

Center for Knowledge Management and Horizontal Cooperation Services (CGCCH)



Inter-American Institute for Cooperation on Agriculture (IICA)

Headquarters

Apartado postal 55-2200 San José,
Vázquez de Coronado, San Isidro 11101- Costa Rica.
Tel.: (506) 2216 0222 • Fax (506) 2216 0233
iicahq@iica.int / www.iica.int

Director General: Manuel Otero

Director of Technical Cooperation: Federico Villarreal
**Center for Knowledge Management and Horizontal
Cooperation Services (CGCCH) Manager:**
Francisco Fujita de Castro Mello (francisco.mello@iica.int)

CGCCH Team:

Training Unit:

Yoania Arean Rodríguez (yoania.arean@iica.int)
Ana Yanci Bustamante (ana.bustamante@iica.int)

Horizontal Cooperation Unit:

Luis Carlos Vargas (luis.vargas@iica.int)
Mariela Zúñiga (mariela.zuniga@iica.int)
Tatiana Arévalo (tatiana.arevalo@iica.int)

Information Unit:

Manuel Hidalgo (manuel.hidalgo@iica.int)

Orton Memorial Library:

Jeffry Jiménez (jeffry.jimenez@iica.int)
Fabiola Espinoza (fabiola.espinoza@iica.int)
Inyhalia Orozco (inyhalia.orozco@iica.int)
Marco Saborio (marco.saborio@iica.int)

August 2023

Inter-American Institute for Cooperation on Agriculture (IICA) 2023



Center for Knowledge Management and Horizontal Cooperation
by IICA is published under license Creative Commons
Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO)
(<http://creativecommons.org/licenses/by-sa/3.0/igo/>)
Based on a work at www.iica.int

IICA encourages the fair use of this document. Proper citation is requested.

This publication is also available in electronic (PDF) format from the Institute's web site: <http://repositorio.iica.int/>

Editorial coordination: Federico Villarreal

Translation: IICA Language Unit

Layout: IICA Communication Unit

Center for Knowledge Management and Horizontal Cooperation /
Inter-American Institute for Cooperation on Agriculture –
San Jose, C.R.: IICA, 2023
32 p.; 21x16 cm.

ISBN: 978-92-9273-080-2
Published also in Spanish

1. South-South cooperation 2. training
3. Sistemas de información 4. e-learning I. IICA II. Título

AGRIS DEWEY
C20 658.403.8

San José, Costa Rica
2023

Table of Contents

IICA's Technical Cooperation.....	4
Acronyms.....	6
1. Summary.....	8
2. Introduction.....	9
3. Vision and technical proposal.....	11
3.1 Training Unit.....	11
3.2. Horizontal Cooperation Unit.....	16
3.2.1 Cooperation for development.....	17
3.2.2 Stays, internships and scholarships policy.....	20
3.3. Information and Documentation Unit.....	22
3.3.1 Internal management platforms.....	23
3.3.2 International databases.....	25
3.3.3 Collaborative networks.....	26
3.3.4. Library system.....	28
4. REFERENCES.....	32

IICA's Technical Cooperation

The Inter-American Institute for Cooperation on Agriculture (IICA), established in 1942, is the specialized agricultural agency of the Inter-American System that supports the efforts of its Member States to achieve agricultural development and rural well-being. The Institute promotes hemispheric cooperation aimed at achieving a more competitive, inclusive and sustainable agricultural sector, capable of feeding the region and the world.

IICA works together with its member countries to identify their needs and demands for technical cooperation, in order to provide the most appropriate responses to these demands through knowledge management led by its specialized technical experts, in coordination with hemispheric programs and the participation of partner institutions and professional networks of recognized prestige.

The Institute's operations are aimed at the implementation of three strategic technical cooperation actions:

- Support the strengthening and transformation of agri-food systems, in accordance with the mandate of the Inter-American Board of Agriculture expressed in resolution 531, in which it endorses the 16 messages presented by the Americas at the United Nations Food Systems Summit of 2021.
- Provide tools and inputs that contribute to the formulation of a new generation of public policies aimed at recognizing the contribution of agriculture in agri-food systems and in solving the climate crisis, as well as addressing science and innovation issues, placing agricultural and livestock producers of all contexts and scales at the center; and
- Support the collective action efforts of member countries in areas linked to their institutional mandate.

To this end, the new Medium-Term Plan (MTP) established the creation of a new integrating body called the Observatory of Public Policies for the Transformation of Agri-Food Systems. The Observatory carries out cross-cutting actions in all areas of the MTP, and operates in coordination with the Coalition to Build Capacities for the Transformation of Agri-Food Systems, whose objective is to mobilize political, social, financial and technical support between national, regional and global entities with common and complementary objectives, in order to contribute to the development of

leadership capabilities, and to the promotion and management of innovation, required to foster the evolution of the agri-food systems of the Americas.

Furthermore, the programs were adjusted to adequately reflect the emerging issues of the new global scenarios and priorities. IICA currently has the following hemispheric programs:

- Innovation and Bioeconomy
- Territorial Development and Family Farming
- International Trade and Regional Integration
- Agricultural Climate Action and Sustainability
- Agricultural Health, Safety and Agri-food Quality
- Digitalization of Agrifood Systems
- Gender Equality and Youth

The seven programs act in a coordinated manner and with an interdisciplinary approach to ensure the provision of articulated responses to the challenges faced by the 34 Member States of the Institute.

Through these changes, we seek to continue consolidating the vision of an IICA that looks outward to the world from the Americas and that, through its network of national delegations and its various regional and subregional technical cooperation mechanisms, provides member countries with technical cooperation of excellence, offering real solutions to the Ministries of Agriculture of the Americas.

