168.
- Ebert, A.W.; Astorga, C.; Ebert, I.C.M.; Mora, A.; Umaña, C. 2007. Asegurando nuestro futuro: colecciones de germoplasma del CATIE. Serie Técnica. Boletín Técnico (CATIE) no. 26. 204 p.
- Enríquez Lenis, M.L.; Sáenz, J.C.; Ibrahim, M. 2007. Riqueza, abundancia y diversidad de aves y su relación con la cobertura arbórea en un agropaisaje dominado por la ganadería en el trópico subhúmedo de Costa Rica. *Agroforestería en las Américas* no. 45:49-57.
- Espinal Brundo, E. 2007. Mecanismos de financiamiento para el manejo y cogestión de la microcuenca del río La Soledad, Valle de Angeles, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 170 p.
- Esquivel Mimenza, H. 2007. Recurso arbóreo en sistemas silvopastoriles tradicionales y su impacto en la productividad y calidad nutricional de la pastura en el trópico seco de Costa Rica. Ph. D. Thesis. Turrialba, Costa Rica, CATIE. 161 p.
- Estrada Chinchilla, L.; Finegan, B.; Delgado, D. 2007. Guía de monitoreo ecológico: validación de procedimientos metodológicos y enfoques propuestos para un bosque de coníferas manejado en la Reserva de Biosfera Sierra de las Minas, Guatemala. *Recursos Naturales y Ambiente* no. 51-52:96-106.
- Fernández Méndez, F. 2007. Diversidad funcional de bosques muy húmedos tropicales en el noroeste de Costa Rica a partir de rasgos foliares y densidad de la madera. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 97 p.
- Freitas, J.V. de; Hummel, A.C. 2006-2007. Situación del manejo forestal sostenible en la Amazonia brasileña. *Recursos Naturales y Ambiente* no. 49-50:24-30.
- García Fernández, C.; Sist, P.; Kanashiro, M. 2006-2007. Manejo sostenible de los bosques tropicales: desafíos para las prácticas de aprovechamiento de impacto reducido. *Recursos Naturales y Ambiente* no. 49-50:12-17.
- Gómez Martínez, M.J. 2007. Relación entre la diversidad de herpetofauna en sistemas silvopastoriles, la calidad del agua y el bienestar de los productores en el municipio de Matiguás (Matagalpa, Nicaragua). Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 121 p.
- González H., C.; Locatelli, B.; Imbach, P.; Vignola, R.; Pérez, C.J.; Vaast, P. 2007. Identificación de bosques y sistemas agoforestales proveedores de servicios ecosistémicos para el sector agua potable en Nicaragua. *Recursos Naturales y Ambiente* no. 51-52:34-39.
- González Martínez, A.J. 2007. Flujos de nutrientes y sus implicaciones para la sostenibilidad en sistemas silvopastoriles con y sin *Arachis pintoi* en Muy Muy, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 154 p.
- González Maya, J.F. 2007. Densidad, uso de hábitat y presas del jaguar (*Panthera onca*) y el conflicto con humanos en la región de Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 125 p.
- Guerra Alarcón, L. 2007. Construcción de la huella de carbono y logro de carbono neutralidad para el Centro Agronómico Tropical de Investigación y Enseñanza (CATIE). Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 94 p.
- Gutiérrez Montes, I.; Rivas Platero, G.G.; Yepez Pacheco, C.; Quintero Sánchez, N.N.; Pinto Decelis, G.; Vega Márquez, L. 2007. Escuela de campo para promotores y promotoras de La Selva Chiapas, México. Mód.1 Desarrollo rural participativo y equitativo. Serie Técnica. Manual Técnico (CATIE) no. 66. 50 p.
- Hernández García, N.A. 2007. Escalamiento territorial de la cogestión de cuencas hidrográficas en las subcuencas de los ríos Higuito y Copán, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 174 p.
- Hernández López, I. 2007. Cambios en la estructura y composición del bosque bajo dos tratamientos silviculturales en la comunidad de Capulálpam de Méndez, Ixtlán, Oaxaca, México. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 90 p.
- Ibrahim, M.; Chacón, M.; Cuartas, C.; Naranjo, J.; Ponce, G.; Vega, P.; Casasola, F.; Rojas, J. 2007. Almacenamiento de carbono en el suelo y la biomasa arbórea en sistemas de usos de la tierra en paisajes ganaderos de Colombia, Costa Rica y Nicaragua. *Agroforestería en las Américas* no. 45:27-36.

- Ignacio Cárdenas, S. 2007. Caracterización morfológica y agronómica de la colección núcleo de café (*Coffea arabica* L.) del CATIE. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 103 p.
- International Cocoa Research Conference (15, 2006, San José, Costa Rica). 2007. Proceedings. Lagos, Nigeria, Cocoa Producers' Alliance/COPAL/CATIE. v. 1-2.
- Jiménez Trujillo, J.A. 2007. Diseño de sistemas de producción ganaderos sostenibles con base a los sistemas silvopastoriles (SSP) para mejorar la producción animal y lograr la sostenibilidad ambiental. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 103 p.
- July Martínez, W. 2007. Caracterización morfológica y molecular del cacao nacional boliviano y de selecciones élites del Alto Beni, Bolivia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 88 p.
- Junkin, R.; Pinto Decelis, G.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2007. Escuela de campo para promotores y promotoras de La Selva, Chiapas, México. Mód.3: Organización empresarial para la comercialización. Serie Técnica. Manual Técnico (CATIE) no. 76. 71 p.
- Junkin, R. 2007. Talleres en organización empresarial y comercialización para iniciativas empresariales asociativas de la Selva Chiapas, México. Guía de facilitación. Serie Técnica. Manual Técnico (CATIE) no. 73. 43 p.
- Labrín Sotomayor, N.Y. 2007. Estudio de la resistencia en variedades de arroz (*Oryza sativa* L.) venezolanas al virus de la hoja blanca. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 83 p.
- Leguía Hidalgo, E.J.; Locatelli, B.; Imbach, P.; Alpizar, F.; Vignola, R.; Pérez, C. 2007. Servicios ecosistémicos e hidroelectricidad en Nicaragua. Recursos Naturales y Ambiente no. 51-52:40-47.
- López, F.; Gómez, R.; Harvey, C.; López, M.; Sinclair, F. 2007. Toma de decisiones de productores ganaderos sobre el manejo de los árboles en potreros en Matiguás, Nicaragua. Agroforestería en las Américas no. 45:93-100.
- López, F.; López, M.; Gómez, R.; Harvey, C.A.; Villanueva, C.; Gobbi, J.; Ibrahim, M.; Sinclair, F.L. 2007. Cobertura arbórea y rentabilidad de fincas ganaderas en Rivas y Matiguás, Nicaragua. Agroforestería en las Américas no. 45:101-108.
- Lorion, C.M. 2007. Effects of deforestation and riparian buffers on lotic communities in Southeastern Costa Rica: implications for biodiversity conservation in tropical streams. Ph. D. Thesis. Turrialba, Costa Rica, CATIE. 132 p.
- Marín, Y.; Ibrahim, M.; Villanueva, C.; Ramírez, E.; Sepéveda, C. 2007. Los impactos de un proyecto silvopastoril en el cambio de uso de la tierra y alivio de la pobreza en el paisaje ganadero de Matiguás, Nicaragua. Agroforestería en las Américas no. 45:109-116.
- Marschall Murillo, C.A. von. 2007. Protocolo de muestreo secuencial para la evaluación de la población de plagas en la producción de *Dracaena marginata*. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 177 p.
- Martínez Alonso, C.; Imbach, P.; Locatelli, B. 2007. ¿Cómo seleccionar una definición de bosque para el mecanismo de desarrollo limpio? Recursos Naturales y Ambiente no. 51-52:184-190.
- Matus Silva, O.D. 2007. Elaboración participativa de una metodología para la identificación de zonas potenciales de recarga hídrica en subcuencas hidrográficas, aplicada a la subcuenca del río Jucuapa, Matagalpa, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 228 p.
- Melgarejo, O.; Ríos, F.; Colán, V.; Sabogal, C. 2006-2007. Situación del manejo forestal sostenible en la Amazonia peruana. Recursos Naturales y Ambiente no. 49-50:31-37.
