

Thirty-ninth Regular Meeting of the Executive Committee

Strategic proposal for the future of CATIE

IICA/CE/Doc. 697 (19) - Original: Spanish

San Jose, Costa Rica 16-17 July 2019

STRATEGIC PROPOSAL FOR THE FUTURE OF CATIE

Ad hoc Working Group - Resolution 507 of the IABA, 2017

Martin Piñeiro (Coordinator), Marcos Chaves Solera, Jorge Faustino and Erick Quirós



Martin Piñeiro, Coordinator; Marcos Chaves Solera, Government of Costa Rica; Jorge Faustino, CATIE; Erick Quirós, IICA

The members of the *ad hoc* Working Group wish to thank Roberto Quiroz, Edgard Mata and Alejandro Imbach for their participation in the working meetings and for their important contribution to the content of this document.

Table of Contents

PREFACE AND ACKNOWLEDGMENTS	5
EXECUTIVE SUMMARY	6
INTRODUCTION: ORIGIN AND OBJECTIVES OF THE DOCUMENT	3
CHAPTER I. CATIE'S INSTITUTIONAL MANDATE AND ITS RELATIONSHIP OF COOPERATION AND COMPLEMENTARITY WITH IICA	.6
1. Evolution of the legal framework of the two institutions and their institutional relationship 1	6
2. The current institutional mandates of the two organizations, and the opportunities for collaboration and synergy	.9
The institutional mandates1	.9
3. Proposal regarding institutional collaboration links between CATIE and IICA	20
CHAPTER II. A STRATEGIC VISION OF CATIE'S INSTITUTIONAL OBJECTIVES AND THEIR POSSIBLE CONTRIBUTIONS TO DEVELOPMENT IN THE REGION: REAFFIRMING CATIE'S ORIGINAL MISSION	
1. Introduction	23
2. A proposed strategic vision for CATIE	25
CHAPTER III. THE RESEARCH PROGRAM: SOME SUGGESTIONS RELATED TO OBJECTIVES AND CONTENTS	28
CHAPTER IV: THE ROLE AND PRIORITIES OF EDUCATION AND TRAINING ACTIVITIE AT CATIE	
1. Introduction	60
2. The current situation	60
3. Evaluation and recommendations	51
CHAPTER V. THE CONTEXT OF INTERNATIONAL DEVELOPMENT AID: GUIDELINES FOR A FINANCING STRATEGY FOR CATIE	34
1. Introduction	\$4
2. The international context and the situation of IDA funding	6
3. Some elements of a comprehensive strategy for financing CATIE	57
IDA Financing	8
The governments of Latin America and the Caribbean	8
Interaction with the private sector	;9
Partnerships and synergies for providing information and services to technical cooperation institutions	;9
Partnerships and cooperation with research and education institutions	0
Better use and partial sale of CATIE's own assets and those held in usufruct	0

CHAPTER VI. THE GOVERNING BODIES OF CATIE AND THE PROCEDURE FOR THE ELECTION OF THE DIRECTOR GENERAL	42
1. Governing bodies	
The current situation	
Evaluation of the current situation	43
A proposal for simplification	43
2. Election of the Director General of CATIE	44
The current situation	44
A proposal for simplification	45
3. Looking to the future	45
CHAPTER VII. GUIDELINES FOR THE IMPLEMENTATION OF THE RECOMMENDATIONS	47

PREFACE AND ACKNOWLEDGMENTS

The Tropical Agriculture Research and Higher Education Center (CATIE) was created in January 1973 under a contract signed between IICA and the Government of Costa Rica that was subsequently enshrined in law.

Since its creation, CATIE has fulfilled an important function by carrying out research and education activities on agricultural subjects related to the tropical regions of the Americas, complementing IICA's broader technical cooperation work.

Over the last two decades, the institutional relationship between the two organizations has deteriorated, a situation that has been exacerbated by the negative effects of the financial constraints faced by CATIE since 2015.

In response to this situation, in October 2017 the Inter-American Board of Agriculture (IABA), the highest-level governing body of both institutions, adopted Resolution 507, in which it instructed the two directors general, in consultation with the Government of Costa Rica, to establish an Ad Hoc Working Group and task it with preparing a strategic proposal for the future of CATIE.

The working group was set up accordingly, comprised of the following members: Martín Piñeiro (coordinator); Marcos Chaves Solera (representative of the Government of Costa Rica); Erick Quirós (representative of IICA); and Jorge Faustino (representative of CATIE).

The Ad Hoc Working Group has since drafted the proposal set out in this document, for submission for consideration by Manuel Otero and Muhammad Ibrahim, the directors general of IICA and CATIE, respectively, and, subsequently, by IICA's Executive Committee.

The Working Group wishes to express its appreciation for the assistance received from various members of the two institutions, and especially the two directors-general, which was extremely important given the nature of the task involved.

It also wishes to thank Roberto Quiroz, Alejandro Imbach, and Edgar Mata for their participation in many working meetings, and for their important contributions to the drafting of this document; and to Laura Cartín, for her efficient organizational and secretarial support.

EXECUTIVE SUMMARY

In October 2017, the Inter-American Board of Agriculture (IABA) adopted resolution 507, in which it instructed the Inter-American Institute for Cooperation on Agriculture (IICA) and the Tropical Agriculture Research and Higher Education Center (CATIE) to prepare "a strategic proposal for the future of CATIE that details scenarios and alternatives for restructuring and strengthening the Center's organizational, scientific, academic and financial frameworks, as well as its legal basis."

In response to this mandate, the directors general of the two institutions, in consultation with the Government of Costa Rica, established an Ad Hoc Working Group tasked with drafting a strategic proposal as the IABA had requested.

The Ad Hoc Working Group has drawn up a proposal that analyzes and evaluates different aspects of the future of CATIE, and its relationship with IICA.

The document includes 16 main recommendations, which are intended to be read, studied and interpreted in light of the whole text of the document.

The document presents five main ideas that form the underpinnings of a proposal aimed at strengthening CATIE through an improved institutional partnership with IICA, based on common objectives and the generation of complementarities and synergies between the two institutions.

The five main ideas or proposals that undergird the strategic proposal for the future of CATIE are as follows:

- a. Determine the principal mandates and responsibilities of each of the two organizations as the key to achieving an institutional partnership based on greater collaboration and complementarity.
- b. Define, specify, and strengthen the institutional mandate of CATIE and, accordingly, its priority areas of action.
- c. Devise and implement a strategy to strengthen the financing of CATIE.
- d. Redefine and simplify certain aspects of the governance of CATIE.
- e. Implement an institutional process designed to ensure and consolidate the creation of the institutional partnership proposed.

The 16 recommendations are presented below, grouped under the five ideas/proposals already mentioned:

a. Establish the principal mandates and responsibilities for each of the two organizations as the key to achieving an institutional partnership based on greater collaboration and complementarity. These mandates and responsibilities are clearly identified and established in the legal frameworks of both institutions.

Recommendation 1: That each institution focus its activities on the substantive core elements of its respective institutional mandate. In this way, CATIE, as an institution that generates knowledge, technologies, and innovations, could, as part of its work, contribute to and provide input for IICA's programs. For its part, IICA, in carrying out its institutional mandate of providing technical cooperation to the countries, could integrate CATIE into its work as an important source of knowledge, technologies, and innovations for processes aimed at establishing public policies and the institutional framework required for development.

<u>Recommendation 2</u>: That CATIE sign an agreement with IICA to use the latter's offices as a focal point and center of operations for carrying out its activities and programs. The two institutions could integrate, coordinate and implement many of these actions together.

a. Define, specify, and strengthen the institutional mandate of CATIE and, accordingly, its priority areas of action.

Recommendation 3: Reaffirm that CATIE's mission is to contribute, through research and education, to the sustainable development of agricultural production and natural resource conservation in the tropical agriculture regions of the continent.

Recommendation 4: That CATIE, as part of the preparation of its new strategic plan, evaluate its research program and, in the immediate future, consider giving the following two overarching areas of research a high priority:

- a. Development of the production and sustainability of the main agricultural activities in the tropical regions in which CATIE has developed capabilities and has demonstrated experience: cacao and coffee cultivation, silvopasture systems for livestock, and cultivated forests. The work in these areas should maintain a systemic vision and seek to make further progress with the links of scale-up and value-added.
- b. Protection and sustainable management of natural forests, soils, and water resources in tropical agriculture regions.

<u>Recommendation 5</u>: CATIE's educational activities are an essential core element of its institutional projection at the international level. The Working Group therefore recommends that CATIE be strengthened as an international educational center specializing in sustainable production and natural resource conservation in tropical agriculture regions, and that it promote itself as an important provider of these educational services among other regions of the world.

Recommendation 6: The Doctoral Program should be viewed as an objective that needs to be developed and consolidated in the medium term, based on the lessons learned and experience acquired thus far. The Working Group considers that the human resources currently available at CATIE to assume this responsibility, especially full-time staff with doctorates, are limited and insufficient. Therefore, CATIE should immediately focus efforts on maintaining and expanding its agreements with eligible public and private universities and international research centers, in which it should be stipulated that dissertations will be prepared at CATIE.