Acronyms

ADDIE	Analysis, design, development, implementation and evaluation
BCO	Orton Memorial Library (IICA/CATIE)
CATIE	Tropical Agricultural Research and Higher Education Center
CCCCC (5C's)	The Caribbean Community Climate Change Centre
CCORAL	Consultancy Services for the Development of an Online Training Platform for the Caribbean Climate Online Risk Assessment Tool
CGCCH	Center for Knowledge Management and Horizontal Cooperation Services
ECLAC	Economic Commission for Latin America and the Caribbean
ERVIA	Regional Online School for Food Inspection in Central America and the Dominican Republic
ERVIF	Regional Online School in Plant Health Inspection
FITT	Forum for International Trade Training
FUNIBER	Ibero-American University Foundation
GSSDC	Global South-South Development Center
HC	Horizontal Cooperation
IBEI	Institut Barcelona d'Estudis Internacionals
ICOA	Inter-American Commission for Organic Agriculture
ICTs	Information and Communication Technologies
IICA	Inter-American Institute for Cooperation on Agriculture
LAC	Latin America and the Caribbean
LMS	Learning Management System
MAPA	Brazilian Ministry of Agriculture, Livestock and Supply
MIOA	Market Information Organization of the Americas

MOOC	Massive Open Online Course
MTP	Medium-Term Plan (IICA)
NDC	Nationally Determined Contribution
SAM	Successive Approximation Model
SDGs	Sustainable Development Goals
SEGIB	Ibero-American General Secretariat
SELA	Latin American and the Caribbean Economic System
SIBI	Integrated Library System IICA/CATIE
SIDALC	Alliance of Agricultural Information Services of Americas
SCC	South-South Cooperation
SSTC	South-South and Triangular Cooperation
SUGI	Integrated institutional management system (IICA)
UCH	Horizontal Cooperation Unit (CGCCH)
UN	United Nations
UNOSSC	United Nations Office for South-South Cooperation
USDA	United States Department of Agriculture
USDA-FAS	United States Department of Agriculture Foreign Agricultural Service
WFPF	World Food Prize Foundation

1. Summary

The Knowledge Management and Horizontal Cooperation Center (CGCCH), part of the Office of Technical Cooperation of the Inter-American Institute for Cooperation on Agriculture (IICA), has three thematic units: i) Training, ii) Horizontal Cooperation and iii) Information and Documentation Management. It is also the link with the Orton Memorial Library (BCO), belonging to IICA and located on the campus of the Tropical Agriculture Research and Higher Education Center (CATIE).

The Center's main purpose is to foster and articulate processes and means of knowledge management and horizontal cooperation to fulfil institutional strategic goals.

The Center works to facilitate learning and training processes, e-learning courses, specialized information services, internships, the systematization of successful experiences and the implementation and active search for external resources that facilitate the exchange of knowledge and promote horizontal and triangular cooperation between member countries together with IICA partners.

All this in alignment with the technical cooperation model established in the Medium-Term Plan (MTP) for the 2022–2026 period, and key activities led by IICA, especially the Continental Partnership for Food Security and Sustainable Development.

The present document gives a general overview of the units, their main goals, actions, partners and recent successes, to explain the technical expertise that the CGCCH offers and facilitate the management of technical cooperation initiatives at hemisphere level, seeking the transformation of agrifood systems and rural development and wellbeing.

2. Introduction

Since 2018, IICA has based its technical cooperation agenda on knowledge management, with strong components of horizontal cooperation, especially through the exchange of experiences and lessons learned, fostering joint actions and access to high-level technical information. Both issues were presented transversally and in different contexts in the Institute's 2018-2022 Medium-Term Plan (MTP), and in the 2022-2026 MTP, which updates and continues the first plan, with clear adherence to some of the actions developed by the Knowledge Management and Horizontal Cooperation Center (CGCCH), part of the Office of Technical Cooperation.

Knowledge management is an essential action to promote effective cooperation throughout the American continent, as it incentivizes continual learning, strengthens the socialization of and access to information and up-to-date technical resources, and fosters the harnessing of knowledge that can be used by member countries to transform agrifood systems and bring about sustainable development.

It is also part of IICA's work and permeates the different units of its headquarters and representations in different countries. Organizing and sharing agricultural information effectively makes it possible to make smarter decisions, foster innovation in agriculture and support rural development. It also encourages collaboration among member countries, allowing best practices to be exchanged, strengthening leadership in sustainable agricultural development in the region.

The main purpose of the CGCCH is to promote and articulate processes and means of knowledge management and horizontal cooperation to fulfil the Institute's strategic goals. The Center directly supports the provision of technical cooperation of excellence of the Institute's different units through activities that focus on strengthening the skills of the stakeholders involved in agricultural and rural development, facilitating learning and training processes, providing e-learning courses and specialized information services, offering stays and internships, systematizing successful experiences and seeking and executing external resources that facilitate the exchange of knowledge and encourage horizontal and triangular cooperation among member countries and jointly with IICA partners.

To achieve this, the CGCCH is structured into three organizational units: the Training Unit, the Horizontal Cooperation Unit and the Information and Documentation Unit. Additionally, the Center is linked to the Orton Memorial Library (BCO), which belongs to the Institute and is located on the campus of the Tropical Agriculture Research and Higher Education Center (CATIE) in Turrialba, Costa Rica, in accordance with the contract signed between the Government of Costa Rica and IICA on the CATIE constitution, as determined by Law 5210 of 1973, and Law 6873 of 1983.

3. Vision and technical proposal

Knowledge management is essential for improving the effectiveness of cooperation in the Americas, by promoting continuous learning and facilitating access to up-to-date information. The CGCCH directly supports the Institute's units in different processes. It also executes activities within its remit with strategic partners, allowing it to maintain a high-level position in the issues intrinsic to its technical responsibility, such as cooperation for development, skills building and information management.

The initiatives, actions, main partners and technical proposal of the Center's various units are as follows:

3.1 Training Unit

The Training Unit leads activities to strengthen technical capacities through the Leadership School for the Transformation of Agrifood Systems of the Americas (ELTSA), with consolidated, effective methodologies for the design of online courses, learning management systems (LMS) and project management methodologies, which make it possible to create, together with the hemispheric action programs set out in the current MTP, robust training programs that meet international standards.