- Merlo Caballero, M.E. 2007. Comportamiento productivo del café (*Coffea arabica* var caturra), el poró (*Erythrina poeppigiana*), el amarillón (*Terminalia amazonia*) y el cashá (*Chloroleucon eurycyclum*) en sistemas agroforestales bajo manejos convencionales y orgánicos en Turrialba, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 92 p.
- Molina, Y.; Hernández, E. 2007. Evaluación de un proyecto de desarrollo rural sostenible mediante indicadores de logros, Aldea Ecológica San José de Limones, Estado Mérida, Venezuela. Recursos Naturales y Ambiente no. 51-52:191-198.
- Montero M, M.; De los Santos Posadas, H.; Kanninen, M. 2007. *Hyeronima alchorneoides*: ecología y silvicultura en Costa Rica. Serie Técnica. Informe Técnico (CATIE) no. 354. 50 p.
- Monzón Centeno, A.J. 2007. Insect pathogenic fungi in *Hypothenemus hampei*, *Leucopiera coffeella* and in the soil in coffee plantations in Central America: natural occurrence, management system and genetic diversity. Ph. D. Thesis. Hogskoloveien, Noruega, Norwegian University of Life Science/Norwegian Institute for Agricultural and Environmental Research/CATIE. pv.
- Monzón, A.J.; Elameen, A.; Klingen, I.; Klemsdal, S.S. 2007. Genetic diversity of *Beauveria bassiana* isolates in *Hypothenemus hampei* and *Leucopiera coffeella* populations in coffee. In Monzón Centeno, A.J. Insect pathogenic fungi in *Hypothenemus hampei*, *Leucopiera coffeella* and in the soil in coffee plantations in Central America: natural occurrence, management system and genetic diversity. Ph. D. Thesis. Hogskoloveien, Noruega, Norwegian University of Life Science/Norwegian Institute for Agricultural and Environmental Research/CATIE. 24 p.
- Monzón, A.J.; Guharay, F.; Klingen, I. 2007. Natural occurrence of *Beauveria bassiana* in *Hypothenemus hampei* (Coleoptera: Curculionidae) populations in unsprayed coffee fields. In Monzón Centeno, A.J. Insect pathogenic fungi in *Hypothenemus hampei*, *Leucopiera coffeella* and in the soil in coffee plantations in Central America: natural occurrence, management system and genetic diversity. Ph. D. Thesis. Hogskoloveien, Noruega, Norwegian University of Life Science/Norwegian Institute for Agricultural and Environmental Research/CATIE. 8 p.
- Monzón, A.J.; Guharay, F.; Klingen, I. 2007. Natural occurrence of *Beauveria bassiana* and parasitoids in *Leucopiera coffeella* (Lepidoptera: Lyonetiidae) larvae in coffee. In Monzón Centeno, A.J. Insect pathogenic fungi in *Hypothenemus hampei*, *Leucopiera coffeella* and in the soil in coffee plantations in Central America: natural occurrence, management system and genetic diversity. Ph. D. Thesis. Hogskoloveien, Noruega, Norwegian University of Life Science/Norwegian Institute for Agricultural and Environmental Research/CATIE. 30 p.
- Monzón, A.J.; Sand, R.; Hidalgo, E.; Klingen, I. 2007. Effect of coffee management, time and climate on the occurrence of insect pathogenic fungi in the soil. In Monzón Centeno, A.J. Insect pathogenic fungi in *Hypothenemus hampei*, *Leucopiera coffeella* and in the soil in coffee plantations in Central America: natural occurrence, management system and genetic diversity. Ph. D. Thesis. Hogskoloveien, Noruega, Norwegian University of Life Science/Norwegian Institute for Agricultural and Environmental Research/CATIE. 26 p.
- Morán Montaña, M.; Carrera Gambetta, F.; Campos Arce, J.J.; Louman, B.; Delgado, D.; Galloway, G. 2006-2007. Evaluación de la sostenibilidad del manejo forestal comunitario para identificar prioridades de inversión en ejidos del estado de Guerrero, México. Recursos Naturales y Ambiente no. 49-50:124-130.
- Morse, W.C. 2007. Payments for environmental services in Costa Rica: conservation and production decisions within the San Juan - La Selva Biological Corridor. Ph. D. Thesis. Turrialba, Costa Rica, CATIE/ University of Idaho. 245 p.
- Moya Roque, R. 2007. Industrialización y comercialización de madera proveniente de plantaciones forestales en Costa Rica. Recursos Naturales y Ambiente no. 49-50:154-162.
- Muñoz Espinoza, J.C. 2007. Identificación de oportunidades de mercado y mercadeo con un enfoque multi-cadena para productos agroforestales de Alto Beni, Bolivia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 105 p.
- Murrieta, E.; Finegan, B.; Delgado, D.; Villalobos, R.; Campos, J.J. 2007. Propuesta para una red de conectividad ecológica en el Corredor Biológico Volcánica Central-Talamanca, Costa Rica. Recursos Naturales y Ambiente no. 51-52:69-76.

- Murrieta, E.; Finegan, B.; Delgado, D.; Villalobos, R.; Campos, J.J. 2007. Identificación y caracterización florística de bosques naturales en el Corredor Biológico Volcánica Central Talamanca, Costa Rica. Recursos Naturales y Ambiente no. 51-52:57-68.
- Muschler, R.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2007. Producción orgánica y agroforestal de cultivos perennes (café). Mód.5: Producción orgánica y agroforestal de cultivos perennes (café). Serie Técnica. Manual Técnico (CATIE) no. 69. 51 p.
- Neeff, T.; Henders, S. 2007. Guía sobre los mercados y la comercialización de proyectos MDL forestales. Turrialba, Costa Rica, CATIE/Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria/CIFOR/El Colegio de la Frontera Sur/Ministerio de Ganadería, Agricultura y Pesca (Uruguay). Serie Técnica. Manual Técnico (CATIE) no. 65. 45 p.
- Neeff, T.; Najarro, T.; Castro, M. 2006-2007. Abordaje participativo para establecer la definición de bosque bajo el mecanismo de desarrollo limpio en Honduras. Recursos Naturales y Ambiente no. 49-50:141-146.
- Nuestros logros 2006. 2007. Serie Institucional. Informe Anual (CATIE) no. 27. 104 p.
- Orozco Zamora, C.; Montagnini, F. 2007. Lluvia de semillas y sus agentes dispersores en plantaciones forestales de nueve especies nativas en parcelas puras y mixtas en la Estación Biológica La Selva, Costa Rica. Recursos Naturales y Ambiente no. 49-50:131-140.
- Pacheco, P. 2006-2007. El régimen forestal boliviano: una mirada retrospectiva a diez años de su implementación. Recursos Naturales y Ambiente no. 49-50:58-67.
- Payán, A. 2007. Evaluación participativa de forrajes mejorados para el manejo sostenible de los recursos naturales en la subcuenca del río Jucuapa, Matagalpa, Nicaragua. Serie Técnica. Informe Técnico (CATIE) no. 356. 36 p.
- Payán, A.; Jiménez, F.; Ibrahim, M.; Casanoves, F. 2007. Crecimiento de forrajes mejorados con potencial para sistemas de producción agropecuaria en la subcuenca del río Jucuapa, Nicaragua. Recursos Naturales y Ambiente no. 51-52:167-174.
- Payán, A.; Jiménez, F.; Ibrahim, M.; Casanoves, F. 2007. Evaluación participativa de forrajes promisorios para zonas secas y su posible impacto en los recursos naturales de la subcuenca del río Jucuapa, Nicaragua. Recursos Naturales y Ambiente no. 51-52:161-166.
- Pérez Carrasco, R.; Faustino, J.; Jiménez, F.; Prins, C. 2007. La coordinación institucional y el manejo de los recursos naturales bajo el enfoque de cogestión adaptativa de cuencas en la subcuenca del río Aguas Calientes, Nicaragua. Recursos Naturales y Ambiente no. 51-52:153-160.
- Pérez León, G. 2007. Evaluación de comportamiento de *Oncometopia clarior* (Walker) (Hemiptera: Cicadellidae) ante especies vegetales asociadas al cultivo *Dracaena marginata* (Lamarck) y su preferencia a diversos regímenes de fertilización. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 87 p.