Recommendation 7: The academically oriented Master's Degree Program should be reviewed, modified where necessary, strengthened, and serve as the main focal point of CATIE's educational activities. It is felt there are too many master's degrees courses with different orientations, which is bound to affect their depth and originality, and the dedication of professors to their teaching activities. Institutional efforts could be focused on a smaller number of master's degrees, drawing and building on the strengths of CATIE's research programs, to achieve the greatest possible synergy between research, technology, and education.

<u>Recommendation 8:</u> CATIE should not offer new graduate education and training opportunities without first ascertaining, based on substantive evidence, that there is interest in, and demand for, such opportunities. This would avoid short-lived programs being created that only weaken the institution and contribute little to its academic image and positioning.

Recommendation 9: Virtual education activities should aim to achieve an educational objective based on clear, verifiable evidence of the need, relevance, and real demand for support for human resources training in the region. In some instances, CATIE could collaborate with IICA in order to use its operating platform.

<u>Recommendation 10</u>: That the two institutions consider developing the institutional mechanisms required to use and take full advantage of IICA's extensive network of offices in its member countries and its network of institutional contacts to attract graduate studies candidates and secure grants and other types of financing for dissertation work. This would strengthen both CATIE's graduate studies, and the technical underpinnings of IICA's technical cooperation activities.

a. Devise and implement a strategy to strengthen the financing of CATIE that includes ways to make better use of the material resources and property owned by CATIE and IICA, held in usufruct by CATIE and not required for research activities.

Recommendation 11: That CATIE focus on designing a bold, creative and comprehensive strategy for securing external resources. The strategy should take into account the difficulty of securing more IDA funding and, therefore, the need to broaden the financial base so as to not have to depend exclusively on those funds. The strategy should consider ways of securing other sources of funding and the development of strategic partnerships, in particular with IICA. Both institutions would benefit from the creation of an explicit institutional and programming partnership for their efforts to secure resources, under which they would present bids together and carry out joint missions to donors. In preparing this strategy, CATIE should carefully consider all the elements mentioned in this chapter.

<u>Recommendation 12</u>: That CATIE carry out the following six complementary actions to generate more income from the assets it owns or holds in usufruct:

First, conduct an exhaustive analysis of the real net income obtained from CATIE's different commercial activities. Such an analysis could demonstrate the need for the institution to halt, at the very least, all activities that do not produce a profit, which could be obtained by leasing the land used in such activities to third parties.

<u>Second</u>, conduct an exhaustive analysis of the expenditure that CATIE incurs to ensure a high level of efficiency in maintaining the land it owns and uses for commercial production.

<u>Third</u>, evaluate the commercial use given to the germplasm banks that are an important source of resources for agricultural innovation, mainly in the cases of coffee and cacao. However, as maintenance, updating, and renewal costs are considerable, they should be covered with the income derived from CATIE's commercial activities based on coffee and cacao. To achieve this objective, it is important that CATIE explore the possibility of producing certified seed of the most sought-after varieties of coffee in the region. It should also operate the sale of cacao seeds and cacao buds for grafting.

<u>*Fourth.*</u> evaluate current leases and develop a proposal for long-term leases, endeavoring to identify and select lessees who maximize monetary income or make a significant contribution to the development of CATIE and/or the local community.

Fifth, draw up a plan for the sale of land owned by CATIE that meets the following three criteria:

1. It is not being used and is not needed now, nor will be in the foreseeable future, for CATIE's research and education activities.

- 2. It is not subject to restriction of ownership.
- 3. The land is primarily located in sensitive areas and has building potential, which could lead to a conflict with neighboring communities in the future.

The resources obtained from these sales could be used to set up a trust fund, with the resources preferably to be used to help finance the renovation of CATIE's physical infrastructure, which has deteriorated over the years.

<u>Sixth</u>, in the case of land owned by IICA that CATIE holds in usufruct, reach agreement with IICA, in consultation with the Government of Costa Rica, on a plan for the transfer of title of two pieces of land (50 or 100 ha. each in size) adjacent to the city of Turrialba and the local hospital. This land is not suitable for conducting research, and is very vulnerable from the security standpoint. On the other hand, its high commercial value could produce a large sum that could be placed in a trust fund managed by IICA and used to fund CATIE research activities, agreed and coordinated with IICA's Directorate of Technical Cooperation.

a. Redefine and simplify certain aspects of the governance of CATIE, to enable the institution to manage its operations more efficiently, and make the IABA the highest-level governing body of the IICA-CATIE partnership.

<u>Recommendation 13</u>: That CATIE and IICA together devise a proposal for the governance of CATIE that simplifies and strengthens decision-making processes based on a governance structure that assigns greater responsibilities and authority to CATIE's Board of Directors. This governance structure would have two levels: the Inter-American Board of Agriculture (IABA) as the political body, and a Board of Directors whose role would be basically scientific and managerial.

The proposed new Board of Directors would have ten members. Three of them would be *ex officio* and seven would be selected and designated by the Board of Directors itself:

- a. The *ex officio* members would be a representative of the Minister of Agriculture and Livestock of Costa Rica, a representative of the Director General of IICA, and a representative of the IABA designated by that body itself.
- b. The other seven members would be designated in a personal capacity and would be members of the scientific community specializing in agriculture and natural resources. Five members would be selected from among CATIE's member countries representing IICA's five regions (Northern, Central, Caribbean, Andean and

Southern). The other two would be members of the international scientific community and citizens of countries beyond the Americas. The duties and responsibilities of the Board of Directors would combine those of the current Board and the current Governing Council of Ministers.

a. The Chair of the Board of Directors would be chosen by the IABA from a shortlist of three candidates presented by the Board of Directors itself. The Chair would hold the position for two years and could be reelected one time only.

<u>Recommendation 14</u>: That CATIE, in consultation with IICA, submit for consideration by the IABA a simplified mechanism for the selection and appointment of the Director General of CATIE, pursuant to the following guidelines:

- a. When the position of the Director General of CATIE becomes vacant, either because the Director General concludes his/her term of office or resigns, the CATIE Board of Directors, following the first three steps in the process established in the current regulations, will draw up a shortlist of three candidates.
- b. The Board of Directors will hold a special session to elect the new Director General of CATIE by a two-thirds majority of the votes of its members.
- c. Implement an institutional process for the design of a road map and the actions needed to ensure the creation of the proposed institutional partnership.

<u>Recommendation 15</u>: That the Director General of IICA, in consultation with the Director General of CATIE, prepare and present to the next IABA:

- a. A comprehensive proposal outlining the concept of the "IABA Group," comprised of IICA as the core entity, CATIE, the existing trust funds, any other trust fund(s) that may be set up, and any other organization(s) that the IABA considers should be incorporated into the Group.
- b. A proposed road map for the implementation of the "IABA Group."

Recommendation 16: That the directors general of IICA and CATIE, in consultation with the Government of Costa Rica, create a commission for the institutional development of CATIE, tasked with proposing and implementing a plan of action for the orientation and

strengthening of CATIE and its relationship with IICA, pursuant to the resolutions of the Executive Committee.

The commission could have three subgroups with responsibility for technical, legal, and organizational matters, respectively. Each subgroup could be made up of:

- a. IICA's Director of Technical Cooperation and three technical specialists, plus CATIE's three research directors and the Director of Education and Training, for the implementation of technical recommendations.
- b. IICA's legal adviser and regional coordinator, plus CATIE's head of administration and legal adviser, to address legal and asset-related matters.

INTRODUCTION: ORIGIN AND OBJECTIVES OF THE DOCUMENT

The Tropical Agriculture Research and Higher Education Center (CATIE) is an institution with a long and distinguished track record in research and education in the fields of agriculture and natural resources in the tropical regions of the Americas.

Over the years, its legal-organizational framework has undergone a number of changes. The most recent of these occurred in 1999, when the Government of Costa Rica enacted Law 8028, in which CATIE, in association with the Inter-American Institute for Cooperation on Agriculture (IICA), was granted the status of a civil association dedicated to science and education.

The law also modified the contract on CATIE signed by IICA and the Government of the Republic of Costa Rica, approved under Law 5201 (1973), which was subsequently amended in 1983 by Law 6873.

Since 2015, CATIE has experienced a sharp fall in its total income, triggering a difficult financial situation in 2017. This had a negative impact on research and education activities, and was accompanied by a reduction in human resources. Indirectly, the situation also aggravated the latent difficulties that have always existed in the interinstitutional relationship with IICA. Although the new administration of CATIE has dealt with the financial and institutional situation satisfactorily, financial problems persist and, alarmingly for the institution, are expected to continue in the future.

In light of this situation, in October 2017 the Inter-American Board of Agriculture (IABA) adopted Resolution 507, in which it instructed the directors general of IICA and CATIE, with the participation of the Government of Costa Rica, to establish an Ad Hoc Working Group tasked with preparing "a strategic proposal for the future of CATIE that details scenarios and alternatives for restructuring and strengthening the Center's organizational, scientific, academic and financial frameworks, as well as its legal basis."

Following the adoption of that resolution, a report on an external evaluation of CATIE was prepared and published in December 2017.