The Unit has specialists with extensive knowledge in educational technology and projects, making up a high-performance team in collaborative and multicultural work, as IICA requires. It has a consolidated learning platform to facilitate knowledge building from different learning projects for training program participants.

The Training Unit offers consultancy and support for technical specialists from the Institute's 34 member countries, IICA internal units, strategic partners and external institutions in the design of online courses, applying different methodologies to share relevant, up-to-date information. The Unit's courses aim to generate high-level knowledge in training program participants and support member countries with specific demands, such as online phytosanitary inspection schools, to give one example, managed jointly with the Office of Technical Cooperation's hemispheric action programs.

The need to make in-person capacity-building programs available online is a very important strategy, one that is highly necessary in the present day. E-learning has become a common and effective process to improve capacity building (Aczel et al. 2008, WEF 2016) with hundreds of online platforms, including distinguished universities such as MIT OpenCourseWare, Harvard Online Learning and others managed by international organizations such as the UN, the World Bank, the Inter-American Development Bank (IDB) and IICA.

The current literature gives examples of the effectiveness of e-learning programs in comparison with traditional in-person courses, in addition to reduced costs and other benefits of mass participation facilitated by mass online open courses (MOOCs) (McAndrew and Scanlon 2013).

Under this perspective, it is important to highlight that in the last ten years, the Institute has been implementing and speeding up the use of information and communications technologies (ICTs) in its technical cooperation actions, especially for training programs. Today IICA has a solid e-learning platform with security protocols, using new methodologies and relevant resources for training and education.

There are specific cases in which the Institute is supporting national governments to strengthen skills through the use of its learning platform in areas such as best agricultural practices, risk management in the agriculture sector, climate change and food safety, among others. Two examples are the Regional Online Food Inspection School in Central America and Dominican Republic (ERVIA) and the Regional Phytosanitary Inspection School (ERVIF), both focusing on supporting agricultural health services in the region.

Another relevant example is the online program of the Manuel María de Peralta Diplomatic Institute used to train diplomats in Costa Rica using the IICA platform, which is part of the professional development process for Foreign Office officials in this country. Strategic partners also offer experience and knowledge in the design and delivery of training courses on diverse issues related to the agricultural sector. IICA experts design content oriented at a wide audience, including the private sector, governmental organizations, universities and farmers' organizations, among others.

The projects developed always include a substantial skills-building component. The team has solid skills for designing training courses, from evaluating needs to providing the

training program. Course facilitators design tailor-made training events to respond to clients' specific needs, including workshops and training courses, roundtables, synchronic webinars and online events. The methodology adopted is applied through a combined learning focus, including the use of pre-recorded videos, synchronic weekly calls and interactive elements such as group exercises and surveys, ensuring a balance between theory and practice.

Since 2018, through the development and implementation of MOOCs for the general public in areas related to IICA's work, around 200 training courses have been provided, with an impact on over 130,000 people in over 80 countries, including all the Institute's regions. In recent years the number of projects developed with major public and private sector partners has increased, making IICA a major provider of training programs. Table 1 gives some examples of partners and projects executed in recent years with key stakeholders.

Another relevant example executed by the CGCCH is the implementation of the project Consultancy Services for the Development of an Online Training Platform for the Caribbean Climate Online Risk Assessment Tool (CCORAL), with the goal of developing CARIFORUM countries' capacities to manage climate risks, by transforming an in-person training program on the use of the CCORAL app into an online training course, and the creation of a solid e-platform to provide training to countries throughout the CARIFORUM region. This EU-funded proposal was the first to be approved by the Institute with 100/100 points and with excellent results for the Caribbean Community Climate Change Centre (CCCCC) and IICA.

Table 1. Examples of e-learning projects executed with strategic partners since 2018.

N°	Partner	Course
1	Forum for International Trade Training (FITT)	Preparing to export agricultural products
2	European Union	1. GAP – Good Agricultural Practices Audit Training. 2. Conceptual bases of the Paris Agreement and NDCs – Nationally Determined Contributions in the agrifood sector.

3	Costa Rica Ministry of Foreign Relations and Worship: Manuel María de Peralta Diplomatic Institute	Training program for members of the diplomatic corps (five courses) through the Online School of the Manuel María de Peralta Diplomatic Institute. To directly support Foreign Office professionals, and possibly a prerequisite for certain posts in the diplomatic corps.
4	United States Department of Agriculture (USDA) USDA Foreign Agricultural Service (FAS)	<ul style="list-style-type: none"> • Dietary Risks Evaluation Program • Codex Alimentarius • Biotechnology and Biosafety Program (six courses)
5	Market Information Organization of the Americas (MIOA)	<ul style="list-style-type: none"> • Introduction to Agricultural Price Analysis • Agricultural Price Analysis Techniques
6	Ministry of Agriculture, Livestock and Supply (MAPA), Brazil	Development of 16 courses in the AHFS Program – Agricultural Health and Food Safety and Quality
7	Bayer	BayG.A.P Service Program (seven courses) and <i>Fusarium</i> TR4 (one course)
8	The Caribbean Community Climate Change Centre (CCCCC)	Development of a training platform to implement the Caribbean Climate Online Risk and Adaptation Tool (CCORAL) in French, English, Dutch and Spanish
9	USDA-The Ohio State University	Antimicrobial Susceptibility Testing (AST) using CLSI standards for diagnostic laboratories

Since online courses were opened up to the general public in 2018, the impact of the Institute’s online campus has increased significantly, due to the training it offers, as Table 2 shows. The South region has had the largest number of participants, with Brazil the country with the highest number of people trained in the region, some 33,000. This has been possible thanks to close collaboration with the Brazilian Ministry of Agriculture and IICA’s representation in the country. Equally, the main countries with participants in the skills-building programs by region stand out: Mexico (North, 11,325 participants), Costa Rica

(Central, 12,292 participants), Bolivia (Andean, 3090 participants), Dominican Republic (Caribbean, 1217 participants).

Table 2. Participants and certificates issued by region (2018–2022).