- Pérez León, R.A. 2007. Composición y estructura de comunidades de aves rapaces diurnas y sus implicaciones para sistemas agropecuarios en paisajes fragmentados de la costa de El Salvador. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 94 p.
- Pérez, C.J.; Locatelli, B.; Vignola, R.; Imbach, P. 2007. Importancia de los bosques tropicales en las políticas de adaptación al cambio climático. Recursos Naturales y Ambiente no. 51-52:4-11.
- Polidoro, B.A. 2007. Ecological risk assessment of current-use pesticides in the Sixaola Watershed, Costa Rica. Ph. D. Thesis. Turrialba, Costa Rica, CATIE/University of Idaho. 188 p.
- Quispe Guanca, J.L. 2007. Caracterización del impacto ambiental y productivo de las diferentes normas de certificación de café en Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 137 p.
- Ramírez Sandoval, L.R. 2007. Contribución geológica y cultural de los sistemas silvopastoriles para la conservación de la biodiversidad en Matiguás, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 175 p.
- Ramos Bendaña, Z.S.; Finegan, B. 2006-2007. Red ecológica de conectividad potencial: estrategia para el manejo del paisaje en el Corredor Biológico San Juan - La Selva. Recursos Naturales y Ambiente no. 49-50:112-123.
- Rascón Ramos, A.E. 2007. Metodología para la elaboración de la línea base y para la implementación del monitoreo biofísico y socioambiental de la cogestión de cuencas en América Central. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 270 p.
- Ríos, N.; Cárdenas, A.Y.; Andrade, H.J.; Ibrahim, M.; Jiménez, F.; Sancho, F.; Ramírez, E.; Reyes, B.; Woo, A. 2007. Escorrentía superficial e infiltración en sistemas ganaderos convencionales y silvopastoriles en el trópico subhúmedo de Nicaragua. Agroforestería en las Américas no. 45:66-71.
- Roberts, D.L. 2007. Effects of tropical forest fragmentation on ecology and conservation of migrant and resident birds in lowland Costa Rica. Ph.D. Thesis. Turrialba, Costa Rica, CATIE/University of Idaho. 100 p.
- Sabogal, C.; Lentini, M.; Pokorny, B.; Silva, J.N.M.; Zweede, J.; Veríssimo, A.; Boscolo, M. 2006-2007. Manejo forestal empresarial en la Amazonia brasileña: restricciones y oportunidades para la adopción de buenas prácticas de manejo. Recursos Naturales y Ambiente no. 49-50:81-89.
- Sabogal, C.; Snook, L.; Boscolo, M.; Pokorny, B.; Quevedo, L.; Lentini, M.; Colán, V. 2006-2007. Adopción de prácticas de manejo forestal sostenible por empresas madereras en la Amazonia de Brasil, Bolivia y Perú. Recursos Naturales y Ambiente no. 49-50:100-111.
- Sáenz, J.C.; Villatoro, F.; Ibrahim, M.; Fajardo, D.; Pérez, M. 2007. Relación entre las comunidades de aves y la vegetación en agropaisajes dominados por la ganadería en Costa Rica, Nicaragua y Colombia. Agroforestería en las Américas no. 45:37-48.
- Salazar Isaza, M.; Campos, J.J.; Prins, C.; Villalobos, R. 2007. Restauración del paisaje en Hojanca, Costa Rica. Serie Técnica. Informe Técnico (CATIE) no. 357. 51 p.
- Salgado Negret, B.E. 2007. Definición de tipos funcionales de especies arbóreas y caracterización de su respuesta a diferentes intensidades de perturbación en un bosque muy húmedo tropical mesoamericano. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 136 p.
- Sánchez Merlos, D.; Finegan, B.; Harvey, C.A.; Delgado, D. 2007. Tipos de bosques en el sector sur del Corredor Biológico del Atlántico, Nicaragua. Recursos Naturales y Ambiente no. 51-52:48-56.
- Sánchez Sarmiento, L.Y. 2007. Caracterización de la mano de obra en fincas ganaderas y rentabilidad de bancos forrajeros en Esparza, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 97 p.
- Schedlbauer, J.L. 2007. Forest ecosystem responses to edge effects and secondary forest development in northeastern Costa Rica: implications for conservation. Ph. D. Thesis. Turrialba, Costa Rica, CATIE/University of Idaho. 94 p.
- Sepúlveda López, C.; Casasola, F.; Ibrahim, M.; Villanueva, C.; Arguello, O.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2007. Sistemas silvopastoriles y apicultura: cuaderno de capacitación. Serie Técnica. Manual Técnico (CATIE) no. 74. 83 p.
- Serrano Dávila, M.E.; Campos, J.J.; Villalobos, R.; Galloway, G.; Herrera, B. 2007. Zonificación de la cobertura forestal a escala de paisaje en el cantón Hojanca, Costa Rica. Recursos Naturales y Ambiente no. 51-52:85-95.
- Snook, L.; Quevedo, L.; Boscolo, M.; Sabogal, C.; Medina, R. 2006-2007. Avances y limitaciones en la adopción del manejo forestal sostenible en Bolivia. Recursos Naturales y Ambiente no. 49-50:68-80.
- Sol Sánchez, A. 2007. Ecological and economic factors affecting the sustainable production of camedor palm (*Chamaedorea elegans* Mart) in Petén, Guatemala and Veracruz, México. Ph. D. Thesis. Turrialba, Costa Rica, CATIE. 157 p.
- Sosa Pérez, G. 2007. Componentes de la gestión del agua para consumo humano en el Municipio de Valle de Angeles, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 161 p.

- Stefano Pagiola: pionero en el diseño y la implementación de proyectos de pago por servicios ambientales en América Latina. 2007. Agroforestería en las Américas no. 45:8-11.
- Tacán Pérez, M.V. 2007. Caracterización agromorfológica de guanábana (*Annona muricata*) y chirimoya (*Annona cherimola*) en fincas de agricultores y condiciones ex situ e identificación de zonas potenciales de conservación y producción en Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 97 p.
- Tobar López, D.; Ibrahim, M. 2007. Mariposas del paisaje ganadero del bosque subhúmedo tropical, Esparza, Costa Rica. Serie Técnica. Informe Técnico (CATIE) no. 351. 37 p.
- Tobar López, D.; Ibrahim, M.; Casasola, F. 2007. Diversidad de mariposas en un paisaje agropecuario del Pacífico Central de Costa Rica. Agroforestería en las Américas no. 45:58-65.
- Tobar López, D.; Ibrahim, M.; Sáenz, J. 2007. Aves del paisaje ganadero del bosque subhúmedo tropical, Esparza, Costa Rica. Serie Técnica. Informe Técnico (CATIE) no. 350. 36 p.
- Tobar López, D.E.; López, M.A.; Morales, R. 2006-2007. Capacidad de carga turística en el Parque Nacional Tapantí-Macizo de la Muerte, Costa Rica. Recursos Naturales y Ambiente no. 49-50:147-153.
- Trautman Richers, B.Z. 2007. Factores que influyen en el diseño, implementación y manejo de sistemas silvopastoriles con características que favorezcan la conservación de la biodiversidad en Copán, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 172 p.
- Villacrés, D. 2006-2007. Situación del manejo forestal sostenible en la Amazonia ecuatoriana. Recursos Naturales y Ambiente no. 49-50:38-43.
- Villalobos Araya, A. 2007. Evaluación del efecto de fertilización y caracterización de vegetación asociada al cultivo de *Dracaena marginata* y sus periferias. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 110 p.
- Villalobos, R.; Detlefsen, G.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2007. Manejo forestal: cuaderno de capacitación. Mód. 4. Serie Técnica. Manual Técnico (CATIE) no. 71. 88 p.
- Villanueva, C.; Tobar, D.; Ibrahim, M.; Casasola, F.; Barrantes, J.; Arguedas, R. 2007. Árboles dispersos en potreros en fincas ganaderas del Pacífico Central de Costa Rica. Agroforestería en las Américas no. 45:12-20.
- Villatoro, F.; Sáenz, J.C. 2007. Clasificación de usos del suelo en paisajes ganaderos: el caso de Esparza, Costa Rica. Agroforestería en las Américas no. 45:21-26.
- Zapata, A.; Murgueitio, E.; Mejía, C.; Zuluaga, A.F.; Ibrahim, M. 2007. Efecto del pago por servicios ambientales en la adopción de sistemas silvopastoriles en paisajes ganaderos de la cuenca media del río La Vieja, Colombia. Agroforestería en las Américas no. 45:86-92.