That detailed, fairly lengthy evaluation covers nearly all the matters that IICA was asked to address in Resolution 507, especially those of a technical nature. Therefore, the Ad Hoc Working Group, while neither endorsing nor offering an opinion about the recommendations made in the external evaluation, deems some of the tasks requested in Resolution 507 to have been carried out, and focuses on others of mainly a legal/institutional nature. In particular, the document prepared by the Working Group omits descriptive aspects of CATIE dealt with in the external evaluation, and concentrates on the analysis of technical, financial, and organizational matters.

CATIE's evolution and present predicament highlight certain institutional difficulties that, in the opinion of the Ad Hoc Working Group, are a consequence, at least in part, of the lack of clarity of CATIE's mission, objectives, and priorities. These difficulties have also weighed on CATIE in its continued struggles to ensure stable financing, maintain a strong, productive relationship with its associate members, and have a clear understanding of the nature of its relationship with IICA and the forms that it takes.

Based on this analysis, and the work carried out and recommendations made by the External Evaluation (IIE 2017), in this document the Working Group, as instructed in IABA Resolution 507, presents a series of suggestions and concrete recommendations regarding certain aspects of the External Evaluation, which could be useful for charting and planning the future of CATIE.

It should be noted that the current CATIE Administration has begun preparing a new Medium-term Plan, in which it will set out a proposed road map for its governing bodies and the IABA to consider. The Director General of CATIE, respectful of Resolution 507, has called a temporary halt to this exercise and is awaiting the recommendations of the Ad Hoc Working Group and the resolutions and any recommendations that IICA's Executive Committee may adopt at its next meeting, scheduled to take place in July 2019.

Therefore, this document makes a series of general points and suggestions before offering more concrete recommendations, mainly in relation to CATIE's mission, its relationship with IICA, its funding strategy, and its governance structure. The recommendations regarding technical and management issues should be taken as suggestions, as they will be studied and defined in greater depth and detail in the Strategic Plan that CATIE will draw up in 2020.

In this document, concrete proposals are made concerning seven institutional issues that, in the opinion of the Ad Hoc Working Group, have never been resolved clearly, either conceptually or operationally. These matters were commented on in the external evaluations carried out in 2012 and 2017, as well as in different internal reports and conversations with the staff and directors general of both institutions. The Ad Hoc Working Group feels that, while significant progress has been achieved over the last two years, these issues still require special attention.

These institutional issues, which will be explored sequentially in the chapters of this document, are as follows:

- 1. CATIE's institutional mandate and its relationship with IICA, which is one of cooperation and complementarity.
- 2. CATIE's strategic objectives and raison d'être.
- 3. Research priorities.

- 4. The main objective of CATIE's educational activities, and their relationship and balance with research activities.
- 5. The strategy for strengthening CATIE's strategic partnerships and financing.
- 6. CATIE's governance structure.
- 7. The procedures for selecting and appointing CATIE's Director General.

CHAPTER I. CATIE'S INSTITUTIONAL MANDATE AND ITS RELATIONSHIP OF COOPERATION AND COMPLEMENTARITY WITH IICA

1. Evolution of the legal framework of the two institutions and their institutional relationship

Based on an initiative proposed by the Government of the United States of America, the Inter-American Institute of Agricultural Sciences was created on 7 October 1942 with a specific, concrete mandate geared to research and development for rubber growing. In addition, the mandate included encouraging and advancing the sciences and education in Costa Rica and in the other American Republics by means of teaching, research, experimentation, extension activities, general education, and training in agriculture and related arts and sciences. A limited number of countries, mainly those of Central America and northern South America, supported the initiative.

In 1972, after 30 years of fruitful research and education work, the countries decided to make a fundamental change to the organization. A convention was approved for the creation of a new institution: the **Inter-American Institute for Cooperation on Agriculture (IICA)**, with international legal status and specializing in agriculture. The main objective was to create a new hemispheric institution with a broad mandate centered around technical cooperation.

Furthermore, on 12 January 1973, the Government of Costa Rica and IICA signed a contract for the establishment of the **Tropical Agriculture Research and Higher Education Center** (**CATIE**), which is a contract approved by Congress, NOT an international convention. The new organization (CATIE) was tasked with continuing the research activities that the previous Inter-American Institute of Agricultural Sciences had carried out, for which IICA agreed to give its facilities in Turrialba in usufruct for the operation of CATIE. Thus, two complementary institutions were created, both subject to a common mandate established and supervised by the Inter-American Board of Agriculture (IABA).

Subsequently, the IABA, IICA's highest-level governing body, at a meeting held in Buenos Aires, Argentina in August 1981, authorized the IICA Director General to negotiate a new contract on CATIE with Costa Rica. The result was Law 6873 of 3 June 1983, entitled *"Contract between the Government of Costa Rica and the Inter-American Institute for Cooperation on Agriculture (IICA) regarding the Tropical Agriculture Research and Higher Education Center.*" CATIE was granted the status of "civil association" under the auspices of IICA, which affords it the same immunities and privileges for its operations as those enjoyed by IICA itself. This civil association is scientific and educational in nature, and its purposes are agricultural, forestry, and related research, in support of IICA's work of providing technical cooperation and technology transfer services to its member countries (Chapter IV - IICA/CATIE Relations). To this end, the State of Costa Rica permits IICA to grant CATIE international professionals the status of associate personnel, affording them the legal and institutional protection they need to carry out their activities.

Subsequently, Costa Rica enacted Law 8028 of 27 September 2000, entitled "Approval of the amendments to the contract signed between the Government of the Republic of Costa Rica and the Inter-American Institute for Cooperation on Agriculture regarding the Tropical Agriculture Research and Higher Education Center, approved under Law No. 6873." The Government of Costa Rica enacted this new law, under the terms of which CATIE still operates, to grant non-Costa Rican professional personnel the same rights as those granted to IICA under Law No. 29 of 22 December 1942, which created the Inter-American Institute of Agricultural Sciences. This law states that the relationship between IICA and CATIE is one of collaboration, for the purpose of maximizing resources and securing external resources to support the member countries (Chapter IV, Clause Twenty-five); in addition, IICA grants CATIE's international personnel the necessary legal and institutional protection. The IICA General Directorate is the depository of this contract, approved by means of Law No. 6873. Clearly, IICA's international legal framework is the one that governs CATIE's official relations with Costa Rica, and its immunities and privileges.

The most recent amendment to CATIE's legal framework was made by means of Law 8787 of November 2009, which approved an amendment protocol to the first clause of the contract signed between the Government of the Republic of Costa Rica and IICA regarding CATIE, adding the following text: "As such, CATIE is authorized to offer academic degree courses and professional credentials related to its areas of competence that will entitle the holders thereof to practice the respective profession."

The description of the creation of, and successive changes made to, the legal frameworks of the two institutions demonstrates that they have maintained **close historical ties**, due to their shared origins, dating back to the Inter-American Institute of Agricultural Sciences, and the combination of legal, economic and operational links that have existed between them since then.

However, that interinstitutional relationship has been not only very close, but also changing, asymmetrical and complex.

Changing, because CATIE's legal framework has evolved over time, as explained above. After CATIE was created in 1973 under Law 5201, as an institution separate from IICA, a number of changes were made to its legal framework that gradually gave it higher institutional standing and more responsibilities, especially in the field of education (Law 8028 of September 2000 and Law 8787 of December 2009). **Asymmetrical**, because, after the division of responsibilities in 1973, CATIE was created as an independent entity subordinate to, and supervised by, IICA. Although this subordinate role was gradually limited and modified as a result of successive changes in CATIE's institutional framework, the asymmetrical relationship has continued over time, manifested in a series of links that establish an unequal relationship between the two institutions.

Various factors demonstrate the asymmetrical nature of the relationship:

- a. The size of the institutions (in 2018, CATIE executed a budget of roughly USD23 million, while IICA's budget was more than USD150 million).
- b. Assets (IICA gave approximately 1000 hectares of real estate in Turrialba to CATIE in usufruct, receiving nothing in return).
- c. Financial position (IICA transfers 5% of its quota budget to CATIE, a sum of around USD1 million per year).
- d. Legal situation (the legal "umbrella" of privileges and immunities that IICA provides to CATIE personnel).

Taken together, these elements represent substantial support from IICA to CATIE. They also mean that any legal and/or political problems that may arise with regard to the IICA assets that CATIE holds in usufruct, and CATIE's international human resources, directly affect IICA. This establishes shared responsibility.

Complex, for two main reasons. First, because some CATIE administrations have failed to acknowledge fully the asymmetrical ties described above, and second, because the mandates (areas of competence of each institution) have not been defined clearly enough. In many instances, in fulfilling these mandates CATIE has interpreted them loosely or as it saw fit. In consequence, and as is common in many organizations, there has been a tendency to broaden the original mandate, making choices that have placed the two institutions in direct competition, instead of cultivating complementarities that would facilitate cooperation and tap the huge institutional synergies that are both possible and necessary.

In light of the above, in 2010, encouraged by their governing bodies and under the auspices of the Government of Costa Rica, the two organizations signed a cooperation agreement. Since then, successive programs for joint action have been signed that have achieved a certain degree of interinstitutional cooperation. However, the achievements of this collaboration have been quite poor, due to the lack of intensity and real commitment of the two institutions.