Regions	2018		2019		2020		2021		2022		Total	
	Participants	Certificates	Participants	Certificates	Participants	Certificates	Participants	Certificates	Participants	Certificates	Participants	Certificates
North	1409	340	3534	899	3802	1,011	1000	194	1331	313	11,076	2757
Central	2112	594	6725	1637	7357	1990	1720	249	2283	464	20,197	4934
Caribbean	225	65	664	144	343	85	95	16	196	47	1523	357
Andean	3538	1302	7250	1998	10,271	4306	2641	949	3159	1149	26,859	9704
South	2527	839	8232	1645	24,433	9879	12,169	4719	7890	3046	55,251	20,128
Total	9811	3140	26,405	6323	46,206	17,271	17,625	6127	14,859	5019	114,906	37,880

Although the results show a significant annual increase between 2018 and 2020, especially during lockdown for the COVID-19 pandemic, and excellent accumulated results in the last five years, the number of participants dropped in 2021 and 2022. In this specific period a charge was implemented for some of the courses offered by the Institute, which reduced the general public's participation. This year it was decided to offer the courses free of charge again as a way of sharing knowledge to a wider audience. The preliminary results (mid-2023) show that participation has increased, based on which projected participation for 2023 is over 25,000, which will allow IICA to remain well-positioned in terms of capacities building. In terms of the number of certificates issued, the average for the whole period has been 33 percent, considered high for the online universe, where it is usually 5–15 percent. Considering these factors, it can be said that the results achieved in the last five years are highly relevant.

The success of the Institute's online training programs also extends to the private sector. One partner with whom successful e-learning work has been done is with Bayer. To date, seven online courses have been delivered, allowing IICA's Online Campus to train thousands of people from 80 countries, going beyond the borders of the Americas.

Various methodologies are used at the Institute to design e-learning products, such as MOOCs and nano-courses, open to the general public. One example is the Analysis, Design, Development, Implementation and Evaluation (ADDIE) methodology, based on a waterfall model. Although this is widely used in designing online courses, in recent years it has started to be replaced by other institutional models based on streamlined methodologies such as the Successive Approximation Model (SAM), which can be classed as a simpler version than ADDIE, but which makes it possible to involve the whole team to create a product in less time and without any loss of quality.

This is the methodology that IICA uses at present to develop nano-courses. The model consists of three phases: Preparation, Iterative design and Iterative development (also called Iterative configuration). In this model, prototypes are built both for the course design and for the final product, obtained on the e-learning platform, making it possible to create a product more quickly and involving all stakeholders. This is characterized by a process of constant feedback in which the product is built step by step, instead of waiting to complete each phase as occurs with the ADDIE methodology. However, in more robust e-learning programs, such as the one developed for the CCCCC, the methodology we recommended was SCRUM, which was an essential pillar for the project's successful completion.

The Training Unit is qualified and committed to deliver products of excellence to the whole IICA community, with a cutting-edge vision and with wide experience in the use of educational tools and learning systems, in the design of quality courses and in executing top-level projects. This has allowed the Institute to position itself as a leader in the provision of online courses, sharing the knowledge generated by the Office of Technical Cooperation through the hemispheric action programs.

3.2. Horizontal Cooperation Unit

IICA considers South-South and triangular cooperation (SSTC) modalities relevant components of cooperation for development, of utmost importance to drive rural development and wellbeing in member countries. The 2022-2026 MTP states that a strategic priority is to "orient efforts towards the execution of a horizontal and triangular cooperation plan, and establish a South-South and intercontinental South-South

cooperation framework, as key instruments to strengthen the Institute's technical cooperation agenda in the region."¹

The technical cooperation model has been complemented under a strategy of relating and linking with three components. Initially, the Institute sought to promote the organization of strategic networks and partnerships that reinforce collaborative action with other international agencies, aiming to develop a base of shared knowledge, boost joint inter-agency technical cooperation actions and promote horizontal cooperation. In addition, the Institute sought to focus on the development of institutional capacities and allow the increase in the capture and technical execution of external resources².

With this in mind, the Horizontal Cooperation Unit (HCU) aims to establish and promote assistance mechanisms that enable the exchange of knowledge and tools, drive finance for projects with external resources and intensify the capitalization of experiences and good practices between developing countries, to respond to the challenges seen in agrifood systems. Furthermore, considering the importance of internships and scholarships as part of the process of international cooperation, the Unit has a robust program that seeks to promote generational change and provide opportunities for young people, encouraging professionals in the Americas to develop skills and qualifications.

3.2.1 Cooperation for development

The main actions in the HCU's work include the application of specialized funds in South-South Cooperation (SSC) and the generation of approaches and collaborative work with international organizations in this area, such as the United Nations Office for South-South Collaboration (UNOSSC) and the Ibero-American General Secretariat (SEGIB), thanks to which it has been possible to open spaces that recognize IICA as a hemisphere leader and promotor of horizontal cooperation actions.

Since 2018, the Institute has approached these important stakeholders, establishing framework agreements and collaborative actions. Initially, the focus was on preparing proposals and participating in the calls of the Pérez-Guerrero Trust Fund, which provides financial support for economic and technical cooperation activities between developing

¹ IICA. 2022-2026 MTP p.40. Available at <https://repositorio.iica.int/bitstream/handle/11324/20969/BVE22098277i.pdf?sequence=6>

² IICA. 2022-2026 MTP p.7. Available at <https://repositorio.iica.int/bitstream/handle/11324/20969/BVE22098277i.pdf?sequence=6>

countries, of critical importance to Group of 77 member countries, to achieve national or collective self-sufficiency, according to the priorities established.³

To date, four initiatives co-financed by this Fund have been approved:

1. Consolidating the implementation of the South American locust regional management plan to reduce the economic, social and environmental impact of this pest in Argentina, Bolivia and Paraguay (2020).
2. Homologation of the evaluation of inputs permitted in agricultural production, livestock, aquaculture and organic processing for the countries of the Inter-American Commission for Organic Agriculture (ICOA) (2021).
3. Modernization of the technological platform of the Alliance of Agricultural Information Services of Americas (SIDALC) to strengthen processes to capture and visualize documentary production generated by agricultural institutions of Latin America and the Caribbean (2021).
4. Commercial models and mechanisms to consolidate community ventures and enterprises of the social economy of rural and indigenous women (Guatemala, Mexico and Paraguay, 2022).