- Arce, N.; Ortiz, E.; Villalobos, M.; Cordero, S. 2008. Existencias de carbono en charrales y sistemas agroforestales de cacao y banano de fincas indígenas bribri y cabécar de Talamanca, Costa Rica. Agroforestería en las Américas no. 46:30-33.
- Arias, E.; Chacón, O.; Herrera, B.; Induni, G.; Acevedo, H.; Coto M.; Barborak, J.R. 2008. Las redes de conectividad como base para la planificación de la conservación de la biodiversidad: propuesta para Costa Rica. Recursos Naturales y Ambiente no. 54:37-43.
- Arias, E.; Chacón, O.; Induni, G.; Herrera, B.; Acevedo, H.; Corrales, L.; Barborak, J.R.; Coto, M.; Cubero, J.; Paaby, P. 2008. Identificación de vacíos en la representatividad de ecosistemas terrestres en el Sistema Nacional de Áreas Protegidas de Costa Rica. Recursos Naturales y Ambiente no. 54:21-27.
- Ascencio Rojas, L. 2008. Caracterización de especies leñosas en sistemas ganaderos, de los municipios de Tlapacoyan, Misantla y Martínez de la Torre, Veracruz, México. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 119 p.
- Avendaño Reyes, J.R. 2008. Modelos genéricos de biomasa aérea para especies forestales en función de la arquitectura y la ocupación del rodal. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 144 p.
- Ballesteros Possé, W.; Saya, O.M.; Ordóñez Jurado, H.R. 2008. Sistemas agroforestales tradicionales en el Consejo Comunitario del Bajo Mira y Frontera en Tumaco, Nariño, Colombia. Agroforestería en las Américas no. 46:73-80.
- Barbosa, S.J.W.; Calasans, R.N.A. 2008. Capacitación para el monitoreo de recursos hídricos en cuencas hidrográficas del estado de Bahía, Brasil. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 121-124.
- Barriga M; Campos, JJ; Corrales, OM; Prins, C. 2008. Environmental Governance, adaptive and collaborative in model forests, watersheds and biological corridors. Ten experiences in five Latin-American countries. Technical series. Technical report / CATIE ; no.358. Economy, Politics and Governance of the Ordering of Natural Resources. no. 2. 78 p. (e-book)
- Barrios V., C.A.; Pezo, D. eds. 2008. Estudio de mercado de productos pecuarios en tres zonas piloto del proyecto Desarrollo Participativo de Alternativas de Uso Sostenible de la Tierra para Áreas de Pasturas Degradadas en América Central (CATIE/Noruega/Pasturas Degradadas). Serie Técnica. Informe Técnico (CATIE) no. 371. 52 p.
- Benavides Hernández, M. 2008. Evaluación del análisis de fragmentación con base en imágenes TM y fotografías aéreas en Sarapiquí, Vertiente Atlántico Norte, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 88 p.
- Benites, A.; Campos JJ; Faustino, J.; Villalobos, R.; Madrigal, R. 2008. Identificación de servicios ecosistémicos como base para el manejo participativo de los recursos naturales en la subcuenca del río Otún, Colombia. Recursos Naturales y Ambiente no. 55:83-90
- Benavides Rodríguez, Y. del C. 2008. Evaluación de las potencialidades y limitantes de los productores del Proyecto Silvopastoril del municipio de Matiguás, Nicaragua, para desarrollar la producción de carne orgánica certificada. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 114 p.
- Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). 2008. Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. 137 p.
- Botelho, A.C.B. 2008. El protagonismo social de las comunidades rurales como fundamento para la cogestión adaptativa incluyente de los recursos naturales en un territorio. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 155 p.
- Bouroncle Seoane, C. 2008. Efectos de la fragmentación en la ecología reproductiva de especies y grupos funcionales del bosque húmedo tropical de la zona atlántica de Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 77 p.

Publications 2008

- Aguilar V., M.E.; Ortiz V, J.L.; Sandoval F, J.A. 2008. Embriogénesis somática en plátanos y bananos: perspectivas y limitaciones. Serie Técnica. Boletín Técnico (CATIE) no. 27. 50 p.
- Alemán Mejía, J.B. 2008. Caracterización de reptiles y percepción local hacia las serpientes en fincas ganaderas de la subcuenca del Río Copán, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 110 p.
- Alvarez Condo, G. 2008. Modelos alométricos para la estimación de biomasa aérea de dos especies nativas en plantaciones forestales del trópico de Cochabamba, Bolivia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 103 p.
- Andrade H.J.; Segura, M.; Somarriba, E.; Villalobos, M. 2008. Valoración biofísica y financiera de la fijación de carbono por uso del suelo en fincas cacaoteras indígenas de Talamanca, Costa Rica. Agroforestería en las Américas no. 46:45-50.
- Angulo Aguilar, O.; Prins, C.; Faustino, J.; Madrigal, R. 2008. La gestión del agua en Valle de Ángeles, Honduras: elementos claves para la protección y buen aprovechamiento del agua. Serie Técnica. Informe Técnico (CATIE) no. 360. 56 p.

- Bucardo Hernández, E.M. 2008. Escalamiento de experiencias de cogestión de cuencas del río Jucuapa a la parte alta de la subcuenca del río Viejo, Jinotega Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 123 p.
- Burgos, A.; Armero, H.; Somarrriba, E. 2008. Árboles frutales en los campos agrícolas de las fincas indígenas de Talamanca, Costa Rica. *Agroforestería en las Américas* no. 46:21-25.
- Cabrera Medaglia, J. 2008. El Tratado Internacional sobre los Recursos Fitogenéticos para la Alimentación y la Agricultura en Costa Rica: proceso de aprobación y retos de implementación. *Recursos Naturales y Ambiente* no. 53:97-104.
- Calero Borge, W.A. 2008. Producción e incrementos de madera y carbono de laurel (*Cordia alliodora*) y cedro amargo (*Cedrela odorata* L.) de regeneración natural en cacaotales y bananales indígenas de Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 75 p.
- Camino Velozo, R. de. 2008. Mecanismos de financiamiento para la gestión de los recursos naturales: ampliando la paleta de posibilidades. *In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos"* (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 54.
- Camino Velozo, R. de; Detlefsen R., G. 2008. Aportes clave del foro electrónico sobre el abastecimiento sostenible de madera en Costa Rica. *In Taller sobre el Abastecimiento Sostenible de Madera en Costa Rica* (2008, Sarapiquí, Costa Rica). Comp. por R. de Camino; L. Babbar; G. Detlefsen. San José, Costa Rica, OET/Fundación Costa Rica-USA/CATIE. p. 107-114.
- Camino Velozo, R. de; Detlefsen R., G. 2008. Costa Rica y el abastecimiento sostenible de madera: necesidad de acciones decididas. *In Taller sobre el Abastecimiento Sostenible de Madera en Costa Rica* (2008, Sarapiquí, Costa Rica). Comp. por R. de Camino; L. Babbar; G. Detlefsen. San José, Costa Rica, OET/Fundación Costa Rica-USA/CATIE. p. 93-104.
- Camino Velozo, R. de; Detlefsen R., G. 2008. El abastecimiento sostenible de madera en Costa Rica: resumen ejecutivo. *In Taller sobre el Abastecimiento Sostenible de Madera en Costa Rica* (2008, Sarapiquí, Costa Rica). Comp. por R. de Camino; L. Babbar; G. Detlefsen. San José, Costa Rica, OIT/Fundación Costa Rica-USA/CATIE. p. 9-19.
- Camino, R. de; Babbar, L.; Detlefsen, G. comps. 2008. Taller sobre el Abastecimiento Sostenible de Madera en Costa Rica, Sarapiquí, Costa Rica. San José, Costa Rica, OIT/Fundación Costa Rica-USA/CATIE. 114 p.
- Campos Arce, J.J. 2008. Los primeros 100 días: cimentando las bases para el CATIE del futuro...ahora. Turrialba, Costa Rica, CATIE. 16 p.
- Canet, L.; Finegan, B.; Bouroncle, C.; Gutiérrez, I.; Herrera, B. 2008. El monitoreo de la efectividad del manejo de corredores biológicos: una herramienta basada en la experiencia de los comités de gestión en Costa Rica. *Recursos Naturales y Ambiente* no. 54:51-58.