Today there is a new opportunity and a pressing need to strengthen interinstitutional relations. **A new opportunity,** because a series of institutional situations make it feasible and possible:

- a. The new administrations of both institutions have expressed a willingness and commitment to work together. This willingness has resulted in a special effort to promote greater cooperation and complementarity.
- b. The two directors general have professional links with both institutions.
- c. In Resolution 507, the highest-level governing body of both institutions has expressed its concern regarding the need for effective cooperation and complementary work.

There is also a **new need**, given the increasingly complex and urgent nature of the problems facing the countries of the region, as well as the growing financial constraints faced by both institutions, and CATIE in particular, as evidenced in the financial difficulties experienced in 2016 and 2017. In addition, and as argued in Chapter V, the situation regarding international funding is a challenging one. As a result, both institutions must find new ways to be more efficient and productive, and project themselves to the world as two integrated, attractive organizations with great potential.

To try to chart the future course of CATIE, especially further development of its interinstitutional links with IICA for cooperation and complementary work, an analysis of the mandates and comparative advantages of each institution is useful. This aspect is dealt with in the next section.

2. The current institutional mandates of the two organizations, and the opportunities for collaboration and synergy

The institutional mandates

Article 3 of the current **Convention on IICA**, which came into force in Costa Rica following the passing of Law No. 6459, published in La Gaceta, No. 177 of 17 September 1980, establishes that IICA's purposes are "*to encourage, promote and support the efforts of the Member States to achieve their agricultural development and rural wellbeing.*" Article 4 states that these objectives will be promoted through four main types of work, all focused on international technical cooperation. In contrast, the references to research and education allude specifically to institution building for the institutions that engage in these activities, in order to achieve the dissemination of science and technology applied to rural development.

In short, IICA's institutional mandate is clearly focused on technical cooperation activities and makes no mention of research and education activities.

Law 8028 of 27 September 2000, which approved the most recent significant adjustment to CATIE's institutional framework, establishes that the institution's purpose will be "research in the field of the agricultural sciences, natural and related resources in the tropical regions of the Americas, particularly those of Mesoamerica and the Caribbean. As well as post-graduate and other types of education in the agricultural sciences and the fields of renewable natural resources and related subjects, on behalf of the Member States of the Inter-American Institute for Cooperation on Agriculture (IICA)."

It is important to emphasize three elements of this clear, precise definition of CATIE's institutional mandate:

- 1. It is an organization devoted to research and education.
- 2. It works on behalf of all IICA Member States.
- 3. The definition makes no mention of activities involving technical cooperation for development.

This comparison shows clearly that the two institutions have different mandates and, therefore, that there is no reason for institutional overlapping or competition. On the contrary, there are clear possibilities of broad complementarity and efforts to seek synergies.

3. Proposal regarding institutional collaboration links between CATIE and IICA

Since CATIE was created, IICA has made substantial legal and financial contributions to the institution and has loaned it properties in usufruct. These contributions and the respective institutional mandates of the two organizations provide a basis for constructing a road map to achieve greater levels of institutional cooperation and complementarity.

CATIE's mandate is twofold: a) to develop knowhow, technologies, and innovations, validate their possible adaptation for production activities, and promote their use; and, b) implement education activities that contribute to agricultural and rural development and natural resource conservation in the tropical regions of the Americas. The use of these technologies and knowhow in the countries' productive processes calls for specific, large-scale institutional dissemination efforts, as well as support from the countries in the form of public policies to promote them and make them economically, socially and environmentally viable. These are specific tasks of IICA's technical cooperation.

IICA's Medium-term Plan (MTP) for the period 2018-2022, approved at the Thirty-eighth Regular Meeting of the Executive Committee, held in San Jose, Costa Rica, from 17-18 July 2018, identifies five programs that will undergird IICA's technical cooperation.

The subject matter of those programs, particularly in the case of the bioeconomy and the development of production, territorial development and family farming, and climate change and natural resources, is closely linked to the use of the new technologies and innovations developed by CATIE.

Based on this description of the duties and responsibilities of the two institutions, the Ad Hoc Working Group recommends:

<u>Recommendation 1</u>: That each institution focus its activities on the substantive core elements of its respective institutional mandate. In this way, CATIE, as an institution that generates knowledge, technologies, and innovations, could, as part of its work, contribute to and provide input for IICA's programs. For its part, IICA, in carrying out its institutional mandate of providing technical cooperation to the countries, could integrate CATIE into its work as an important source of knowledge, technologies, and innovations for processes aimed at establishing public policies and the institutional framework required for development.

The synergies of this conceptual relationship of closely coordinated joint work are obvious, and could be very significant and fruitful in terms of institutional complementarity. This could generate major savings in both budgetary resources and physical, administrative and management infrastructure requirements. These new strengths resulting from institutional complementarity and collaboration would contribute positively to an improved image, the possibilities of securing new resources, and the institutional development of both institutions.

A case in point are the offices that CATIE maintains in some member countries, which represent a significant cost. In this regard, the following recommendation is made.

<u>Recommendation 2</u>: That CATIE sign an agreement with IICA to use the latter's offices as a focal point and center of operations for carrying out its activities and programs. The two institutions could integrate, coordinate and implement many of these actions together.

Building and consolidating this relationship of institutional cooperation and complementarity between the two organizations would boost the capacity for joint action, creating mechanisms for complementarity and synergies, and greater capacities for research, education, and technical cooperation on a substantial scale and with great potential.

One way to conceptualize and roll out this institutional partnership would be by creating a "IABA Group", comprised of IICA, as the core institution, and all the other legally constituted institutions that exist or may be incorporated in the future, within the institutional and political framework of the IABA. CATIE and the two existing trust funds would be

privileged members of this this IABA Group. This topic is revisited in Chapter VI, which examines CATIE's governance structure.

The correct implementation of the new forms of institutional collaboration between IICA and CATIE discussed in the previous paragraphs calls for the evaluation and reconsideration of CATIE's mandate. This is particularly true in relation to the thematic issues of technology research and development that would have first priority. This matter is explored in the next chapter.

CHAPTER II. A STRATEGIC VISION OF CATIE'S INSTITUTIONAL OBJECTIVES AND THEIR POSSIBLE CONTRIBUTIONS TO DEVELOPMENT IN THE REGION: REAFFIRMING CATIE'S ORIGINAL MISSION

1. Introduction

The vision of the Inter-American Institute for Cooperation on Agriculture (IICA) with regard to agricultural and rural development trends, opportunities, and challenges in the Americas is set out in the Institute's Medium-term Plan (MTP) for 2018-2022, approved at the Thirty-eighth Regular Meeting of the Executive Committee, held in San Jose, Costa Rica, from 17-18 July 2018.

In broad terms, it is an optimistic vision of the development of production in the agricultural sector over the last two decades. Thanks to its wealth of natural resources and to the successes achieved during those decades as a result of the modernization of technology and production, the region has positioned itself as one of the major producers and exporters of food and agro-system services.

This success in the productive sector, however, has not been the same across all subregions, crops, and types of producers. In many cases, the regions farthest away from urban centers and small-scale family farmers have failed to take full advantage of the benefits and opportunities offered by advances in technology. Therefore, as occurs in nearly all production modernization processes, some—but not all—social sectors benefited. Others were marginalized and require special support programs, either to support the production modernization process or to find other viable forms of economic and social insertion.

Furthermore, the successes in terms of technology and production have been particularly important in the temperate and/or subtropical subregions, where very high levels of productivity and international competitiveness have been achieved, especially in the case of their traditional products, such as corn, soybeans, wheat, barley, beef, and dairy products. Figure 1 shows, in general terms, the uneven growth in productivity in the different subregions of the continent.



Figure 1. Evolution of agricultural production by subregion, according to accumulated annual growth for the period 2000-2015 (in 2004-2006 constant USD).

(1) Bahamas, Cuba, the Dominican Republic, Haiti, Jamaica, Trinidad and Tobago, Lesser Antilles, Guyana, and Suriname.

(2) Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama.

(3) Bolivia, Colombia, Ecuador, Peru, and Venezuela.

(4) Argentina, Brazil, Chile, Paraguay, and Uruguay.

Source: Prepared by the authors based on USDA data.

As a result of this, the United States and Canada, on the one hand, and the founder members of the Southern Common Market (MERCOSUR), on the other, account for a very high percentage of global food production and exports, and around 40% of global <u>net</u> food exports.

A larger number of countries are spearheading agricultural and livestock production in the case of beef, poultry and pork production, and certain special products, such as coffee, sugar, bananas, pineapple, citrus fruits, and oil palm, among others.

Nevertheless, it is fair to say that a very significant proportion of the hemisphere's production and export potential was based on the use of natural resources of its temperate subregions.

The productive use of natural resources in the tropical subregions has been uneven in terms of productivity, efficiency, and international competitiveness. Certain countries have achieved highly competitive production of crops sold on international markets, generating

substantial income. These include coffee (Colombia and Costa Rica), sugar (Brazil, Guatemala and Colombia), beef (Brazil and Nicaragua), and ornamental plants (Colombia and Costa Rica), among many other successful cases. However, other products and regions are lagging behind, with production systems that have not incorporated new technologies. This prevents countries from generating sufficient income to enable farmers and their families to live a decent life, or significant economic surpluses for the development of rural territories and the country as a whole.