Furthermore, we have worked in coordination with IICA representations and hemispheric action programs to create initiatives between developing countries in the region, to provide external finance channeled through the Pérez Guerrero Trust Fund and other available funds.

Another important action line has been developed with the SEGIB, with a series of activities and events executed over the years. In 2021, a joint publication was written titled: "South-South and Triangular Cooperation in agriculture and food security in the face of Covid-19." This presented extensive data on the importance of agriculture in the region, the adoption of measures to combat the consequences of the pandemic, and the potential contribution and lessons learned from SSTC, also considering some successful experiences that could be replicated in other countries and regions.

³ See <https://www.g77.org/pgtf/>

From 2022, activities with the UNOSSC were consolidated, which has permitted the preparation of a horizontal cooperation proposal developed with the Climate Action and Agricultural Sustainability Program, as part of the initiatives co-financed by the UNOSSC.

The project is titled “Building bridges of knowledge in Latin America and the Caribbean (LAC): South-South exchange of experiences to strengthen resilience and adaptation of food systems facing climate change,” which was successfully approved. This has allowed the Institute to be part of the UNOSSC’s Centers of Excellence in South-South Cooperation, underlining IICA’s leadership in SSTC.

The initiative seeks to accelerate climate action in the agricultural sector in Latin America and the Caribbean (LAC) through SSC, which will be achieved by improving and consolidating peer-to-peer learning networks that the Institute facilitates permanently, to support the exchange of experiences and lessons learned and build stronger relationships among LAC technical professionals.

Related to the approval of this project, IICA had the opportunity to participate in the panel “Promoting South-South and Triangular Cooperation to support post-Covid-19 recovery and sustainable development,” organized by the UNOSSC in October 2022, the main global event to promote horizontal cooperation, where the approved project was presented in the context of the initiatives promoted in the Global South-South Development Center (GSSDC). This annual event demonstrates and shares innovative local solutions and facilitates experiences based on the exchange of knowledge and intermediation between partners, harnessing and promoting SSTC. The Institute’s participation in these spaces is strategic and highly relevant to position technical cooperation actions executed in the universe of cooperation for development.

In addition to these actions, the HCU has fostered the mapping and exchange of successful experiences in the region to promote the capitalization of knowledge through the creation of a bank of best practices, which is fed with systematized project data describing the challenges present, the way they are addressed, the main SDGs addressed, the partners and the products generated. Through the progress made from initiatives executed in other countries, this seeks to harness such knowledge to address similar needs, reduce the cost of starting up a project from scratch and support countries’ development agendas. In other words, it is a question of recovering knowledge from successful experiences that can be replicated in other countries and regions.

Furthermore, participation has been fostered in multilateral forums to discuss SSTC, to demonstrate the importance and added value of managing international assistance processes through these modalities, representing the voice of agriculture of the Americas and driving the improvement of agrifood systems at regional level. One example of this is the attendance at the 31st Meeting of Directors of International Cooperation of Latin America and the Caribbean, titled “New Mechanisms of South-South and Triangular Cooperation (SSTC) in Latin America and the Caribbean,” which took place in the Dominican Republic, convened by the Latin American and Caribbean Economic System (SELA), and the 1st Meeting of the Regional Conference on South-South and Triangular Cooperation of Latin America and the Caribbean, organized by the Economic Commission for Latin America and the Caribbean (ECLAC) in Chile, both in 2023.

In addition to the above, considering the importance and value of opening up internships and scholarships as part of international horizontal cooperation actions, the HCU jointly with other IICA units has built a robust program to open spaces of professional growth for young people in the hemisphere, as detailed below.

3.2.2 Stays, internships and scholarships policy

The Institute’s policy of stays and internships seeks to strengthen partnerships with the academic sector and other technical sectors with a space for the exchange of skills and knowledge, boosting the Institute’s technical cooperation and providing a space for learning and technical support for young participants.

IICA thus gives young people the opportunity to strengthen their technical skills and understand the role of an international organization oriented to supporting member countries to address diverse challenges in agrifood systems.

To institutionalize IICA’s stays and internships policy, article 2.15 “Professional stays and internships” was added to IICA’s Personnel Manual in 2020, to provide a regulatory framework and regulate the application of professional stays and internships in the Institute’s Headquarters and offices in other countries.

Young people and professionals can participate through professional internships (for recent graduates and undergraduates) and professional stays, which are an opportunity to develop and complement technical knowledge in different areas of IICA's work.

Since 2018, 305 people have participated in this hemispheric program, including internships and professional stays, from the Institute's five regions: North, Central, Caribbean, Andean and South (figure 1).