- Cárcamo Ardón, J.A. 2008. Escalamiento territorial de manejo de cuencas en el contexto municipal de Valle de Angeles, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 147 p.
- Cárdenas Herrera, A.M. 2008. Incentivos económicos para la producción ecoamigable en fincas cafetaleras en el Corredor Biológico Volcánica Central - Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 200 p.
- Castellón, N. 2008. Educación: una estrategia para la cogestión de cuencas; Comité de la Subcuenca del Río Jucuapa, Nicaragua. *In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos"* (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 97-100.
- Castillo Quintero, C.L. del. 2008. Escenarios económicos para el manejo de la oferta del servicio ecosistémico de provisión y regulación del recurso hídrico para consumo humano en la subcuenca alta superior del río Pasto, Colombia. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 111 p.
- Cepeda Gómez, C. 2008. Relación entre el capital natural y el financiero con el bienestar de la comunidad de Holbox en Quintana Roo, México. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 118 p.
- Cerda Bustillos, R.H. 2008. Calidad de suelos en plantaciones de cacao (*Theobroma cacao*), banano (*Musa AAA*) y plátano (*Musa AAB*) en el valle de Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 56 p.
- Cervantes Zavala, R. 2008. Propuesta de herramientas para el desarrollo de procesos de cogestión de cuencas hidrográficas en América Central. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 145 p.
- Céspedes, M.V.; Finegan, B.; Herrera, B.; Delgado, L.D.; Velásquez, S.; Campos, J.J. 2008. Diseño de una red ecológica de conservación entre la Reserva de Biosfera La Amistad y las áreas protegidas del Área de Conservación Osa, Costa Rica. *Recursos Naturales y Ambiente* no. 54:44-50.
- Chica I., N.; León, J.; Prins, C. 2008. Organización, liderazgo y reglamentación: elementos claves para la gestión comunitaria del agua. Experiencia en siete comunidades de Copán Ruinas, Honduras. Serie Técnica. Informe Técnico (CATIE) no. 348. 42 p.
- Cisneros, J.; Loret, P. 2008. El Fondo para la Protección del Agua: mecanismo financiero para la conservación y el cuidado del agua en Quito, Ecuador. *In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos"* (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 63-68.
- Correa, C.M. 2008. Recursos fitogenéticos bajo la administración y control de las partes contratantes y en el dominio público ¿cuán rica es la canasta del sistema multilateral del Tratado Internacional? *Recursos Naturales y Ambiente* no. 53:118-125.
- Cotler A, H.; Caire, G. 2008. Lecciones aprendidas del manejo de cuencas a diversas escalas: el caso mexicano. *Cogestión de cuencas hidrográficas: experiencias y desafíos. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos"* (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 9-12.
- Cruz, J.; Nieuwenhuys, A. 2008. El establecimiento y manejo de leguminosas arbustivas en bancos de proteína y sistemas en callejones. Serie Técnica. Manual Técnico (CATIE) no. 86. 152 p.
- Dahlquist, R. 2008. Biology and management of the banana weevil (*Cosmopolites sordidus* germar) in the socioeconomic and agroecological context of the indigenous territories of Talamanca, Costa Rica. Ph. D. Thesis. Turrialba, Costa Rica, CATIE/University of Idaho. 154 p.
- Debouck, D.; Ebert, A.; Peralta, E.; Barandiarán, M.A.; Ramírez, M. 2008. La importancia de la utilización de la diversidad genética vegetal en los programas de investigación agrícola en América Latina. *Recursos Naturales y Ambiente* no. 53:46-53.
- Delgado, D.; Ramos, Z.; Bouroncle, C. 2008. Evaluación de la efectividad de estrategias de conservación en tierras privadas: una propuesta de estándar para los principales mecanismos utilizados en Latinoamérica. *Recursos Naturales y Ambiente* no. 54:59-65.
- Detlefsen, G.; Ibrahim, M. 2008. Sistemas agroforestales predominantes en la cuenca del Canal de Panamá. Serie Técnica. Informe Técnico (CATIE) no. 366. 47 p.
- Detlefsen, G.; Pomareda, C.; Ibrahim, M.; Pezo, D. 2008. La legislación forestal debe ser revisada para fomentar y aprovechar el recurso maderable en fincas ganaderas de Centroamérica. *Síntesis para Decisores* (CATIE) no. 1. 4 p.
- Dominguez del Aguila, S. 2008. Zonificación ambiental para el ordenamiento territorial de la subcuenca bimunicipal del río Aguas Calientes, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 165 p.
- Ebert, A.W. 2008. Flujos de germoplasma facilitado por el Centro Agronómico Tropical de Investigación y Enseñanza dentro y fuera de Latinoamérica. *Recursos Naturales y Ambiente* no. 53:62-71.

- Escobar García, J.E. 2008. Plan de ordenamiento territorial de la subcuenca del río Jucuapa, Matagalpa, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 188 p.
- Esquinas Alcázar, J.; Hilmi, A. 2008. Las negociaciones del tratado internacional sobre los recursos fitogenéticos para la alimentación y la agricultura. Recursos Naturales y Ambiente no. 53:20-29.
- Fernández Díaz-Silveira, M. 2008. El Tratado Internacional sobre los Recursos Fitogenéticos para la Alimentación y la Agricultura en Cuba. Recursos Naturales y Ambiente no. 53:105-109.
- Fernández González, E. 2008. Responsabilidad empresarial ambiental en el manejo y gestión de recursos naturales y cuencas hidrográficas en Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 180 p.
- Finegan, B.; Céspedes Aguero, M.; Sesnie, S.E.; Herrera, B.; Induni, G.; Sáenz, J.; Ugalde, J.; Wong, G. 2008. El monitoreo ecológico como herramienta de manejo para la conservación: bases conceptuales y estructura del Programa de Monitoreo Ecológico Terrestre en Áreas Protegidas y Corredores Biológicos de Costa Rica. Recursos Naturales y Ambiente no. 54:66-73.
- Fonseca G, W.; Alice, F.E.; Montero, J.; Toruño, H.; Leblanc, H. 2008. Acumulación de biomasa y carbono en bosques secundarios y plantaciones forestales de *Vochysia guatemalensis* e *Hieronyma alchorneoides* en el Caribe de Costa Rica. Agroforestería en las Américas no. 46:57-64.
- Franco, T. 2008. Los bancos de germoplasma en las Américas. Recursos Naturales y Ambiente no. 53:81-84.
- Frison, E.; Fowler, C.; Snook, L. 2008. Sostenibilidad de la diversidad y del intercambio de cultivos: nuevos mecanismos para asegurar el futuro del desarrollo agrícola. Recursos Naturales y Ambiente no. 53:9-19.
- Gaiji, S.; Debouck, D.G. 2008. Flujos de germoplasma en las Américas, 30 años de distribución de muestras de frijol por parte del Centro Internacional de Agricultura Tropical. Recursos Naturales y Ambiente no. 53:54-61.
- Gaiji, S.; Dias, S.; Enderesen, D.T.F.; Franco, T. 2008. Desarrollo de un sistema global de información a nivel de accesiones en apoyo al Tratado Internacional sobre los Recursos Fitogenéticos para la Alimentación y la Agricultura. Recursos Naturales y Ambiente no. 53:126-135.
- García Góchez, S.I. 2008. El papel de los gobiernos locales en el manejo de cuencas: estudio de caso municipios de San Isidro y Armenia, El Salvador. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 44-48.
- García Marín, J. 2008. Implementación del programa de rehabilitación de la cuenca El Naranjo, Cuba: evaluación económica, social y ambiental. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 125-128.
- García Oliva, N.F. 2008. Análisis de la demanda de productos lácteos y la aplicación de un modelo de equilibrio espacial para el mercado de leche pasteurizada en Honduras: algunas estimaciones del impacto del DR-CAFTA. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 154 p.
- Gentes, I. 2008. Gobernanza, gobernabilidad e institucionalidad para la gestión de cuencas: estado de arte. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 27-36.
- Gerbasí, F. 2008. Importancia del tratado internacional sobre los recursos fitogenéticos para la alimentación y la agricultura. Recursos Naturales y Ambiente no. 53:6-8.