2. A proposed strategic vision for CATIE

A large percentage of the world's tropical regions are to be found in the Americas, with vast territories and abundant natural resources whose full potential has not yet been tapped. (see Map 1).



Map 1. Tropical agricultural regions of the world.

The major challenge, therefore, is to give new impetus to technological and productive development in the hemisphere's tropical agricultural regions, taking into account the characteristics and potential of the natural resources available, as well as the impact of climate change and the economic and social conditions of those territories.

This calls for a comprehensive approach that links territorial development with the bioeconomy and fully incorporates the extraordinary advances achieved by science and

technology in information technology, biotechnology, agroecology, robotics, artificial intelligence, and other branches of the sciences. Only in this way will it be possible to fully harness the natural resources of the hemisphere's tropical regions for sustainable production that respects the restrictions imposed by climate variability and climate change.

It was argued in the previous section that CATIE's institutional mandate, as defined both in the laws under which it was created and by its institutional complementarities with IICA, is research and education. The key question, then, is what should be the focus of CATIE's research and education activities?

Bearing this in mind, the Ad Hoc Working Group proposes that the key objective of CATIE's planning of its range of research and education activities should focus on the original mandate: to help increase the efficiency and productivity of value chains in the hemisphere's tropical regions in an economically, socially and environmentally sustainable way, and with the lowest possible CO₂ emissions.

Other important national agencies, such as the Brazilian Agricultural Research Corporation (EMBRAPA) and the National Institute of Agricultural Technology (INTA) of Argentina, focus on the tropical regions in the south of the continent, while the International Center for Tropical Agriculture (CIAT) has a presence in the tropical subregions of the northern region of South America. Therefore, it is proposed that CATIE work in collaboration with these agencies under strategic partnerships in the tropical regions of the Americas where they operate.

Developing more technology-based agricultural production in the tropical regions is no simple task. Two important elements undoubtedly account for the relatively limited progress made in comparison with the temperate regions. The first is that productive conditions are complex, biotic stresses have increased and, in many cases, the economic and social conditions are especially difficult, often due to the implementation of ineffective policies that have failed to permit the development and adoption of innovations and new technologies. The second is that the temperate regions benefited from important technological advances achieved in developed countries with similar ecological conditions that their developing counterparts were able to take advantage of quite easily.

The development of more technology-based production in the tropical agriculture regions will depend much more on the applied and adaptive research carried out and technological developments achieved by, and in, the developing countries themselves. CATIE is and should continue to be a key link in the network of institutions that contributes to these technology developments.

The priority crops and activities should be selected in relation to the commercial opportunities available for the countries, including the alternative uses of biomass and the options for adding value in the products included in the institution's mandate.

Based on this analysis, the Ad Hoc Working Group makes the following recommendation:

Recommendation 3: Reaffirm that CATIE's mission is to contribute, through research and education, to the sustainable development of agricultural production and natural resource conservation in the tropical agriculture regions of the continent.

CHAPTER III. THE RESEARCH PROGRAM: SOME SUGGESTIONS RELATED TO OBJECTIVES AND CONTENTS

In the previous chapters, the Ad Hoc Working Group has argued that, given the provisions of the law under which CATIE was created, CATIE's comparative advantages and the needs and synergies arising from its relationship with IICA, its specific role should focus on *agricultural research and education in the tropical agriculture regions of the Americas, with the aim of promoting the modernization of production and achieving competitive and sustainable agriculture. If this proposal is accepted, CATIE's research program should be reviewed and strengthened to fulfill that mandate.*

The core elements of that mandate are as follows: a) to contribute to the development of the tropical agriculture regions of the Americas in an economically, socially and environmentally sustainable manner, and b) to position the region as a leading producer of food, other agricultural products and potential ecosystem services, based on its rich endowment of natural resources.

Thus, the conceptual framework for CATIE's research program must be broad and inclusive, and take into account the complex, comprehensive nature of the problems faced. Nevertheless, the Working Group believes that research and education should be the focal point of CATIE's work, with research activities focused on topics of manageable scale that contribute to knowledge that can be applied in practical ways to achieve the sustainable development of production. It should also include efforts to apply, scale up and conduct field trials of new production technologies and practices developed through research.

Furthermore, based on the proposed new cooperative relationship with IICA, one of the most important criteria for designing the content and setting the priorities of CATIE's research program, is to determine their usefulness and relevance to IICA's technical assistance programs in the countries. This includes designing the policies, investments and institutional arrangements needed to move forward with the adoption and use of new technologies.

The Ad Hoc Working Group has not evaluated CATIE's research program in detail, nor does it regard this action as part of its mandate. In general, its task is to support the recommendations made by the External Evaluation of CATIE, conducted in 2017, and, accordingly, it proposes the following specific recommendation:

Recommendation 4: That CATIE, as part of the preparation of its new strategic plan, evaluate its research program and, in the immediate future, consider giving the following two overarching areas of research a high priority:

a. Development of the production and sustainability of the main agricultural activities in the tropical regions in which CATIE has developed capabilities and has demonstrated experience: cacao and coffee cultivation, silvopasture systems for livestock, and cultivated forests. The work in these areas should maintain a systemic vision and seek to make further progress with the links of scale-up and value-added.

b. Protection and sustainable management of natural forests, soils and water resources in tropical agriculture regions.

The Working Group also considers that CATIE's research program should emphasize and develop a broad and modern vision that integrates and articulates, in each selected value chain, the different components and linkages of the value-added process. CATIE has already accomplished this goal under some projects, for example in the Gaviria Gourmet Project. The great challenge is to take full advantage of the technologies included in Agriculture 4.0 to ensure the productive and sustainable development of these value chains. CATIE's research program should also have a comprehensive vision that encompasses concepts such as bioeconomics and the circular economy, as well as the objectives of climate change adaptation and mitigation.

Notwithstanding the above, the Working Group suggests that CATIE organize, with the support of qualified external experts, consultations with those national and international institutions that are its natural partners. The outcome of this consultation and subsequent discussion on the evolution of CATIE's research programs should determine the actions it must take to progressively adapt to the extraordinary technological advances achieved in the fields of biology, artificial intelligence, computing and other areas of science, to participate actively in their use and to apply them in agriculture. This will call for major institutional changes and a broad range of cooperative partnerships with other research and education institutions in the region.¹

¹Some specific topics for consideration include the following:

^{1.} Coffee and cacao:

a. Genetic improvement through improved clones/high productivity hybrids, of excellent quality and resistant to adverse climate conditions and diseases.

b. Efficient, self-financed management of germplasm banks and varietal collections.

c. Biotech innovations linked to organic agriculture.

d. Scaling-up and value-added activities, including residue management.

e. Practices and technologies for greenhouse gas (GHG) mitigation and climate change adaptation.

f. Commercial partnerships with firms that produce inputs, equipment and machinery for validation and demonstration of technologies.

^{2.} Livestock:

a. Implementation and promotion of practices and technologies for climate change adaptation and mitigation in tropical livestock farming based on the use of forages (for meat, milk and dual-purpose production).

b. Improve the use of different types of forage, conservation methods (haymaking and use of silos), reduce dependence on grain crops and improve cost-benefit of different diets (weight gain, production of liters of milk, etc.).

c. Facilitate access to genetics adapted to the humid tropics for milk and meat production (establish a processing center for semen and embryos).

d. Specific measurements of GHG emissions in specific conditions and in different production systems.

e. Use of sustainable management techniques (electric fences, water harvesting, biodigesters, clean energy generation etc.).

f. Implementation of a milk and meat production module for small producers with intensive or semi-intensive silvopasture systems.3. Forestry:

a. Production and marketing of forest seed species with high biological and commercial value, through forest seed banks.

b. Application of sustainable agricultural technologies for different species and natural resources.

CHAPTER IV: THE ROLE AND PRIORITIES OF EDUCATION AND TRAINING ACTIVITIES AT CATIE

1. Introduction

Over the years, CATIE has gained prestige through its education and training activities, which have enabled it to forge strong links with other educational institutions and with the academic community of the Americas.

Law 8787 of the Republic of Costa Rica, approved in November of 2009, authorizes CATIE to offer academic degree courses and professional credentials related to its areas of competence that will entitle the holders to practice the respective profession.

During the last 70 years of work, CATIE has graduated around 2500 professionals, who fulfill important functions in many countries of the hemisphere and beyond.

Now, with all the educational, scientific and technological changes in the area of communications, it is useful to consider the role that education and training should play in the context of a strategic vision for CATIE's development.