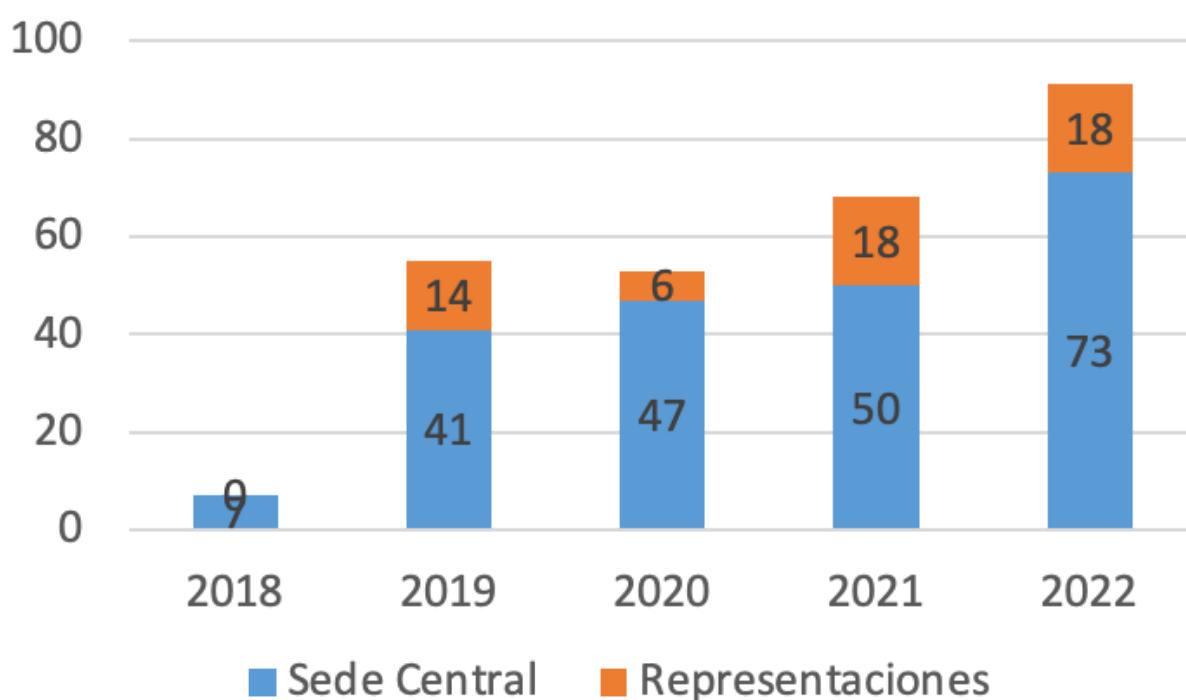


Figure 1. Total number of participants (2018-2022).

The institutionalization of stays and internships has made it possible to forge relations with leading organizations in skills development and share the necessary vision to strengthen agrifood systems at hemisphere level. Participating institutions include the German Program of Exchange and Scholarships in Development Policy for Students and Young People with Professional Training (ASA), the World Food Prize Foundation (WFPF) and universities such as Complutense of Madrid, Politécnica of Valencia, Wageningen, Cornell, Illinois, Córdoba, Institut Barcelona d'Estudis Internacionals (IBEI) and the European Union

Program to support education, training, young people and sport in Europe (Erasmus+), among other high-prestige international programs.

In relation to the scholarship program, in the last five years a partnership was established with the Ibero-American University Foundation (FUNIBER), with the goal of strengthening the participation of young people and professionals of the agricultural sector in the formal education process, especially by offering specialization and post-graduate programs in agrifood sector areas.

This program consisted of 50 partial scholarships in each of the countries IICA considers appropriate to undertake specific training actions. During the period when the partnership was in place, the Institute processed 1752 applications, of which 133 were for people with scholarships.

3.3. Information and Documentation Unit

The goal of the Information and Documentation Unit is to lead and organize institutional knowledge management processes over digital platforms and information systems that facilitate organizing preserving and sharing IICA-generated resources, and to establish collaborative actions with strategic partners so as to visibilize the production of technical resources generated by specialists in the region.

One of the primary characteristics to bring about proper organization of documentary resources is the management of open access platforms that meet norms and standards aligned to international trends in information and documentation management. Another highly valuable aspect of the open platforms is that they have a large community of users who make adjustments and improvements with their updates, which means major savings in development for the institutions that use these platforms.

Digital repositories, integrated systems, access to resources of high scientific level and collaborative networks have permitted the proper management of IICA-generated resources through its libraries system formalized in 2019 as part of the modernization process implemented by the CGCCH.

There is a working team trained to attend to information registration and organization demands, with technical capacities to collaborate with the processes of consultation and

attending to specialized requests from IICA technical experts, strategic partners and general users in the agricultural sector in the region.

IICA strives so that its specialists have access to high-level scientific resources. One of the primary improvements implemented in recent years has been to provide them with access regardless of their physical location, meaning resources are available remotely.

Since IICA's foundation, various regional projects have been developed to promote the open exchange of knowledge resources generated by IICA and its strategic partners. The first action in this respect was the formation of the Orton Memorial Library (BCO, Biblioteca Conmemorativa Orton) in 1943, as the main point of access to knowledge and information on agriculture and rural life in the Americas. The BCO continues to be part of IICA, as stated in the contract between the government of Costa Rica and IICA on the constitution of the CATIE, as determined by Law 5210 of 1973 and later by Law 6873 of 1983.

Among the diverse activities led by IICA in knowledge management and divulgation, one of the most recent is the modernization of the SIDALC Alliance. Since 1999 this alliance has promoted the exchange of agricultural, livestock, forestry and environmental information. It brings together a large number of institutions conscious that in sharing their knowledge they promote and improve specialists' technical capacities, who then generate new high-value knowledge for the wellbeing of rural communities in the region.

The most important resources managed in the unit that make up the Institute's knowledge management strategy are described below. To give a clearer vision of each of the products, these are divided into four major groups: internal management platform, international databases, collaborative networks and libraries system.

3.3.1 Internal management platforms

The internal management platforms permit the organization and divulgation of information produced by the Institute. Included in this category are the Institutional Knowledge Repository, IICA-CATIE's Integrated Libraries System (SIBI) and the intranet.

These platforms were updated in the 2018-2022 period as part of the modernization process led by the CGCCH. At present they operate over high-level information systems

that meet international standards and present modern interfaces for ease of use from mobile devices.

On the platforms, users can find technical publications by the Institute, government agencies' resolutions (both in the repository and the SIBI) and general information (intranet), such as manuals, access to other internal monitoring platforms (SUGI), human resources platforms (Sapiens), and others.

The modernization process in recent years has allowed these databases to be indexed in search engines. As a result, the amount of access to the institutional repository has increased (Table 3) and access to SIBI has decreased. This is due to the nature of information that exists on the two platforms, prioritizing information registers in the SIBI and the availability of documents in the repository, following the models of universities such as Cornell, with which the Unit has collaborated in recent years.