- Gil de Lamadrid, A.S. 2008. Contribución de diferentes arreglos silvopastoriles a la conservación de la biodiversidad, mediante la provisión de hábitat y conectividad en el paisaje de la subcuenca del Río Copán, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 101 p.
- Gómez, M.; Pezo, D. eds. 2008. Estudio de mercado de productos forestales enfocado en fincas ganaderas en las zonas piloto del Proyecto CATIE/Noruega/Pasturas Degradadas. Serie Técnica. Informe Técnico (CATIE) no. 374. 108 p.
- González Zárate, M. 2008. Estimación de la biomasa aérea y la captura de carbono en regeneración natural de *Pinus masiminoi* H. E. Moore, *Pinus oocarpa* var. *ochoterenai* Mtz. y *Quercus* sp. en el norte del estado de Chiapas, México. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 81 p.
- González, M. 2008. Hacia la sostenibilidad financiera de los programas de cuencas: los contratos vinculantes en Valle de Ángeles, Honduras. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 55-62.
- Gutiérrez Montes, I.; Escobedo, A.; Bucardo, E.M.; Castillo, R.L.; Castro, J.E.; Cervantes, R.; Escobar, J.E.; Estrada, N.; Fernández, E.; Flores, C. 2008. Diagnóstico rural para implementar un programa de educación ambiental en las comunidades de Matina, Bataan y Pacuare, Costa Rica. Serie Técnica. Informe Técnico (CATIE) no. 374. 47 p.
- Halewood, M.; Nnadozie, K. 2008. El sistema multilateral de acceso y distribución de beneficios del Tratado Internacional sobre los Recursos Fitogenéticos para la Alimentación y la Agricultura. Recursos Naturales y Ambiente no. 53:30-38.
- Harvey, C.A.; Sáenz Méndez, J.C. eds. 2008. Evaluación y conservación de biodiversidad en paisajes fragmentados de Mesoamérica. Heredia, Costa Rica, INBIO/Universidad Nacional/CATIE. 620 p.
- Hernández Sánchez, L.G. 2008. Genetic diversity and mating system analysis of *Cedrela odorata* L. (Meliaceae) populations under different human dominated landscapes and primary forests. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 74 p.
- Herrera, B.; Finegan, B. 2008. La planificación sistemática como instrumento para la conservación de la biodiversidad: experiencias recientes y desafíos en Costa Rica. Recursos Naturales y Ambiente no. 54:4-13.
- Huerta Chombo, G.L. 2008. Diagnóstico de condiciones mínimas y validación de una guía para el desarrollo de esquema de PSE-hídrico en las microcuencas de los ríos Reventado y Parrita Chiquito-Salado, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 126 p.
- Irias, J. 2008. Procesos de intervención en microcuencas en la Mancomunidad de Municipios del Centro de Atlántida, Honduras. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 78-81.
- Jiménez, F. 2008. Fortalecimiento de capacidades y formación de recursos humanos para la gestión de cuencas hidrográficas. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 82-96.
- Juep Bakuants, A. 2008. Rescate del conocimiento tradicional y biológico para el manejo de productos forestales no maderables en la comunidad indígena Jameykari, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 61 p.
- Kammerbauer, H. 2008. Planificación, implementación y monitoreo para la cogestión de cuencas. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 1-18.
- Lara, C.; León, J.; Alemán, L.; Prado, A. 2008. Creando institucionalidad local en la cogestión para el manejo adaptativo de cuencas: la experiencia de la MANCORSARIC a través de la mesa sectorial de ambiente y producción (MESAP). Serie Técnica. Informe Técnico (CATIE) no. 359. 60 p.

- Lardizábal Joya, C.C. 2008. Análisis de la sequía y alternativas de adaptación y mitigación en la subcuenca del río Guacerique, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 114 p.
- Lázaro Angulo SJ, A.E. 2008. Factores condicionantes de la toma de decisiones en procesos de organización empresarial: caso del entorno platanero en Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 129 p.
- Lemus de Jesús, G. 2008. Análisis de productividad de pasturas en sistemas silvopastoriles en fincas ganaderas de doble propósito en Esparza, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 126 p.
- León, J. 2008. El pago por el servicio ambiental hídrico en la subcuenca del río Copán, Honduras. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 69-77.
- López Báez, W.; López Martínez, J.; Villar Sánchez, B.; Faustino Manco, J. 2008. Manejo de cuencas hidrográficas en el estado de Chiapas, México: diagnóstico y propuesta de un modelo alternativo de gestión. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 21-26.
- López Nolasco, N.D. 2008. Financiamiento del manejo, gestión y cogestión de cuencas hidrográficas en Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 173 p.
- López Rosse Antequera, J.L. 2008. Oportunidades y limitaciones para el posicionamiento de pequeños cafetaleros de Costa Rica y sus empresas asociativas en mercados de cafés diferenciados. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 155 p.
- Louman, B.; Galloway, G.; Villalobos, R.; Campos Arce, JJ; Jiménez, F. 2008. Forestry research within a changing environment: The case of CATIE, Central America. *In* IUFRO 6.06.00. Forest Research Management in an Era of Globalization. p. 97-103.
- Madrigal, R.; Alpizar, F. 2008. El pago por servicios ecosistémicos y la acción colectiva en el contexto de cuencas hidrográficas. Serie Técnica. Informe Técnico (CATIE) no. 361. 29 p.
- Martínez Salinas, M.A. 2008. Conectividad funcional para aves terrestres dependientes de bosque en un paisaje fragmentado en Matiguás, Nicaragua. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 128 p.
- Matamoros, A.; Galante, E. 2008. Gestión socioecológica de la cuenca del río Frío, Costa Rica. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 156-157.
- Mena Mosquera, V.E. 2008. Relación entre el carbono almacenado en la biomasa total y la composición fisionómica de la vegetación en los sistemas agroforestales con café y en bosques secundarios del Corredor Biológico Volcánica Central - Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 68 p.
- Mendoza Barrera, A.F. 2008. Mecanismos de financiamiento sostenible para el plan de manejo de la cuenca hidrográfica del Río Santa María, Panamá. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 190 p.
- Mendoza Díaz, M.M. 2008. Metodología para el análisis de vulnerabilidad del recurso hídrico para consumo humano; aplicación y determinación de medidas de adaptación en la subcuenca del río Copán, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 102 p.
- Meza Picado, V.H. 2008. Evaluación de la eficiencia económica y la integridad ecológica para dos tipos de bosques húmedos intervenidos bajo manejo forestal con diferentes intensidades de cosecha en la Región Norte y Atlántica de Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 112 p.
- Molina Garate, E. 2008. El Consejo de Gestión de Aguas de la cuenca del Paute: experiencias y lecciones. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica).
- Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 37-39.
- Monge, M. 2008. Taller de ordenamiento territorial comunitario. Serie Técnica. Manual Técnico (CATIE) no. 78. 72 p.
- Moore, G. 2008. La tercera parte beneficiaria según el acuerdo normalizado de transferencia de material. Recursos Naturales y Ambiente no. 53:110-117.
- Moreno Vargas, M. 2008. Análisis de la capacidad empresarial de pequeños productores del cantón de Guácimo, Costa Rica: el caso de los productores inscritos al programa de desarrollo comunitario de la Universidad Earth. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 88 p.
- Muller, L.E. 2008. Anatomía y morfología de antófitos: principios y prácticas. Turrialba, Costa Rica, CATIE. 270 p.
- Murakami Bello, S. 2008. Contribución de los pagos por servicios ambientales (PSA) en la restauración de bosques secundarios en Hojanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 36 p.
- Muschler, R.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2008. Escuela de campo para promotores y promotoras de La Selva, Chiapas, México. Mód. 6: Producción ecológica de cultivos anuales básicos: maíz, frijol y calabaza. Serie Técnica. Manual Técnico (CATIE) no. 80. 60 p.
- Navarro, G.; Obando, G.; Corella, O. 2008. Ambientalismo light y la resaca forestal en Costa Rica. *In* Taller sobre el Abastecimiento Sostenible de Madera en Costa Rica (2008, Sarapiquí, Costa Rica). Comp. por R. de Camino; L. Babbar ; G. Detlefsen. San José, Costa Rica, OET/Fundación Costa Rica-USA/CATIE. p. 77-92.