2. The current situation

- 1. The Graduate School has managed to overcome the financial difficulties it faced in 2016. So much so, that between that year and the present (class of 2019), enrolment in the master's programs has increased by 60%, rising from nine to 45 students. Even more importantly, the number of external scholarships has increased six-fold, rising from nine to 51, as a result of an effort to mobilize scholarship funds since 2016. However, a significant proportion of these resources are debts owed by member countries for non-payment of institutional quotas, a mechanism that will cease to be viable within a few years.
- 2. This has been achieved by converting the quota debts owed by some countries into funds that are allocated to cover scholarships awarded to students who are citizens of those countries. This mechanism has served to improve the financing of education, sacrificing freely available quota resources.
- 3. The situation with regard to training (short courses) has not evolved satisfactorily, since the number of activities is very low compared with ten years ago. Although this

c. Intensified use and commercial exploitation of timber; sale of carbon credits to interested international corporations or institutions.

area was reorganized in 2017, the reduced number of courses has not produced significant financial impacts; rather, it has diminished CATIE's influence in the region and prevented it from fully complying with one of its basic mandates.

- 4. The loss of technical staff during 2016 and part of 2017 has weakened CATIE's teaching capabilities, making it necessary to recruit external academic staff, particularly for courses on watersheds, and the progressive involvement of the five professionals from the French Agricultural Research Centre for International Development (CIRAD) based on campus.
- 5. During the period 2017-2018, following the recommendations of the External Evaluation, reforms were made to CATIE's graduate courses. The Center currently offers four accredited academic master's programs on campus, lasting 18 months, and two professional master's programs of the same duration. In 2019, CATIE will also offer three virtual (online) master's programs. In addition, it continues to offer the Joint Master's Program with the University of North Texas, and joint doctoral programs with the University of Bangor and the University of Idaho, as well as doctoral degrees with other cooperating universities.
- 6. CATIE's academic master's degrees and doctorates are all duly accredited by the National Accreditation System for Higher Education (SINAES) of Costa Rica, which is affiliated to the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), a world-wide association of more than 300 quality assurance agencies in higher education, and the largest international organization of its type. CATIE is currently undergoing a process for the re-accreditation of its academic master's and doctoral programs for 2019, as well as the accreditation of two professional master's programs.

3. Evaluation and recommendations

The external evaluations carried out in 2013 and 2017, and the available information, suggest that teaching activities have not only been an important element of CATIE's institutional life, but have also had –and continue to have- a positive impact on human resources training in the continent.

Furthermore, the institution's financial difficulties and those associated with the decline in enrolment are gradually being overcome, at least partially, thanks to the scholarship program negotiated with some member countries.

However, in line with the recommendations of the external evaluation carried out in 2017, the Working Group recommends that CATIE include in its next strategic plan a careful

analysis in order to clearly define and specify its objectives, priorities, and ways of financing its teaching and training activities.

As a contribution to that process, the Working Group suggests that special attention be paid to the following topics and considerations:

Recommendation 5: CATIE's educational activities are an essential core element of its institutional projection at the international level. The Working Group therefore recommends that CATIE be strengthened as an international education center specializing in sustainable production and natural resource conservation in tropical agriculture regions, and that it promote itself as an important provider of these educational services to other regions of the world.

Recommendation 6: The Doctoral Program should be viewed as an objective that needs to be developed and consolidated in the medium term, based on the lessons learned and experience acquired thus far. The Working Group considers that the human resources currently available at CATIE to assume this responsibility, especially full-time staff with doctorates, are limited and insufficient. Therefore, CATIE should immediately focus its efforts on maintaining and expanding its agreements with eligible public and private universities and international research centers, in which it should be stipulated that dissertations will be prepared at CATIE.

Recommendation 7: The academically oriented Master's Degree Program should be reviewed, modified where necessary, strengthened and serve as the main focal point of CATIE's education activities. It is felt there are too many master's degrees courses with different orientations, which is bound to affect their depth and originality, and the dedication of professors to their teaching activities. Institutional efforts could be focused on a smaller number of master's degrees, drawing and building on the strengths of CATIE's existing research programs, to achieve the greatest possible synergy between research, technology and education.

The Ad Hoc Working Group suggests that professional master's programs be unified and accredited in order to consolidate the existing programs, reduce redundancies, cut costs, and make them more attractive academically through their accreditation. This would also open the doors to scholarship funds. Accordingly, the following course of action is recommended:

Recommendation 8: CATIE should not offer new graduate education and training opportunities without first ascertaining, based on substantive evidence, that there is interest in, and demand for, such opportunities. This would avoid short-lived programs being created that only weaken the institution and contribute little to its academic image and positioning.

The virtual (online) education program is a useful tool for professional training, but it is also a source of additional work and a potential distraction from CATIE's primary responsibilities, i.e. research and post-graduate education. Consequently, this program should be offered as a professional training tool and should be self-financing.

Recommendation 9: Virtual educational activities should aim to achieve an educational objective based on clear, verifiable evidence of the need, relevance and real demand for support for human resources training in the region. In some instances, CATIE could collaborate with IICA in order to use its operating platform.

Recommendation 10: That the two institutions consider developing the institutional mechanisms required to use and take full advantage of IICA's extensive network of offices in its member countries and its network of institutional contacts to attract graduate studies candidates and secure grants and other types of financing for dissertation work. This would strengthen both CATIE's graduate studies, and the technical underpinnings of IICA's technical cooperation activities.

CHAPTER V. THE CONTEXT OF INTERNATIONAL DEVELOPMENT AID: GUIDELINES FOR A FINANCING STRATEGY FOR CATIE

1. Introduction

CATIE's finances rely on different sources of funding. The main source of funding comes from agreements which, in general terms, may be characterized as part of international development aid (IDA). These contributions have accounted for approximately half of CATIE's total annual financing.

The origin and scale of these funds has varied over time. In general, there have been three distinct stages:

- a. The period from the mid-1980s -after CATIE had overcome the organizational problems stemming from its separation from IICA- until the middle or end of the 1990s, when the Government of the United States, several US foundations such as the Kellogg Foundation, and the International Union for the Conservation of Nature (IUCN), became CATIE's main funding sources. During this phase, the institution focused on agriculture, livestock and natural resources and placed great emphasis on education.
- b. Toward the end of the 1990s, CATIE began to receive significant funding from some Nordic countries, such as Sweden and Norway. This continued to increase over the following decade with additional funds from Denmark and Finland, partially replacing the funding from the United States. During this phase, emphasis was placed on conservation of ecosystems, watersheds, natural forests and other topics associated with natural resources and the environment.
- c. From 2012 onwards, the funding from the Nordic countries declined. In the absence of other donors to replace those countries, CATIE was plunged into a difficult financial situation in 2016, which led to a loss of personnel and operational capacity. From 2017, the current administration focused on improving the transparency of the institution's financial management and implemented several administrative decisions that helped to stabilize its operations, and even allowed for a recovery in the amount of the projected budget for 2019.

Figure 2 shows a breakdown of CATIE's different funding sources and the total amount of financing from 2012. From this it may be inferred that:

a. IDA funds are the most important component.
- b. Those funds declined after 2015, the year in which funding reached a peak.
- c. In addition to IDA funds, there are other complementary funding sources. The most significant are CATIE's own resources, obtained from the provision of services, income generated from production activities and transfers from the Trust Fund.

Figure 2. Financial performance based on fund accounting for the period 2012-2019 (amounts in thousands of USD).



These trends and the recent decline in IDA funds received by CATIE are the result of several circumstances, namely:

- a. International geopolitics and the industrialized countries focusing less attention on Central America over time.
- b. The overall decrease in international aid in recent years and the relatively higher priority given to other regions of the world, especially Africa.
- c. The changing priorities and specific interests of donor countries and CATIE's potential role in the context of those priorities.

Given the current international context and its likely evolution over the coming decade, there can be few expectations of securing comprehensive and sustainable funding from IDA donors, and even less likelihood of CATIE being able to maintain the research priorities of recent years.

2. The international context and the situation of IDA funding

The international context, both in the economic and political spheres, is going through a period of major difficulties and great uncertainty that negatively affect financing for international development (IDA).

Some important elements of this situation are as follows:

- a. The World Bank (WB) has projected a weakening of global economic growth, particularly in most of the industrialized countries, which are major contributors of IDA funds. These projections forecast an annual growth of gross domestic product (GDP) of less than 3.0 % for developed countries during the coming decade. This will affect their capacity and willingness to maintain current levels of IDA funding.
- b. Over the last two decades, most of the leading donor countries, particularly the European Union (EU) and the Nordic countries, have faced highly complex political situations that have distracted them from their concerns and interests in international development. Moreover, migratory flows from Africa to the European countries, a major ingredient of the EU's political problems, are diverting political attention and IDA resources toward that continent.
- d. During the last two decades, global economic growth trends have had a major destabilizing effect at the regional level. The Asian countries, particularly China, India, Vietnam and others, have experienced rapid economic growth, which has resulted in a rebalancing of the economic and commercial importance of different regions and countries at the global level. One consequence has been the emergence of a multipolar world in which new countries have acquired greater importance in world governance, trade, investment and the financing of international aid. However, the new key players are countries that do not actively engage in IDA financing. Their financial mechanisms differ from the traditional systems and are tied to specific agreements and activities, through which the donor countries seek to obtain direct economic advantages.
- e. The role of the United States and Canada in providing IDA funds for the region has declined in recent years. Moreover, under the current government, the United States may have different priorities that could affect funding for CATIE. Although the United States created the institution in 1942 and for decades was its main source of political, technical and financial support, it is important to clearly understand the new interests and priorities of the US and Canada, and make efforts to maintain and strengthen their interest and support in the new political context.