Equally, Table 3 shows that the intranet, which concentrates general IICA information, has had a good response and access from users, with over 5000 individual users in the last year.

The table below describes the platforms and services that facilitate the organization of documentary resources managed by IICA.

Table 3. List of internal management platforms.

Platform	Description	Users	
		Year	Number
ICA knowledge repository https://repositorio.iica.int	This platform organizes, preserves and shares knowledge resources generated by IICA specialists. The platform has recorded the Institute's institutional memory since 1943. The resources that can be located include annual reports , country reports , AgroEnlace programs , audiovisual resources , government agencies , IICA blog , project resources, etc. At present there are 21,298 digital resources, which are indexed in international search	2018 2019 2020 2021 2022	1470 3192 2,217,489 3,672,876 5,708,313

	engines and openly available to Institute partners and the agricultural community in general.		
Integrated libraries management system (IICA/CATIE) https://opac.biblioteca.iica.int	Integrated platform that organizes physical and digital information generated by the representations of both institutions, and other resources of interest related to institutional issues. In addition to the organization of documentary resources, currently 148,164 publications, it is possible to manage everything related to the library's internal administration.	2018 2019 2020 2021 2022	24,948 24,200 23,066 12,814 11,295
Intranet https://intranet.iica.int	Platform integrating digital resources for internal institutional management and for the promotion of organizational culture.	2018 2019 2020 2021 2022	No data 3207 4503 4558 5216

3.3.2 International databases

Another important line of access to high-level information are databases managed by the Institute over the BCO. This access is possible due to the IICA-CATIE association with the One CGIAR, which makes it possible to contract databases at values up to 90 percent cheaper than the market and which assist over 800 people internally (Table 4).

With this, the Institute has access to high-impact global scientific publications, such as Science, Nature, Springer and over one hundred other relevant publications, including opinion magazines such as The Economist.

Table 4. Available international databases and number of users by year (2020-2023).

Platform	Description	Users	
		Year	Number
Scientific databases https://acceso.biblioteca.iica.int/	This platform facilitates access to international databases of great importance in the area of research and development. Specialists from both institutions can access from any physical location digital resources from EBSCO, <i>The Economist</i> , CABI, <i>Nature</i> , Oxford University Press, Cambridge University Press, <i>Science</i> , <i>Springer</i> . In 2022, 5534 digital resources were downloaded, making this an important asset for the IICA community. As part of the divulgation processes, there is a weekly bulletin that shares the current issues of the respective journals, which has promoted their access internally with an average annual visit of 4510 pages.	2020 2021 2022	795 891 825

3.3.3 Collaborative networks

The CGCCH manages two relevant platforms that support articulation and networking: SIDALC Alliance and Agriperfiles. As mentioned in 3.3, both platforms present fairly specific characteristics and have given extensive support to different institutions in the hemisphere.

SIDALC has been providing support to information centers for over 20 years from a network of libraries, made up over 200 institutions in over 20 countries of LAC, and attends to over 2 million users per year (Table 5).

Agriperfiles, the result of an agreement with the United States Department of Agriculture (USDA), has made it possible to create registers of a network of agriculture sector professionals in the region, including officials of IICA, Agrosavia (Colombia), the Supreme Electoral Court of Costa Rica, and INIA (Peru), among others.

Both hemispheric platforms led by IICA facilitate access to knowledge resources validated and generated by institutions and specialists in the region, while interconnecting experts in related areas.

Table 5. Platforms of available collaborative networks and number of users by year (2018–2023).

Platform	Description	Users	
		Year	Number
SIDALC Alliance https://www.sidalc.net	International platform offering agricultural, livestock, forestry and environmental information services. Stands out as a strategic place for divulging and sharing knowledge resources generated by institutions and organizations in LAC. Currently contains 2,982,722 records, of which 2,834,362 correspond to digital resources shared by 134 specialized libraries of 99 institutions from 29 countries. Its recent modernization has made it possible to make information resources available to the agricultural community of the Americas more efficiently, as from a single access point users have validated, up-to-date information. Its Specialized Resources Center includes predefined searches in areas such as family farming , organic agriculture , water for agriculture , bioeconomy , biofuels , bioinputs , climate change , Fusarium tropical race 4 , gender , rural youth , rural women , food security and agrifood systems , etc.	2018	3,920,091
		2019	2,980,919
		2020	2,889,135
		2021	2,274,730
		2022	712,981
AgriPerfiles https://agriperfiles.agri-d.net	The platform functions as a knowledge network to identify and connect agriculture sector experts, providing them with the opportunity to share their skills, experience and areas of specification, information which is valuable for identifying collaborative actions. At present 17,574 professional profiles are registered with 21,413 documentary resources	2018	26,236
		2019	25,391
		2020	48,111
		2021	84,315
		2022	126,739

	<p>open to the public. Various institutions related to the agriculture sector in the Americas include their institutional profile, as well as the respective professional profiles.</p>		
--	---	--	--

3.3.4. Library system

The IICA and CATIE libraries system brings together their main libraries and information centers to optimize institutional resources and facilitate access to information resources generated by both institutions. The Orton Memorial Library (BCO) acts as the main library specializing in issues of agriculture, forestry sciences, livestock and related subjects. Most of its users define themselves as scientists, researchers, technical experts and students related to the agriculture sector.

The memorandum of understanding for the modernization of the BCO, signed by both institutions at the start of 2023, outlines its transformation, with the respective monitoring of its action plans. Its administrative committee, whose members are named by the directors general, validate and adjust the projects to meet the goals outlined.

The members of the working team, who have technical and creative capacities, are changing the traditional library concept to a “learning commons” model, through the creation of an environment of open exchange. As well as permitting access to agricultural knowledge from the region through high-level publications and databases, there are physical spaces that are being transformed into areas of collaboration and co-creation. This initiative, carried out jointly with the CATIE, directly benefits both institutions, strategic partners, farmers and the community of Turrialba, where the BCO is located.