- Neef, T.; Eichler, L.; Deecke, I.; Fehse, J. 2008. Actualización sobre los mercados para compensaciones forestales para la mitigación del cambio climático. Serie Técnica. Manual Técnico (CATIE) no. 77. 34 p.
- Núñez de León, D.L. 2008. Aplicación de atributos de buena gobernanza ambiental en paisajes clave de Guatemala para su adhesión a la red regional de bosques modelo. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 129 p.
- Núñez Gual, M.A. 2008. Evaluación de comunidades de aves en bosques secundarios restaurados en potreros abandonados ubicados en la cuenca del río Zapotal, Hojanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 83 p.
- Nieuwenhuys, A.; Aguilar, A.; Mena, M.; Nájera, K.; Osorio, M. 2008. La siembra de pastos asociados con maní forrajero *Arachis pintoi*. Serie Técnica. Manual Técnico (CATIE) no. 82. 74 p.
- Noh, J.K. 2008. Plantas medicinales de Costa Rica: basado en el conocimiento local de caficultores del Corredor Biológico Volcánico Central de Talamanca. Serie Técnica. Informe Técnico (CATIE) no. 367. 112 p.
- Obregón, S.; Solórzano, C.; Mejía, I. 2008. Equidad de género en la gestión y manejo de cuencas: una forma de intervención inclusiva y sostenible en la subcuenca Aguas Calientes, Nicaragua. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 101-104.
- Orozco, L.; López, A.; Somarriba, E. 2008. Enriquecimiento de fincas cacaoteras con frutales y maderables en Alto Beni, Bolivia. Agroforestería en las Américas no. 46:65-72.
- Orozco, L.; Villalobos, M.; Ortíz, A.; Riascos, L.; Méndez, J.; Sánchez, V. 2008. Las fincas indígenas bribri y cabécar de Talamanca, Costa Rica. Agroforestería en las Américas no. 46:14-20.
- Orozco, P.P.; Brown, S.; Lantagne, S. 2008. Proceso de planificación para el manejo, gestión y cogestión de la parte alta de la subcuenca del río Viejo, Nicaragua: el caso del proyecto MARENCA-PIMCHAS. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 13-20.

- Orozco, P.P.; Jiménez, F.; Faustino, J.; Prins, C. 2008. La cogestión de cuencas abastecedoras de agua para consumo humano. Serie Técnica. Boletín Técnico (CATIE) no. 28. 28 p.
- Ortiz, A.; Riascos, L.; Somarriba, E. 2008. Almacenamiento y tasas de fijación de biomasa y carbono en sistemas agroforestales de cacao (*Theobroma cacao*) y laurel (*Cordia alliodora*). Agroforestería en las Américas no. 46:26-29.
- Ospina Zéñiga, O.E.; Ramírez Arcila, H. 2008. Modelo agua segura: exploración de la fábrica de agua. Cogestión de cuencas hidrográficas: experiencias y desafíos. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 115-120.
- Otálvaro Arnago, D.M.; Henao Osorio, A.M.; León Peláez, J.D. 2008. Lineamientos para la planificación participativa y la actuación interinstitucional en cuencas hidrográficas: una experiencia académica. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 139-143.
- Paaby, P. 2008. Vacíos en los esfuerzos de conservación de la biodiversidad en aguas continentales de Costa Rica. Recursos Naturales y Ambiente no. 54:28-36.
- Páez Bogarín, G. 2008. La raíz del conocimiento científico explícito sobre el trópico americano, enclavada en el Valle de Turrialba; acto de juramentación de José Joaquín Campos como Director General del CATIE período 2008 - 2012, 29 de febrero 2008. Turrialba, Costa Rica, CATIE, Turrialba. 27 p.
- Pérez García, O. 2008. Evaluación de la biodiversidad de mariposas diurnas presentes en sistemas agroforestales modernos con café en el Corredor Biológico Volcánica Central-Talamanca, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 68 p.
- Pinto Ruiz, R.; Gómez, H.; Medina, F.; Guevara, F.; Hernández, A.; Martínez, B.; Hernández, D. 2008. Árboles forrajeros de Chiapas. Serie Técnica. Manual Técnico (CATIE) no. 84. 116 p.
- Pokorny, B.; Sabogal, C.; Jong, W. de; Stoian, D.; Louman, B.; Pacheco, P. 2008. Experiencias y retos del manejo forestal comunitario en América Tropical. Recursos Naturales y Ambiente no. 54:81-98.
- Polidoro, B.; Winowiecki, L.; Johnson Maynard, J.; McDaniel, P.; Morra, M. 2008. Suelos del valle y del piedemonte en Talamanca: un paisaje dinámico para el almacenamiento de carbono. Agroforestería en las Américas no. 46:40-44.
- Prins, C. 2008. Gestión de conflictos en la protección de recursos hídricos como dimensión para crear institucionalidad y gobernabilidad en cogestión de cuencas. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 37-39.
- Quevedo Corado, J.E. 2008. Análisis y evaluación de las franjas ribereñas y de los usos adyacentes en la microcuenca del río Toila, subcuenca del río Matanzas, Guatemala. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 216 p.
- Quezada Martínez, D. 2008. ¿Cómo construir una sala con su manga de ordeño?. Turrialba, Costa Rica, CATIE. 19 p.
- Ramírez Ramírez, J.A. 2008. Análisis de la interrelación de la empresa minera Pierina con su entorno socioeconómico y ambiental en Ancash, Perú. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 176 p.
- Ramírez, M. 2008. Redes de recursos fitogenéticos en las Américas. Recursos Naturales y Ambiente no. 53:85-92.
- Ramos, M. 2008. The effects of local and landscape context on leafhopper (Hemiptera: Cicadellinae) communities in coffee agroforestry systems of Costa Rica. Ph. D. Thesis. Turrialba, Costa Rica, CATIE. 168 p.
- Retamal, R.; Madrigal, R.; Alpízar, F.; Jiménez, F. 2008. Metodología para valorar la oferta de servicios ecosistémicos asociados al agua de consumo humano, Copán Ruinas, Honduras. Serie Técnica. Informe Técnico (CATIE) no. 362. 54 p.
- Reyes, B.A.; Paiz, C.R.; Lira, M.R.; López, N.D.; Gómez, S.N. 2008. Creación y funcionamiento del Comité de Cuenca Bimunicipal Aguas Calientes: sistematización de experiencias. Serie Técnica. Informe Técnico (CATIE) no. 369. 30 p.
- Rivera Mazariegos, O.; Rivera, M.A. 2008. Plan de manejo de microcuenca desde la visión comunitaria: un instrumento para contribuir en la gobernanza de los Municipios en la cuenca de los ríos Coatán y Suchiate en Guatemala, en el marco del Proyecto Tacaná de UICN. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 148-155.
- Rivera Rojas, M. 2008. Impacto potencial del cambio climático en eventos epidémicos del gorgojo descortezador del pino *Dendroctonus frontalis* Zimmermann (Coleoptera: Curculionidae, Scolytinae) en Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 69 p.
- Rivera, S.; Hernández, A.J.; Martínez de Anguita, P.; Lowry, J.H.; Douglas Ramsey, R. 2008. Experiencias y Desafíos". In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 129-134.
- Rodas Velásquez, G.R. 2008. Manejo y gestión de zonas de recarga hídrica de microcuencas y fuentes de agua para consumo humano en Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 106 p.
- Rodríguez Espinoza, N.M. 2008. Evaluación de dos modalidades de pago por servicios ambientales aplicadas a fincas agroforestales en las provincias de San José y Puntarenas, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 70 p.
- Romero, M. 2008. Ordenamiento y gestión territorial de la parte alta de la subcuenca del río Viejo, Jinotega, Nicaragua. In Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 135-138.
- Ruiz, M. 2008. Una lectura crítica de la Decisión 391 de la Comunidad Andina y su puesta en práctica en relación con el Tratado Internacional. Recursos Naturales y Ambiente no. 53:136-147.
- Sabogal, C.; Jong, W. de; Pokorny, B.; Louman, B. eds. 2008. Manejo forestal comunitario en América Latina: experiencias, lecciones aprendidas y retos para el futuro. Bogor, Indonesia, CIFOR/CATIE. 294 p.