In light of the international situation described above, it is reasonable to suppose that the availability of IDA funds and CATIE's possibilities of accessing these will tend to decline in the immediate future. Reversing this trend to CATIE's advantage will require continuous

efforts to analyze and assess the international situation and seek new forms of financing and strategic partnerships that strengthen the institution's operational capacity, with IICA being a natural partner for securing joint external funds. In that regard the Working Group recommends:

Recommendation 11: That CATIE focus on the design of a comprehensive, bold and creative strategy for securing external resources. The strategy should take into account the difficulty of securing more IDA funding and, therefore, the need to broaden the financial base so as to not have to depend exclusively on those funds. The strategy should consider ways of securing other sources of funding and the development of strategic partnerships, in particular with IICA. Both institutions would benefit from the creation of an explicit institutional and programming partnership for their efforts to secure resources, under which they would present bids together and carry out joint missions to donors. In preparing this strategy CATIE should carefully consider all the elements mentioned in this chapter.

3. Some elements of a comprehensive strategy for financing CATIE

The strategy should include six main elements:

- 1. Continuous evaluation of changes and trends in the international context that affect IDA funding, and adapting the work program to the requirements, needs, demands, and priorities emerging from this new context.
- 2. Design of an aggressive strategy for reaching agreements with CATIE and IICA member countries for the provision of technical, information and education services of high strategic value to those countries.
- 3. Design of a strategy for interacting with the private sector, especially in relation to CATIE's contributions to the development of value-added products in the agricultural and agrifood production chains of crops included in CATIE's mandate.
- 4. Partnerships and synergies with other research and education institutions and strengthening CATIE's capacity to provide information, technical services and research products to technical cooperation institutions at accessible prices.
- 5. A strategy to increase CATIE's own resources through a more profitable use of its own assets and of those currently held in usufruct; this will require the design of a strategic business plan.
- 6. Consideration of the option that IICA, as the owner of the land, sell some of it and use the funds to set up a trust fund to support CATIE's budget. CATIE should

consider selling all the properties registered in its name that are not needed for its research work.

It is clear that CATIE is already implementing many elements of the strategy outlined in the preceding paragraphs. These comments from the Ad Hoc Working Group are merely intended to underscore the importance of making a concerted and innovative institutional effort, seeking specialist advice where necessary, and contributing some conceptual ideas.

IDA Financing

While it is difficult to achieve a substantial increase in this type of funding, it is essential to devise a strategy to ensure that current levels are sustained and protected. In this regard, it is important to bear in mind that the two main concerns of countries that provide IDA funds are migration and climate change. It is therefore vital to explain the contributions that the results of CATIE's research and innovation could make to these two issues.

It could be argued that research that offers substantial improvements in productivity and employment in rural areas is important in relation to migration. Similarly, efforts to understand and address problems associated with agriculture-climate change interactions are more likely to secure IDA funds from the EU and the Nordic countries.

A similar argument could be made in the case of the United States and Canada. It is important to emphasize the enormous concern felt in the United States over the migration of citizens from Mesoamerica, many of them from rural areas. This underscores the strategic importance of CATIE and IICA's potential contributions of to the development of Mesoamerica's rural areas through research, education, training and technical cooperation. This would call for a greater focus on research topics related to sustainable production that would generate income and jobs in the region.

An effort in this direction, accompanied by increased integration, articulation and coordination with IICA, could be a powerful tool to attract the interest and funding of the United States and Canada in the current political climate.

The governments of Latin America and the Caribbean

These governments are currently immersed in a process of major political change and, in general, are facing considerable economic difficulties. Consequently, slow economic growth is forecast in the coming years. This situation will result in less dynamism and fewer opportunities to secure significant financial support through quotas or some other means of financing the budget.

Nevertheless, most countries in the region are eager and determined to take full advantage of their natural and agricultural resources to increase production and agriculture's contribution

to economic growth and employment. Many of these countries would be willing to allocate resources for specific research initiatives, defined by common agreement, to help expand their production in a sustainable manner, with awareness of the challenges posed by climate change and the new demands of commercial markets.

A specific effort by CATIE in this direction would also help resolve the apparent lack of alignment of CATIE's research program, which responds mainly to the donors' priorities, instead of addressing the demands of its member countries expressed through their ministries of agriculture.

Interaction with the private sector

In recent years, the private sector's role in global agricultural research has increased significantly. In the industrialized countries, private investment in research and development of technologies for the agricultural sector is greater than public investment in research and extension.

Moreover, the private sector is leading efforts to develop technology to increase competitiveness and innovation, boost value-added activities and reduce food loss and wastage in consumer processes. One important trend in this regard is the growing commitment made by large information technology (IT) firms, food producers and suppliers of seeds and agrochemicals to address the problems associated with climate change, through a profound transformation of their energy use and production processes.

This change in the circumstances creates new conditions and opportunities for cooperation and partnerships between the private sector and public institutions, including those engaged in international research.

CATIE should therefore engage in a process of reflection and dialogue with the private sector to design a specific strategy.

Partnerships and synergies for providing information and services to technical cooperation institutions

The core mandate of IICA and many other international organizations, such as the United Nations Food and Agriculture Organization (FAO) and the United Nations Development Program (UNDP), as well as numerous non-governmental organizations (NGOs), is to implement technical cooperation projects to support developing countries.

A major dilemma facing all these organizations is how to obtain reliable information, knowledge and specific expertise to strengthen and give legitimacy and technical content to their technical cooperation activities.

This task, which in many cases results from partnerships and cooperation agreements, can be performed by CATIE in its specific field of competence. If CATIE is able to provide technical services in an orderly and strategic manner, this could be a source of funding and a means to utilize and validate the knowledge generated through its research program.

Partnerships and cooperation with research and education institutions

Agricultural research is, increasingly, an activity carried out through cooperation between two or more institutions. The scale of production/technology problems, and the complexity of the science and technology that can provide solutions to those problems, means that research requires interdisciplinary teams and huge investments in order to be effective and achieve results. This situation calls for interinstitutional partnerships that allow for an increase in the scale and complexity of the resources committed to achieve a particular research objective.

CATIE has human resources, a strategic location, and a network of contacts and relations with institutions and local governments which, enhanced by its relationship with IICA, makes it a strategic partner of interest to other institutions, especially those of developed countries.

A case of particular interest is the International Center for Tropical Agriculture (CIAT), one of the international centers of the CGIAR system. CIAT has research platforms, large facilities and privileged access to funding sources that differ from those of CATIE. It also has a mandate and research programs that complement those proposed for CATIE. This increases opportunities for joint research between both institutions.

Better use and partial sale of CATIE's own assets and those held in usufruct

CATIE has significant assets, consisting mainly of considerable tracts of farmland. It owns some of the land, while the rest belongs to IICA and is held in usufruct.

Around 30% of the land is directly used for CATIE's own activities, including research, germplasm banks, demonstration crops and other projects. Part of the land is used for the production of commercial crops and another part is leased to third parties. The revenues obtained through these mechanisms are substantial, but do not significantly impact CATIE's overall financing.

<u>Recommendation 12</u>: That CATIE carry out the following six complementary actions to generate more income from the assets it owns or holds in usufruct:

First, conduct an exhaustive analysis of the real net income obtained from CATIE's different commercial activities. Such an analysis could demonstrate the need for the institution to halt,

at the very least, all activities that do not produce a profit, which could be obtained by leasing the land used in such activities to third parties.

<u>Second</u>, conduct an exhaustive analysis of the expenditure that CATIE incurs to ensure a high level of efficiency in maintaining the land it owns and uses for commercial production.

<u>Third</u>, evaluate the commercial use made of the germplasm banks that are an important source of resources for agricultural innovation, mainly in the cases of coffee and cacao. However, as maintenance, updating, and renewal costs are considerable, they should be covered with the income derived from CATIE's commercial activities based on coffee and cacao. To achieve this objective, it is important that CATIE explore the possibility of producing certified seed of the most sought-after varieties of coffee in the region. It should also operate the sale of cacao seeds and cacao buds for grafting.

Fourth, evaluate current leases and develop a proposal for long-term leases, endeavoring to identify and select lessees who maximize monetary income or make a significant contribution to the development of CATIE and/or the local community.

Fifth, draw up a plan for the sale of land owned by CATIE that meets the following three criteria:

- 1. It is not being used and is not needed now, nor will be in the foreseeable future, for CATIE's research and education activities.
- 2. It is not subject to restriction of ownership.
- 3. The land is primarily located in sensitive areas and has building potential, which could lead to a conflict with neighboring communities in the future.

The resources obtained from these sales could be used to set up a trust fund, with the resources preferably to be used to help finance the renovation of CATIE's physical infrastructure, which has deteriorated over the years.

<u>Sixth</u>, in the case of land owned by IICA that CATIE holds in usufruct, reach agreement with IICA, in consultation with the Government of Costa Rica, on a plan for the transfer of title of two pieces of land (50 or 100 ha. each in size) adjacent to the city of Turrialba and the local hospital. This land is not suitable for conducting research, and is very vulnerable from the security standpoint. On the other hand, its high commercial value could produce a large sum that could be placed in a trust fund managed by IICA and used to fund CATIE's research activities, agreed and coordinated with IICA's Directorate of Technical Cooperation.