The BCO has technological tools aligned with international trends, which has facilitated their rapid adoption for the respective management of document resources generated by both institutions’ specialists.

One of the areas outlined and approved by the administrative committee is the approach to different institutional programs and projects, as a way of finding out their information needs and establishing actions to collaborate directly with meeting their goals. This approach has made it possible to more efficiently compile the technical

memory generated by the two institutions, as well as bringing users closer to the library. The most relevant projects and actions are highlighted below:

Table 6. IICA libraries system services and projects

Services and projects	Description
Learning commons	The BCO's most ambitious project aims to transform spaces and services into a learning commons model, where users have areas equipped with modern technology, co-working and socialization spaces that permit interdisciplinary work to foster the generation of new knowledge. Through the CATIE collaboration, investments have been made to set up and fit out better spaces for users, which has been boosted thanks to the VERTO Education project, corroborating the need to advance with the learning commons project.
Thematic training	An annual plan has been drawn up to provide training in different institutional areas, to be implemented with internal and external specialists. One that has been widely requested is the reading aloud workshop, which seeks to foster reading through the Sustainable Development Goals of the United Nations 2030 Agenda, using elements, techniques and exercises to improve reading and public speaking skills. There are also spaces for training in the main institutional knowledge management tools, such as international databases, Agriperfiles, SIDALC Alliance, IICA/CATIE standards and Use of Libraries System, etc. Thematic training has revitalized collaborative work with relevant institutions in the country and have generated important ties with the productive sector, especially with rural producers.

<p>Document management</p>	<p>Document management is one of the main resources of the libraries system, organizing the institutional memory according to international norms and standards, managing the editorial process, executing continual improvement actions that foster proper organization and divulgation. Platforms such as the repository and integrated systems are used for the respective organization.</p> <p>The automation of publication processes is one of the goals. As part of such actions the International Standard Book Number (ISBN) request process was modified so that this is now done on an online form, which makes the procedure traceable and shortens publication times on the respective platforms.</p>
<p>Community</p>	<p>Forming ties with the Turrrialba community through joint work with the town council, public and private institutions, elementary and high schools and other social stakeholders in the canton has made it possible for more people to visit the library, reactivating users' visits after a notable drop in numbers after the pandemic. Also, to boost the attainment of the IICA goal to bring rural life closer to its projects, special support is being given to producers, farmers and cooperative members to provide them with training to update their technical, IT and computer skills so that they can do their work better.</p>
<p>Dealing with requests</p>	<p>The System has a team trained to deal with users' information needs. Online and in-person requests require this team to have technical skills to use the abovementioned tools (repository, database, etc.) to obtain high-level information to resolve users' information requirements.</p>
<p>IT and digital skills development course</p>	<p>There is an IT update course for master's students that is adapted to provide training externally, thus promoting the different resources of the libraries system.</p> <p>This course, which is taught every year jointly with the CATIE Postgraduate School, provides professionals with tools to enable them to do their research, so that this then has a high chance of being published in academic journals.</p>

	<p>Furthermore, the virtual course content has been exported to other academic bodies in the country.</p>
<p><i>Raíces</i> Podcast</p>	<p>This resource boosts communication among people in the agriculture sector. It is also a bridge between the library and its users to share technical, academic and rural experiences in 20-minute audios. The podcast allows users close and concise knowledge of the work done by people and institutions related to the issues of both institutions, and gives information on relevant actions to inspire listeners.</p>
<p>Virtual Bookshop</p>	<p>E-commerce platform to promote and sell publications, giving both institutions a safe space for the sale of products.</p>
<p>Document copying and binding service</p>	<p>This service, which makes technological photocopying and binding equipment available to library users, has constant activity in the library's everyday work. As part of the process of transforming and automating the BCO, this self-service facility has been made available to students, so that they can print and bind documents without assistance, improving and streamlining the service. The service is set out in the IICA-CATIE memorandum of understanding and is a product that is part of the BCO modernization process.</p>

4. REFERENCES

Aczel, JC; Peake, SR; Hardy, P. 2008. Designing capacity-building in e-learning expertise: Challenges and strategies. *Computers and Education* 50(2):499–510.

IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2018. Medium-Term Plan for the Period 2018–2022 (online). San José, Costa Rica. Available at: <https://repositorio.iica.int/handle/11324/7191>.

IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2020. 2019 Annual Report (online). San José, Costa Rica. Available at: <https://repositorio.iica.int/handle/11324/15258>.

IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2021. 2020 Annual Report (online). San José, Costa Rica. Available at: <https://repositorio.iica.int/handle/11324/15663>.

IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2022. 2021 Annual Report (online). San José, Costa Rica. Available at: <https://repositorio.iica.int/handle/11324/20020>.

IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2022. Medium-Term Plan for the period 2022–2026 (online). San José, Costa Rica. Available at <https://repositorio.iica.int/handle/11324/20969>.

IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2023. 2022 Annual Report (online). San José, Costa Rica. Available at <https://repositorio.iica.int/handle/11324/21517>.

McAndrew, P; Scanlon, E. 2013. Open learning at a distance: lessons for struggling MOOCs. *Science* 342:1450–1451.

Contract

Contract is a legal agreement between two or more parties that is enforceable by law. It is a promise or set of promises that is intended to be legally binding. The contract is a legal document that is signed by both parties and is enforceable by law.

Contract Law

Contract law is the body of law that governs the formation, performance, and enforcement of contracts. It is a branch of law that deals with the legal consequences of a contract. The contract is a legal document that is signed by both parties and is enforceable by law.

Contract Formation

Contract formation is the process of creating a contract. It involves the offer and acceptance of terms by both parties. The contract is a legal document that is signed by both parties and is enforceable by law.

Handwritten signature: *Handwritten signature*

2020



Inter-American Institute for Cooperation on Agriculture

HEADQUARTERS

Apartado Postal 55-2200 San José,
Vázquez de Coronado, San Isidro 11101- Costa Rica.
Tel.: (506) 2216-0222 • Fax (506) 2216-0233
iicahq@iica.int / www.iica.int