- Salinas, Z.; Hernández, P. eds. 2008. Guía para el diseño de proyectos MDL forestales y de bioenergía. Serie Técnica. Manual Técnico (CATIE) no. 83. 220 p.
- Sampaio, M.J.A.; Ferreira, S.N. 2008. Ratificación y puesta en práctica del Tratado Internacional sobre Recursos Fitogenéticos para la Alimentación y la Agricultura en Brasil. Recursos Naturales y Ambiente no. 53:93-96.
- Sánchez Garita, V.; Gutiérrez Montes, I.; Rivas Platero, G.G. 2008. Escuela de campo para promotores y promotoras de La Selva, Chiapas, México. Mód. 7: Producción ecológica de cultivos anuales comerciales: chile y tomate. Serie Técnica. Manual Técnico (CATIE) no. 79. 64 p.
- Sánchez, D.; Villanea, C.; Torres, M.; Tobar, D.; DeClerck, F. 2008. Cercas vivas y su valor para la producción y conservación. Serie Técnica. Informe Técnico (CATIE) no. 364. 27 p.
- Segura, M.; Andrade, H.J. 2008. ¿Cómo construir modelos alométricos de volumen, biomasa o carbono de especies leñosas perennes?. Agroforestería en las Américas no. 46:89-96.
- Segura, M.; Andrade, H.J. 2008. ¿Cómo estimar rápidamente el carbono almacenado en la biomasa aérea de los sistemas agroforestales indígenas de Talamanca, Costa Rica? Agroforestería en las Américas no. 46:97-103.
- Seminario Internacional "Adaptación al Cambio Climático: el Rol de los Servicios Ecosistémicos" (2008, Turrialba, Costa Rica). 2008. Resúmenes. Turrialba, Costa Rica, CATIE. 98 p.

- Serrano Dávila, M.E.; Campos, J.J.; Villalobos, R.; Galloway, G.; Herrera, B. 2008. Evaluación y planificación del manejo forestal sostenible a escala de paisaje en Hojancha, Costa Rica. Serie Técnica. Informe Técnico (CATIE) no. 363. 38 p.
- Siang, L.E. 2008. El proceso de elaboración del acuerdo normalizado de transferencia de material. Recursos Naturales y Ambiente no. 53:39-45.
- Sierra Restrepo, R. 2008. El Proyecto Agua y Ambiente del oriente Antioqueño, Colombia. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 49-53.
- Solano Sánchez, W. 2008. Embriogénesis somática en clones superiores de cacao (*Theobroma cacao* L.) obtenidos en el Programa de Mejoramiento Genético del CATIE. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 92 p.
- Somarriba, E.; Andrade, J.E.; Segura, M.; Villalobos, M. 2008. ¿Cómo fijar carbono atmosférico, certificarlo y venderlo para complementar los ingresos de productores indígenas en Costa Rica?. *Agroforestería en las Américas* no. 46:81-88.
- Somarriba, E.; Suárez, A.; Calero, W.; Botina, A.; Chalaca, D. 2008. Aprovechamiento, rendimiento maderable y carbono perdido en los residuos de *Cordia alliodora* de regeneración natural en cacaotales (*Theobroma cacao*) y bananales (*Musa* AAA cv. Gros Michel) de Talamanca, Costa Rica. *Agroforestería en las Américas* no. 46:34-39.
- Somarriba, E.; Villalobos, M.; Sucre, L.; López, M.; Torres, F.; Torres, A.; Rodríguez, K. 2008. El proyecto captura de carbono y desarrollo de mercados ambientales en cacaotales y otros sistemas agroforestales indígenas en Talamanca, Costa Rica. *Agroforestería en las Américas* no. 46:8-13.
- Sterner, T. 2008. Instrumentos de política económica para el manejo del ambiente y los recursos naturales. Turrialba, Costa Rica, CATIE. 542 p.
- Suárez Islas, A. 2008. ¿Cuántos y cuáles árboles de laurel (*Cordia alliodora*) se pueden cosechar en los cacaotales y bananales indígenas de Talamanca, Costa Rica?. *Agroforestería en las Américas* no. 46:104-109.
- Suárez, I.; Jiménez, S.; Vargas, K.; Chan, G. 2008. Estrategia financiera para sistemas de áreas protegidas: la experiencia del Sistema Nacional de Áreas de Conservación de Costa Rica. *Recursos Naturales y Ambiente* no. 54:74-80.
- Tobar López, D.; Ibrahim, M. 2008. Valor de los sistemas silvopastoriles para conservar la biodiversidad en fincas y paisajes ganaderos en América Central. Serie Técnica. Informe Técnico (CATIE) no. 373. 40 p.
- Torres Guerra, K. 2008. Análisis participativo de las condiciones actuales para la implementación del plan de ordenamiento territorial de la microcuenca del río Sesesmiles, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 95 p.
- Torres Tambo, J.C. 2008. Análisis de la potencialidad para el manejo forestal comunitario en comunidades Kichwas de la provincia de Orellana - Ecuador. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 198 p.
- Turcios Samayoa, H. 2008. Evaluación del proceso de toma de decisiones para adopción de bancos de proteína de leucaena (*Leucaena leucocephala*) y su efecto como suplemento nutricional para vacas lactantes en sistemas doble propósito en el Chal, Petén, Guatemala. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 125 p.
- Urbina, L.; Haar, Y.L. 2008. El proceso de cogestión para el manejo de la subcuenca del río Jucuapa, Nicaragua: experiencias organizativas del comité ejecutivo de cuencas. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 144-147.
- Valiente Valiente, E. 2008. Caracterización de capitales y lineamiento de estrategias para el desarrollo de turismo de naturaleza en el río Tagatiyá, Paraguay. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 114 p.
- Varón, E.; Hilje, L.; Eigenbrode, S.D. 2008. Un enfoque agroecológico para el manejo de zompapas en cafetales. Turrialba, Costa Rica, CATIE/University of Idaho. 14 p.
- Vásquez del Castillo, N. 2008. Plan de ordenamiento territorial participativo para la gestión de zonas potenciales de recarga hídrica en la microregión hidrográfica Balalaica, Turrialba, Costa Rica. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 192 p.
- Vega I., D. 2008. Ordenamiento territorial participativo en microcuencas. San José, Costa Rica, ASDI/ CATIE. 9 p.
- Vega Izuuaylas, D.A. 2008. Plan de ordenamiento territorial participativo para la microcuenca del río Sesesmiles, Honduras. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 229 p.
- Vézina, A. 2008. Importancia del acceso a recursos genéticos de Musa en América Latina y el Caribe. *Recursos Naturales y Ambiente* no. 53:72-80.
- Villanueva, C. 2008. Valor económico y ecológico de las cercas vivas en fincas y paisajes ganaderos. Serie Técnica. Informe Técnico (CATIE) no. 372. 36 p.
- Villanueva, C.; Ibrahim, M.; Torres, K.; Torres, M. 2008. Planificación agroecológica de fincas ganaderas: la experiencia de la subcuenca Copán, Honduras. Serie Técnica. Informe Técnico (CATIE) no. 365. 36 p.
- Villasuso Socarrás, I.M.; Florido Trujillo, A.T. 2008. Propuesta para el manejo integrado de cuencas hidrográficas: experiencias de su implementación en Matanzas, Cuba. *In* Seminario Internacional "Cogestión de Cuencas Hidrográficas: Experiencias y Desafíos" (2008, Turrialba, Costa Rica). Memoria. Eds. L. Benegas; J. Faustino. Serie Técnica. Reuniones Técnicas (CATIE) no. 13. p. 105-109.
- Villate Rivera, R.H. 2008. Iniciativas de conservación con tortugas marinas y su efecto sobre el bienestar de la comunidad. Tesis Mag. Sc. Turrialba, Costa Rica, CATIE. 163 p.

The Tropical Agricultural Research and Higher Education Center (CATIE) is a regional center dedicated to research and graduate education in agriculture and the management, conservation and sustainable use of natural resources. Its members include the Inter-American Institute for Cooperation on Agriculture (IICA), Belize, Bolivia, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Venezuela and Spain.



Solutions for environment and development
Soluciones para el ambiente y desarrollo

Headquarters, CATIE 7170
Cartago, Turrialba, 30501
Telephone: (506) 2558-2000 • Fax: (506) 2558-2060

www.catie.ac.cr