The resources that could be obtained from these four sources are very substantial and would make the trust fund a very important complement to CATIE's own budget. The fund's high level of predictability and free availability would make a major contribution to the overall financing of CATIE.

CHAPTER VI. THE GOVERNING BODIES OF CATIE AND THE PROCEDURE FOR THE ELECTION OF THE DIRECTOR GENERAL

1. Governing bodies

The current situation

Law 8028, approved on December 3, 1999, reorganized CATIE as a scientific and educational civil association, with a fairly complex governance structure, both from the political and the functional standpoint.

Its main governing bodies are:

a. **The Inter-American Board of Agriculture (IABA).** The IABA is the highest-level governing body of IICA and, under the provisions of Law 8028, is also the highest governing body of CATIE. Comprised of 34 member countries, it meets every two years. The IABA has an Executive Committee composed of 12 member countries, which meets each year and acts as a first step for the analysis of issues to be discussed at IABA meetings, based on the recommendations of said Executive Committee.

The fact that the IABA is CATIE's highest governing body clearly underscores the institution's hemispheric character and its membership of a unique institutional system that could be called the "IICA Group."

b. **Governing Council.** The Council is currently comprised of 16 members: the Director General of IICA, who acts as vice president; a representative of the IABA; 13 ministers representing the areas of agriculture and/or natural resources of each of the Latin American and Caribbean countries that are regular or adherent members of CATIE (Belize, Bolivia, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Dominican Republic and Venezuela); and a representative of the State of Acre, Brazil, which is an affiliated member of CATIE.

The Chair of the Governing Council of Ministers is the Minister of Agriculture and Livestock of Costa Rica.

c. **Board of Directors.** The Board consists of 13 members, appointed by the Governing Council of Ministers, except in the case of *ex officio* members. Board members provide their services *ad honorem* and meet at least twice a year.

The members of CATIE's Board of Directors are selected according to certain restrictions established in the law under which the institution was created.

- 1. Four members are appointed *ex officio:* the Minister of Agriculture and Livestock of Costa Rica or his representative; the Director General of IICA or his representative; a representative of the IABA; and, a representative of the Governing Council of Ministers. The last two are elected by the respective collegiate bodies that they represent.
- 2. Four members, who must be citizens of four member countries of CATIE, are selected and proposed by the Board of Directors.
- 3. The remaining five members, selected and proposed by the Board of Directors, must belong to the international scientific community and may be citizens of CATIE's member countries.
- 4. The Director General of CATIE acts as *ex officio* Secretary of the Board.

Evaluation of the current situation

CATIE's governance structure is extremely complex and cumbersome for an organization of its size and functional complexity.

Having three levels of governance -the IABA, the Governing Council of Ministers and the Board of Directors- makes for very complex administrative and management processes, since the same political interests are represented on the three governing bodies. Some representatives -such as the Minister of Agriculture and Livestock of Costa Rica and the Director General of IICA- participate in a personal capacity in all three governing bodies and, therefore, are obliged to consider and decide on the same matters three times.

Furthermore, given that CATIE is a research and education organization, the political input and the direct and indirect mechanisms of social control appear to be excessive, in relation to the natural guiding role that the hemispheric and international scientific community should perform to safeguard the relevance and scientific solidity of CATIE's work.

A proposal for simplification

Based on this analysis, the Ad Hoc Working Group suggests making some changes to CATIE's governance structure, in order to simplify the institutional governance processes and make them more efficient.

<u>Recommendation 13</u>: That CATIE and IICA together devise a proposal for the governance of CATIE that simplifies and strengthens decision-making processes based on a governance structure that assigns greater responsibilities and authority to CATIE's Board of Directors. This governance structure would have two levels: the Inter-American Board of Agriculture

(IABA) as the political body, and a Board of Directors whose role would be basically scientific and managerial.

The proposed new Board of Directors would have ten members. Three of them would be *ex officio* and seven would be selected and designated by the Board of Directors itself:

- a. The *ex officio* members would be a representative of the Minister of Agriculture and Livestock of Costa Rica, a representative of the Director General of IICA, and a representative of the IABA designated by that body itself.
- b. The other seven members would be designated in a personal capacity and would be members of the scientific community specializing in agriculture and natural resources. Five members would be selected from among CATIE's member countries representing IICA's five regions (Northern, Central, Caribbean, Andean and Southern). The other two would be members of the international scientific community and citizens of countries beyond the Americas. The duties and responsibilities of the Board of Directors would combine those of the current Board and current Governing Council of Ministers.
- c. The Chair of the Board of Directors would be chosen by the IABA from a shortlist of three candidates presented by the Board of Directors itself. The Chair would hold the position for two years and could be reelected one time only.

2. Election of the Director General of CATIE

The current situation

The institutional process for the selection of a new Director General of CATIE is established in the rules of procedure approved by the Governing Council of Ministers, and consists of five clearly differentiated stages:

- 1. CATIE's Human Resources Division initiates the process by announcing the start of the search for candidates.
- 2. Once the registration process has closed, the Board of Directors' Nominations Committee preselects five to eight semifinalist candidates and submits their names to the Board of Directors.
- 3. The semifinalist candidates take a written and an oral test and attend any interviews considered necessary.

- 4. The Board of Directors selects three to five finalists.
- 5. The final candidates give presentations to the Governing Council of Ministers, which makes the final selection of the new Director General of CATIE.

As is evident, the current procedure for selecting the Director General of CATIE is a complex process in several stages that involves different levels of CATIE's governance structure. Consequently, it can result in changes in the decisions taken by lower-level bodies, and exposes potential candidates to excessive effort and considerable risk to their reputation.

A proposal for simplification

The preceding section proposes a plan to simplify CATIE's governance structure, to make it more flexible and ensure that scientific-technical interests are at the forefront of the decision-making process. In line with that proposal, it is also necessary to simplify the selection process for the Director General of CATIE and adapt the procedures to the proposed governance structure.

Recommendation 14: That CATIE, in consultation with IICA, submit for consideration by the IABA a simplified mechanism for the selection and appointment of the Director General of CATIE, pursuant to the following guidelines:

- a. When the position of the Director General of CATIE becomes vacant, either because the Director General concludes his/her term of office or resigns, the CATIE Board of Directors, following the first three steps in the process established in the current regulations, will draw up a shortlist of three candidates.
- b. The Board of Directors will hold a special session to elect the new Director General of CATIE, by a two-thirds majority of the votes of its members.

3. Looking to the future

Chapter 1 outlines the idea of creating the "IABA Group" as a new way of unifying, linking and strengthening all the legal organizations that currently operate within the political sphere of the IABA, along with any others that may be incorporated in future.

An organizational structure of this type would allow better use to be made of the human and financial resources of both institutions, and create a critical mass of significant resources dedicated to joint research, education, training and technical cooperation. This would result in a greater capacity to influence the development of the hemisphere's agricultural sector.

Based on this idea, the Ad Hoc Working Group makes the following recommendation:

<u>Recommendation 15</u>: That the Director General of IICA, in consultation with the Director General of CATIE, prepare and present to the next IABA:

- a. A comprehensive proposal outlining the concept of the "IABA Group", comprised of IICA as the core entity, CATIE, the existing trust funds, any other trust fund(s) that may be set up, and any other organization(s) that the IABA considers should be incorporated into the Group.
- b. A proposed road map for the implementation of the "IABA Group."

CHAPTER VII. GUIDELINES FOR THE IMPLEMENTATION OF THE RECOMMENDATIONS

The implementation of the recommendations set out in this document would require a complex institutional process, consisting of at least four steps:

- 1. The directors general of IICA and CATIE, bearing in mind Resolution 507 of the IABA and the recommendations of the Ad Hoc Working Group, and in direct consultation with the Government of Costa Rica, should agree on the central elements of plan of action to guide and strengthen CATIE's work and its relationship with IICA.
- 2. The Director General of IICA, in consultation with the Director General of CATIE, should prepare a set of resolutions for approval by the Executive Committee and the IABA, authorizing, when necessary, the implementation of the proposed actions.
- 3. Based on the resolutions of the Executive Committee, the directors general of IICA and CATIE should organize an institutional process to carry out the specific studies and necessary actions for the design and implementation of a plan of action to strengthen CATIE. Accordingly, the Ad Hoc Working Group makes the following recommendation:

Recommendation 16: That the directors general of IICA and CATIE, in consultation with the Government of Costa Rica, create a commission for institutional development of CATIE, tasked with proposing and implementing an plan of action for the orientation and strengthening of CATIE and its relationship with IICA, pursuant to the resolutions of the Executive Committee .

This commission could have three subgroups with responsibility for technical, legal and organizational matters, respectively. Each subgroup could be made up of:

- a. IICA's Director of Technical Cooperation and three technical specialists, plus CATIE's three research directors and the Director of Education and Training, for the implementation of technical recommendations.
- b. IICA's legal adviser and regional coordinator, plus CATIE's head of administration and legal adviser, to address legal and asset-related matters.